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Credit Research
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#chinadebt

China High Grade Handbook

The lay of the land

In the two years since we last published our *China High Grade Handbook*, the issuer base has broadened significantly. Bloomberg Barclays Asia high grade indices now include almost 200 unique Chinese credits, up from 133 at end-2016, while the China high grade sector has remained at c.50% of the outstanding Asia high grade universe since 2017.

The sector has further diversified and, in addition to the now-familiar central SOEs, large developers, and benchmark internet companies, now has an increasing number of lower-tier LGFVs, peripheral SOEs, and non-TMT corporates. Given the potentially lower-for-longer interest rate environment and with credit spreads at or near record tights, the USD bond market has become an increasingly important alternative funding channel for Chinese companies, supplementing the loan and onshore capital markets.

These same factors make credit selection challenging for high grade investors, not to mention a tricky outlook for these credits. They face potentially sustained external pressure from US-China trade tensions, which are weighing on economic growth. Weakness in the domestic economy is also not helped by China's focus on tackling structural issues in the domestic financial system, and by policy makers' reactive approach to cushioning economic slowdowns, both of which suggest only incremental supportive measures are likely.

We highlight key themes that will shape credit profiles of the corporates in the China high grade segment. We also provide single-page profiles covering 83 non-financial Chinese issuers, accounting for more than 50% of outstanding non-financial issuers and 80% of such bonds outstanding. The profiles include summaries of their credit profiles, bond support structures, and key near- and medium-term drivers. We hope investors will find this publication helpful in assessing the major bond issuers in the China high-grade universe.

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US-China tensions: Playing the long game

The changing outlook for US-China trade negotiations has been a key theme for Asia credit since early 2018, with sharply divided views on how the talks will pan out. Concerns have centred on how heavily a negative outcome would weigh on China HG credit, and the sectors that would be most affected. Interestingly, China HG operating performance during this period has shown that second-order effects have dominated – exporters experienced shifts in demand related to new tariffs, manufacturers saw subdued demand as a weaker global growth outlook led to softer business confidence, and a slowdown in the economy has fed through to a weakening in consumption. First-order effects have been relatively limited, except in the case of outright restrictions on specific tech companies such as Huawei. Sentiment has been the main driver of China HG TMT credit so far, and it is likely to remain so for most of these companies.

The effects of US-China tensions are visible in several developments:

1. Companies in "old economy" sectors have done well, partly as China sought to stabilise growth. Credit profiles of the SOEs in these sectors in particular, continued to show gradual improvement, boosted by reform measures taken in the past years;

2. Outbound M&A by Chinese companies, particularly large SOEs, has been limited, likely owing to the shift in sentiment regarding Chinese acquirers as a result of US-China tensions spilling over into the global community;

3. Investors have favoured SOEs and LGFVs, a view likely driven by expectations that China will strengthen its grip on these entities, which may play strategic roles in implementing any government counter-cyclical support measures (eg, increased infrastructure investment);

4. Increasing government influence in the technology and internet sectors, which we view as a consequence of US pressure on China's technological ambitions as laid out in its Made in China 2025 plan; as well as an acceleration of plans to develop technological capabilities in areas where it continues to lag, which could materialise in additional resource allocation to these sectors; and

5. The tit-for-tat may not end with just trade and technology. The US has launched investigations into financial transactions involving Chinese banks that may have helped finance North Korea's nuclear program. In October 2018, the US had also put in place policies to regulate sales of nuclear technology to China, although this has likely been offset by development of local nuclear technology by Chinese state-owned nuclear power operators.

Notably, China's focus on tackling domestic structural issues, first in the industrial sectors, and now in the financial sector, has not seemed to waver.

Jian Chang, Barclays Chief China economist, believes that China will stand firm while preparing for a prolonged trade war. In *China Outlook: So much for the ceasefire…*, 2 August 2019, she noted that Trump remains keen on pushing China to strike a grand deal as opposed to a narrow one. However, China is unlikely to be willing to concede on important issues, particularly drawing a line under three “matters of principle:” removing the existing tariffs, setting realistic targets for buying US goods, and balanced wording in the deal.

With trade tensions potentially continuing in 2020 (the US presidential election takes place in November 2020), investors cannot rule out tail risks from further escalation. Potential new tariffs likely would cover a broader set of companies, and measures taken by either side are likely to extend to a broader number of sectors. In addition, the effects of the trade war on global growth, and in turn China’s economy, should not be overlooked. In our view, this suggests opportunities to the construction-related SOEs as policymakers turn to incremental infrastructural investments to cushion a potential slowdown. At the same time, it potentially spells pain for corporates in the consumer cyclical sectors, as consumer sentiment may get hurt further. In consumer-related sectors, we recommend sticking with market leaders operating in sectors with secular growth outlooks.

China economy: A gradual slowdown likely

2Q19 GDP growth moderated to 6.2% y/y from 6.4% in 1Q, while on a q/q saar basis, the slowdown was more visible at 5.6% from 6.9% previously. The slowdown reflected contracting exports and still lacklustre domestic demand, issues which were largely expected, according to our economists. The stage is set for 2H19 growth momentum to continue to moderate, with higher-frequency data on industrial production and retail sales suggesting that activity had weakened in the first half of July. Retail sales are likely to remain weak, as seen from the lacklustre auto sales and slowing home purchases, while on the investment front, infrastructure investment could pick up, although it may not fully offset a slowdown in property investment. Our economists expect GDP growth to slow to 6.0% in 2019, and 5.5% in 2020, and for quarterly growth momentum to decelerate to 5.2% and 5.1% in 3Q and 4Q 2019, respectively. See *China Outlook: GDP downgrade on trade war escalation*, 7 June 2019.

Reactive policy stance reflects focus on quality growth

In terms of the policy response, our economists continue to expect the PBOC to balance growth objectives against elevated leverage, the risk of a housing bubble and financial stability concerns. According to them, this suggests that, unlike other central banks in the region which have been undertaking proactive easing, PBoC is likely to take a reactive stance, acting only on further evidence of a slowdown materialising (see *China Outlook: Downward pressure to remain*, 19 July 2019). In fact, the PBoC’s stance has been shifting, first towards tightening in April on concerns about leverage, before turning more accommodative in May due to the re-escalation of trade tensions as well as the subsequent Baoshang Bank takeover. More recently, even after the latest rise in trade tensions, the PBoC maintained a neutral stance (see *PBoC Watching: A Q&A on interest rate outlook*, 6 August 2019).

The Politburo statement on 30 July 2019, while acknowledging pressure on the economy, suggests the administration remains focused on “quality growth”, instead of aggressive support measures. This takes into consideration the ongoing structural transformation that is occurring in the domestic economy, which is likely driving the government’s watch-and-see attitude. But it would also imply that the government may tolerate a further (but gradual) slowdown in the near term. Support measures are thus likely to be incremental – the consumption stimulus plan to spur demand for autos and electronics, infrastructure investment on the back of further LG special bond financing, and potential targeted rate cuts.

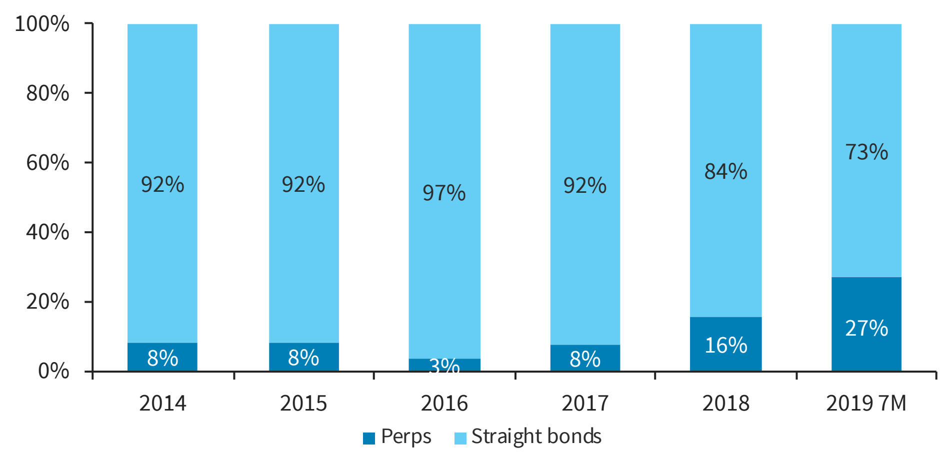
The recent surprise in the USDCNY fixing by the PBoC, likely in retaliation to President Trump’s renewed tariff threat, may have rekindled memories of the sharp devaluation of the CNY in August 2015, and sparked fears of a severe escalation in trade tensions. The PBoC likely set the stage for such a move, when the governor Yi Gang suggested no red line for the yuan on 7 June 2019. In our economists' view, the PBoC's tolerance of a weaker currency may suggest a reduced probability of significant monetary easing as the central bank may consider CNY depreciation as a way to stabilise growth via exports. This could also be helped by reduced concerns about potential capital flight, given the containing of capital outflows that have taken place since late-2017 (see *PBoC Watching: A Q&A on interest rate outlook*, 6 August 2019).

Supply shifts to LGFVs and property; quality deteriorates

Supply has remained elevated in YTD 2019, with the run-rate likely to keep China high-grade gross issuance above USD100bn for the third straight year. However, the supply profile has changed significantly in the nonfinancial segment. Issuance from central SOEs (both core and non-core) has accounted for just 11% of total YTD supply, down from 29% in 2014 and 2015. Central SOE issuance has also shifted towards more perpetual bond structures, likely to improve accounting leverage ratios. According to our credit strategist, the investor base for perpetual bonds has become more diverse, including a larger proportion of asset managers and insurance companies than in the past (see *Asia Credit Strategy: Corporate hybrids handbook Vol. 4: Not all the same*, 30 July 2019). In particular, core SOE's share of supply has fallen owing in part to more limited expansion overseas (and hence a reduced need to access offshore capital), as well as the ample supply of onshore credit available to such strategic SOEs. According to Bloomberg, Chinese companies offshore M&A fell to USD35bn in 1H19, a decline of 75% from the peak in 1H16.

FIGURE 1

Central SOEs have favoured perp issuances



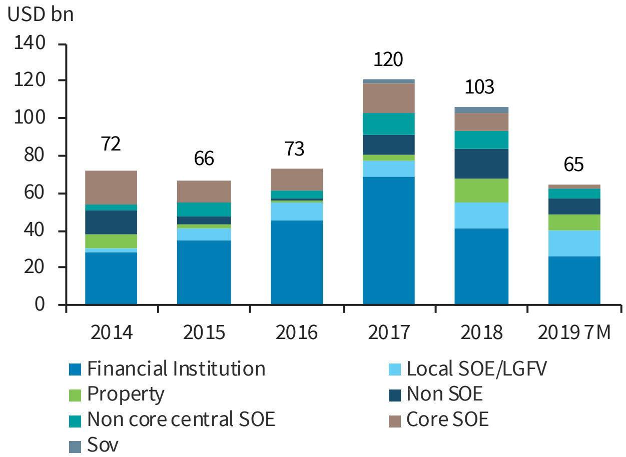
Source: Barclays Research

Supply from non-core SOEs has been steadier. Although core SOEs have been quieter in terms of overseas acquisitions, non-core SOEs or corporates with state backing have been more active acquirers. For example, Zijin Mining and China Molybdenum have bought overseas mining assets, boosting their holdings of global mining reserves.

In contrast, local/regional SOEs and LGFVs, which accounted for just 3% of supply in 2014, have become the second-largest component of supply in YTD 2019 (21%). Property developers and non-SOEs also have been active issuers in 2018 and 2019.

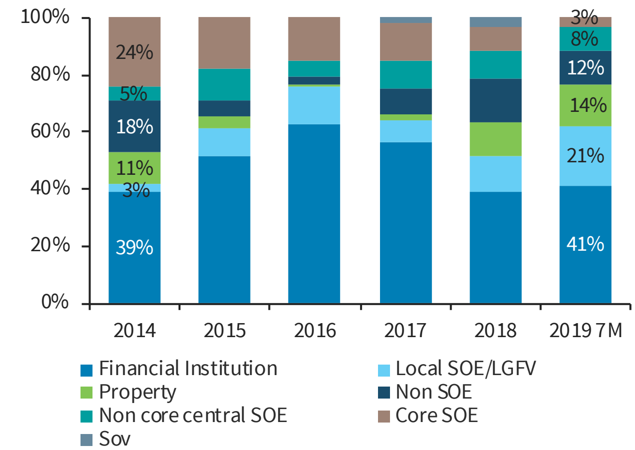
The quality of issuance has worsened. There has been an increase in issuance rated BBB since last year; in particular, mid- to low-BBB rated issuance increased from 7-18% of China

FIGURE 2
China HG issuance still elevated



As of 26 July 2019. Source: Barclays Research

FIGURE 3
Issuance by SOEs has fallen



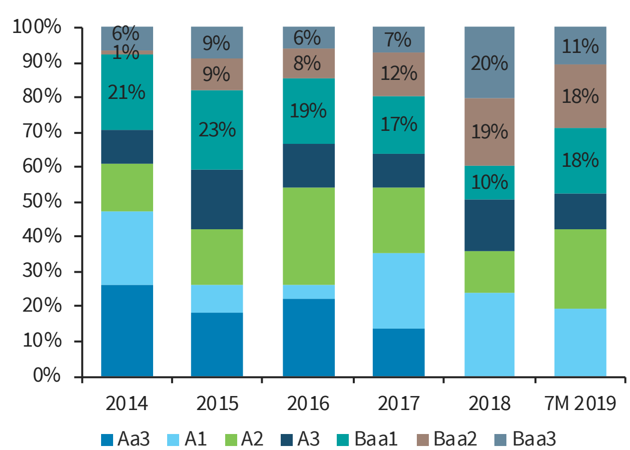
As of 26 July 2019. Source: Barclays Research

HG issuance volume during 2014-16, to 39% in 2018 and 29% in YTD 2019. In terms of maiden issuers, there have been 80 since the end of 2016, of which 60% are local/regional SOEs and LGFVs.

SOEs: Strengthened through consolidation

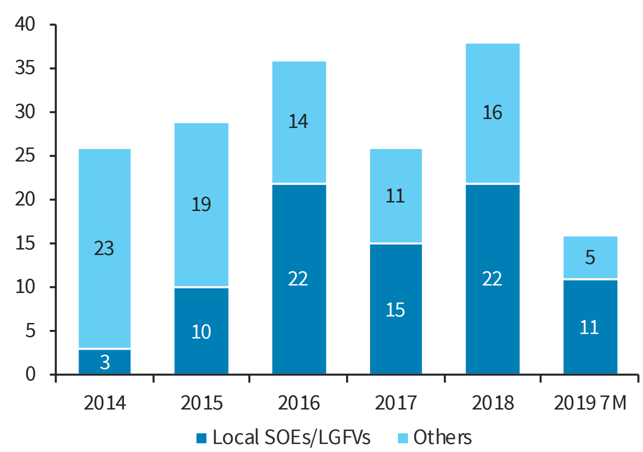
The SOE credit story has improved after the government tightened its grip on SOEs and implemented reforms. In particular, consolidation of SOEs has led to stronger business profiles and hence stronger positions from which to compete. A similar pattern has emerged after consolidation in industries facing overcapacity, where reforms have led to stronger market positions for incumbent leaders (many of which are SOEs). The reform measures are likely to have contributed to a gradual improvement in SOEs' operations. SOE returns on assets rose to 2.5% in 2018 from a low of 2.2% in 2016, and leverage (total liabilities/total assets) fell to 67.7% from 68.6% in 2016.

FIGURE 4
China HG supply by credit quality



As of 26 July 2019. Source: Barclays Research

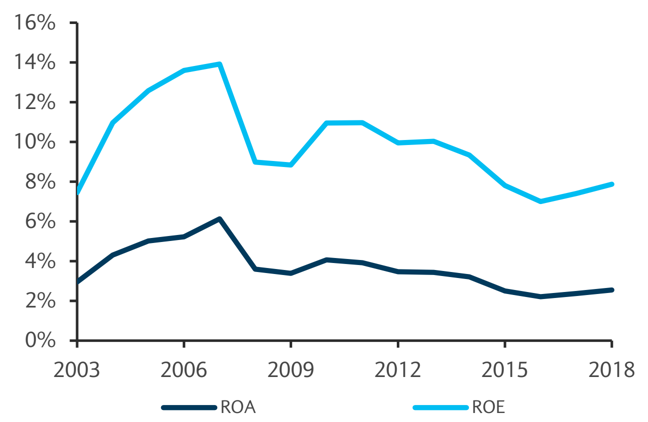
FIGURE 5
China HG maiden issuers dominated by local SOEs/LGFVs



As of 26 July 2019. Source: Barclays Research

FIGURE 6

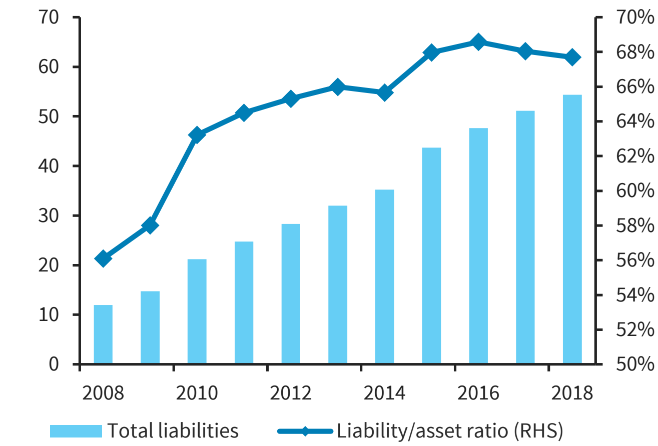
Central SOE returns bottoming in 2016



Source: SASAC, Barclays Research

FIGURE 7

SOE leverage slowly improving despite rising liabilities



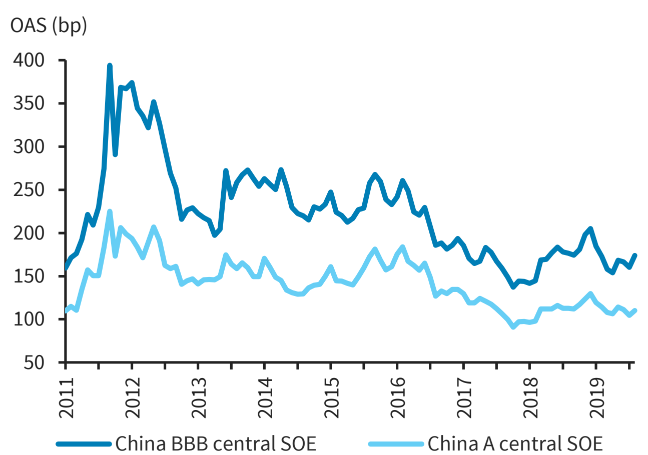
Source: Ministry of Finance, Barclays Research

In our view, rating agencies have recognised the progress especially at the central SOEs – ratings have stabilised, including those of ChemChina and CITIC Ltd. We see scope for upgrades at some SOEs, albeit for differing reasons. At China National Chemical Corp and its subsidiaries CNBG and Syngenta, we think an upgrade could be driven by a potential merger with higher-rated Sinochem. At China Oilfield Services, a potential increase in revenues on higher CNOOC capex could drive improvements in its credit metrics. S&P also has a Positive Outlook on China Railway Group, which could be upgraded if the company demonstrates an ability to manage any increase in leverage from projects by using operating cash flow to reduce debt. China Travel Services, also on Positive Outlook, could be upgraded if margins increase further.

These factors have served to drive investors' view of SOEs as a safer, more stable credit segment, which in our view helped push the sector's credit spreads to record tights. The spread difference between BBB and A rated SOEs is currently near tights, but on spread ratio terms is relatively neutral.

FIGURE 8

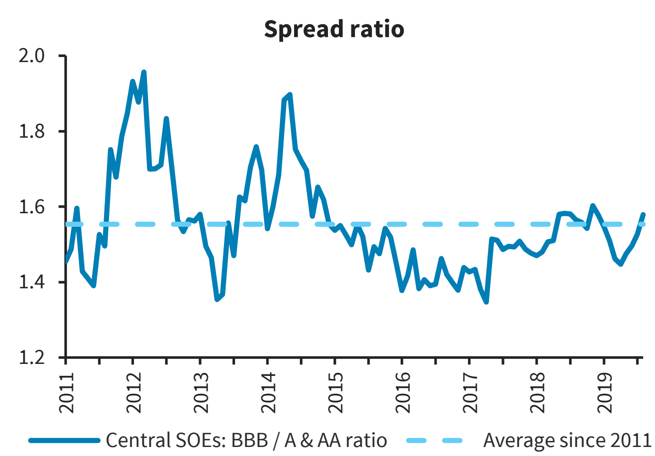
Central SOE spreads remain near historical tights



Source: Bloomberg Barclays Indices, Barclays Research

FIGURE 9

BBB to A spread ratio reverting back to average levels



Source: Bloomberg Barclays Indices, Barclays Research

While valuations are not particularly compelling to investors, we think the current environment should encourage investors to be more discerning on credit selection, as the credit market starts to show greater dispersion in spreads across issuers.

Below, we outline the SOE reform agenda across the different approaches and potential sectors affected.

Reforms – Slow and steady

Mergers and consolidation

- **Steel:** China Baowu Group is again tasked with consolidation of the steel industry, as steel output continues to rise despite the industry achieving the official capacity reduction target for the 13th Five Year Plan. Magang Iron & Steel announced that its parent, Magang Group, will be merged into China Baowu Group. This comes after Baosteel Group (the predecessor of Baowu) merged with Wuhan Iron & Steel back in 2016.

- **Oil & Gas:** The establishment of an independent oil & gas pipeline transmission business by combining assets of the national oil companies has been much talked about. We see the set-up of China Tower Corp, which merged the tower business of the three state-owned telcos, as a potential template for the pipeline company. We think this move could serve as another step to encourage private capital participation in energy investments, by reducing transmission control by the SOEs and providing a level playing field for private energy sources to access consumers.

- **Chemicals:** A potential merger between ChemChina and Sinochem Group remains closely watched, given Frank Ning's concurrent chairmanship of the companies and the appointment of a Sinochem executive as the head of a team overseeing the agricultural operations within China of Syngenta, Sinochem and Adama[1], ChemChina's subsidiary.

- **Power generation:** Bloomberg reported in November 2018 on a potential merger between China Datang Corp and China Huadian Corp that was said to be pending approval by the SASAC. Sxcoal.com later reported that key appointments at the firms made a transaction less likely. Consolidation of the state-owned power gencos, which are highly levered and own a large proportion of coal-fired power assets, is likely to remain a development to follow in coming years.

Supply-side reform

- **Industrials and resources:** The government has achieved, or is close to achieving, official capacity reduction targets in sectors such as steel, coal and aluminium. This has helped improve profitability of the remaining players by consolidating market shares, supporting domestic prices, and increasing plant utilisation rates. In the steel sector, the China Iron and Steel Industry Association said in June 2019 that the mix of exports has also shifted towards high-end products, with about 60% being high-value plates and strips, a positive development[2]. We expect the focus to remain on moving up the value chain in sectors with overcapacity. With output volumes continuing to rise, the focus is likely to turn to ensuring eliminated capacity does not come back on line. Steel companies will likely continue the trend of moving production capacity overseas.

- **Financials:** The central government's focus turned this year towards the financial sector, following on from its deleveraging campaign and crackdown on the shadow banking system. The objective of supply-side structural reform in the financial sector is to reduce the role of indirect financing (mostly through banks), and to increase direct

[1] Sinochem and ChemChina move closer with Syngenta appointment, FT, 1 February 2019
[2] Supply-side reform fosters new growth engines, China Daily, 3 June 2019

financing (through channels such as equity and bonds), according to Caixin. Changes could include adjusting market structure by broadening direct financing channels and allowing new players in the banking system to reduce reliance on state-owned lenders.

Market-based pricing reform

- The government's push to adopt market-based electricity pricing in recent years has been seen as a potentially effective way to force out uncompetitive power capacity. In 2018, market-based electricity sales had risen to 30-40% of sales at some gencos and grid operators. Companies could see thinner margins as pricing is driven more by supply and demand.

Mixed-ownership reforms

- The central SASAC has launched an SOE reform proposal under which several hundred subsidiaries of central SOEs and core local government entities have been earmarked to spearhead the reform agenda. Recent announcements included 113 companies launching mixed ownership programs at the main entity level, attracting CNY538.4bn of non-state-owned capital.

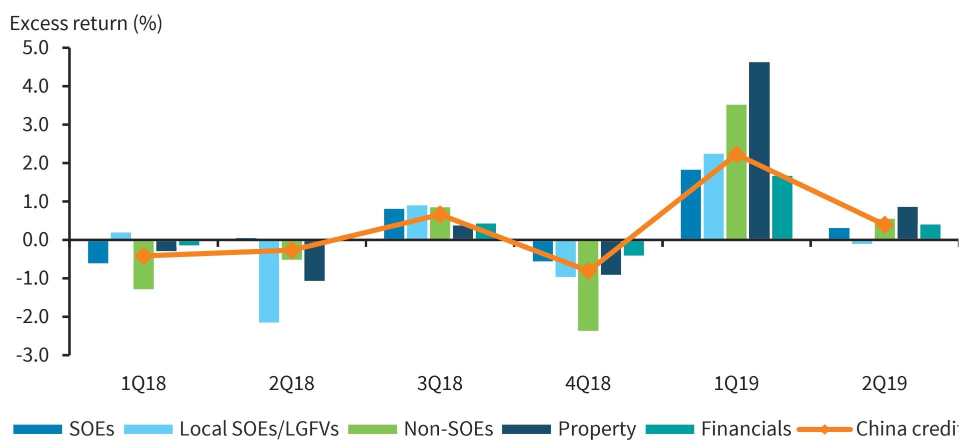
- China Railway Group announced in June 2018 the sale of minority stakes in four of its subsidiaries to nine investors, proceeds of which would be used to pare debt. As of 26 July 2019, the proposed stake sales remained ongoing.

Non-SOE sector: Narrative hinges on US-China tensions

With the Non-SOE sector remaining dominated by TMT credits, US-China tensions will continue to be front and centre of investor concerns. Volatility has picked up each time tensions escalated, driving spreads wider. This is despite there being limited direct impact from any US measures on the operating performance of the large benchmark TMT companies. Investors in this segment will have to live with larger swings in spreads from bouts of escalation, although this also provides opportunities for investors. On a risk-adjusted basis, however, the Non-SOE sector has performed poorly as it responds sharply to the ebbs and flows of the trade talks. As such, we believe nimble positioning is key to outperformance, and long-term investors may be better served by shifting positions to other segments in China HG credit.

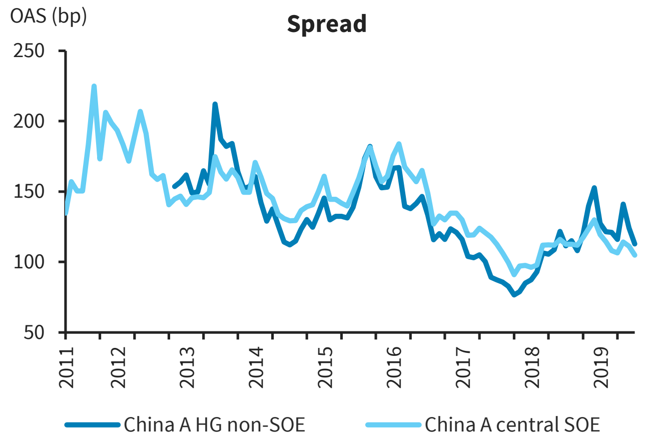
FIGURE 10

Performance across China HG in recent quarters



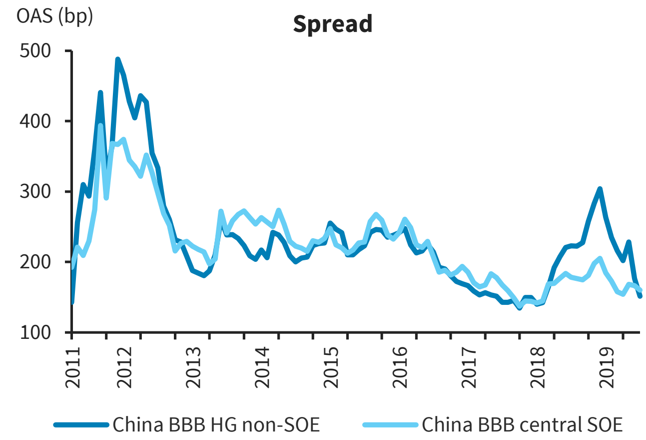
Source: Bloomberg Barclays Indices, Barclays Research

FIGURE 11
A rated Non-SOE/Central SOE spreads (OAS)



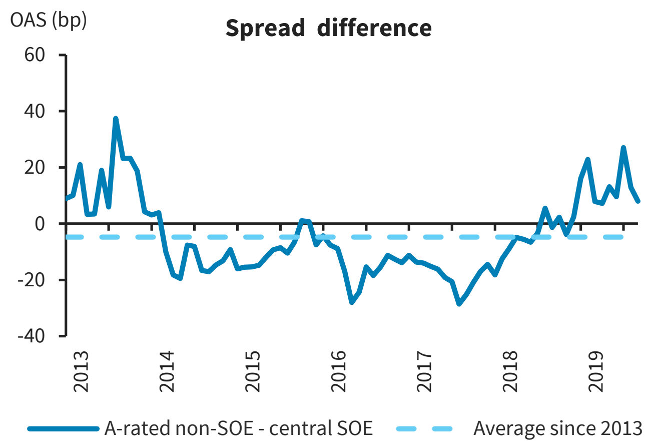
Note: As of end-July 2019. Source: Barclays Research

FIGURE 12
BBB rated Non-SOE/Central SOE spreads (OAS)



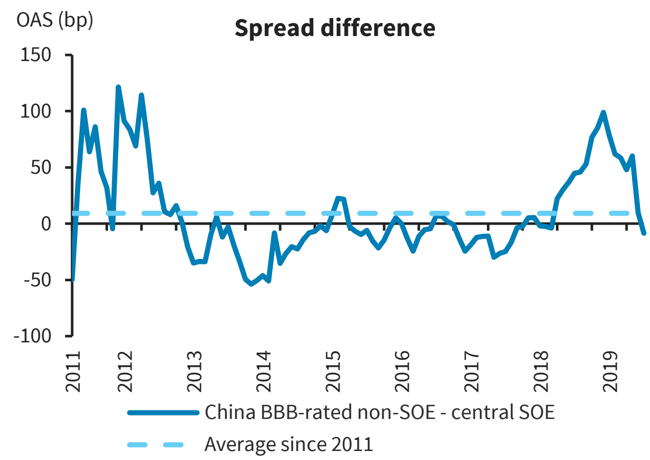
Note: As of end-July 2019. Source: Barclays Research

FIGURE 13
A rated Non-SOE/Central SOE spread difference (OAS)



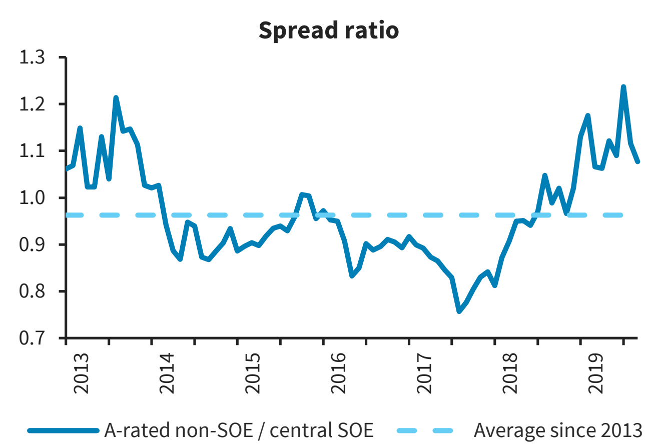
Note: As of 14 July 2015. Source: Barclays Research

FIGURE 14
BBB rated Non-SOE/Central SOE spread difference (OAS)



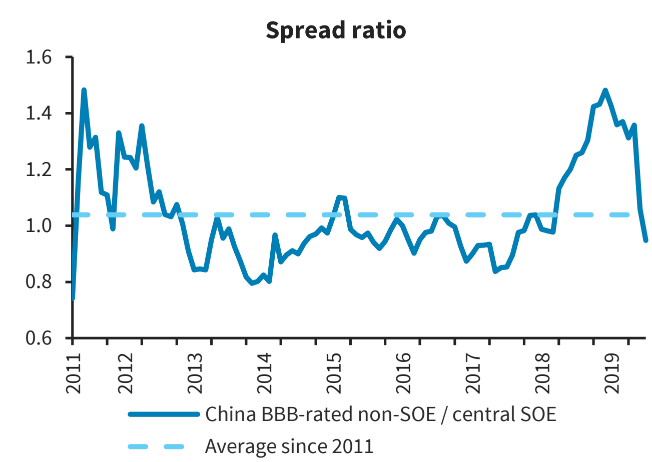
Note: As of end-July 2019. Source: Barclays Research

FIGURE 15
A rated Non-SOE/Central SOE spread ratio (OAS)



Note: As of end-July 2019. Source: Barclays Research

FIGURE 16
BBB rated Non-SOE/Central SOE spread ratio (OAS)



Note As of end-July 2019. Source: Barclays Research

In the past 12 months, we have seen the materialisation of various risks facing the TMT companies. Regulatory risks have played out in the domestic gaming sector. Key man risk was highlighted when sexual misconduct allegations were levelled at JD.com's founder[3]. Companies reliant on ad revenue, such as Baidu and Weibo, face oversupply issues as a result of competition as well as weaker business confidence and consumer sentiment. The variable interest entity (VIE) structures adopted by the TMT companies further tie the fortunes of the companies to those of their founders, who own the entities holding the onshore licences, and accentuate the potential risks that TMT investors face. We thus think it is fair to demand greater risk premium for the TMT sector over the SOE sector.

The BBB segment of the Non-SOE sector has more non-TMT issuers, and is in particular dominated by Sands China Ltd. This segment has sharply outperformed YTD, driven by both cheap valuations in the low-BBB credits such as Sands China and GLP, as well as a more benign environment amid a stabilisation in the credit trajectory since late 2018 and fading concerns regarding the tail risks from elevated US-China tensions on some of these companies. Spreads of the BBB Non-SOEs are trading inside that of BBB SOEs, which makes them seem expensive to us, even taking into account the broader global audience for some credits, such as Weibo and Sands China.

[3] JD.com founder Richard Liu is exonerated of rape claim by newly released evidence, his lawyer says, South China Morning Post, 25 July 2019

LGFVs – an expanding universe

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Given its continued expansion, the local government financing vehicle (LGFV) sector cannot be ignored when looking at the China credit complex. Bonds issued by high grade LGFVs account for 11.6% of the China HG universe. These bonds trade at an average yield of 4.14% for a duration of 2.67 years, which is 107bp wider than the average for bonds issued by non-Core SOEs (Figure 18).

Evolving landscape and changing sector drivers

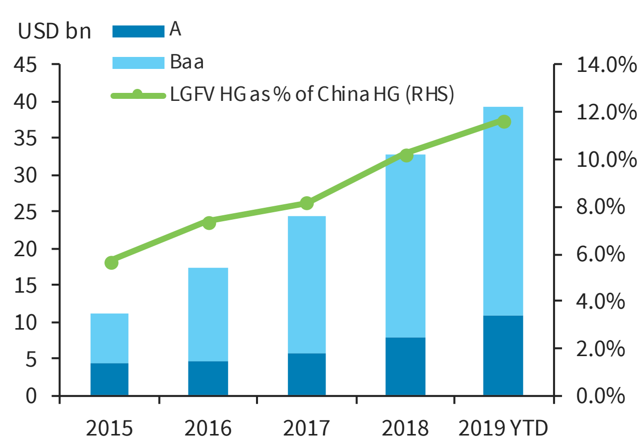
- **Growing size.** The total outstanding size of bonds issued by HG LGFVs has more than tripled since the end of 2015, reaching USD39.4bn by end-1H19 (Figure 17).
- **Wider variety of issuers.** More LGFVs administered by city/county/district governments are tapping the USD bond market, compared with provincial or municipal government LGFVs, which comprised the majority of bond sales before 2018 (Figure 19). The types of LGFV issuers have also broadened both by geography and industry.
- **Large maturities looming.** About one-third (USD13bn) of the USD bonds issued by HG LGFVs are set to mature by 2020 (Figure 20). The total amount of onshore bonds outstanding of the LGFV sector are significantly larger – CNY1,777bn.

Together with the transitioning policy role played by LGFVs in China's deleveraging campaign and changing China bid for USD credit, the drivers of the sector have changed in recent years.

As the large refinancing needs are likely to increase the sector's credit risks, local governments and related entities, along with financial institutions are looking to prevent the risk of systemic problems developing[4]. However, a structurally tighter funding environment onshore implies it could be challenging for the weaker LGFVs to raise funds in the near future. In the long term, LGFVs operating in non-policy focus areas could also face refinancing pressures.

FIGURE 17

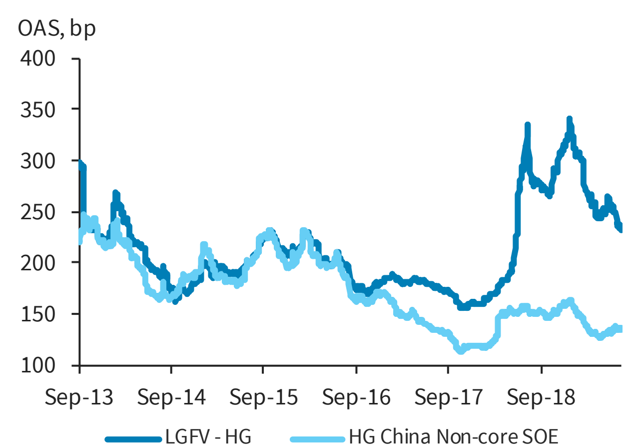
HG LGFV – an expanding part of the Asia credit universe



Source: Barclays Research

FIGURE 18

HG LGFV bonds trade wider than China non-core SOEs

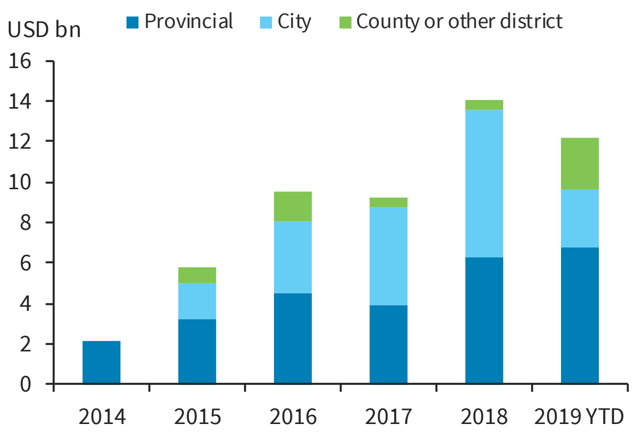


Source: Bloomberg, Barclays Research

[4] Local media reported that some LGFVs are in talks with Chinese financial institutions about various ways to restructure their debt, such as rolling-over into longer tenors and lower interest rates. (21 Caijing, 20 June 2019)

FIGURE 19

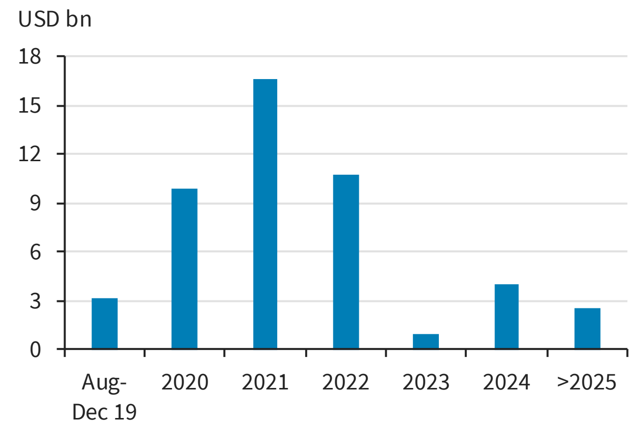
HG LGFV bond issuance by administrative levels of local governments



Source: Barclays Research

FIGURE 20

Offshore HG LGFV bond maturities



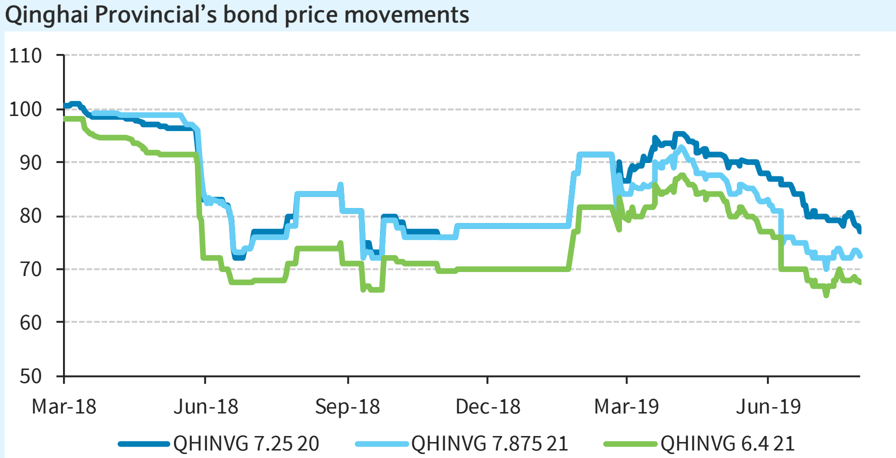
Source: Barclays Research

Example of changes in LGFV bond prices during event risk episodes

The prices of USD bonds issued by Qinghai Provincial Investment Group dropped to the low 70s on news that S&P had placed the issuer on Watch Negative on 21 June 2018, highlighting refinancing risks amid the liquidity crunch in China. After the company confirmed a repayment plan for its maturing bonds in September and December 2018, their prices rebounded to the 80s and then into the 90s on news[5] that the company reached agreement with Chinese banks for an extension of its borrowings. However, its other bond prices fell back into the 80s after the company missed a coupon payment in February 2019. Bond prices have fallen further since then, with S&P recently reporting on 12 June 2019 that the company was reliant on government support to service its outstanding debt and that there was no concrete solution to address the company's high leverage and liquidity problems.

FIGURE 21

Qinghai Provincial's bond price movements



Source: Bloomberg, Barclays Research

[5] Qinghai Provincial Says Formed Verbal Pact with Banks for Loans, Bloomberg, 6 March 2019

As end July 2019, approximately 96% of LGFV USD bonds (including both HG and HY) are trading at cash prices that are above 90. The example of Qinghai Provincial could provide indications for bond price movements in the event of distressed situations.

Three-step framework

We rank LGFV bonds based on perceived support from an issuer's respective local government as well as the LGFV's role in the national, provincial, or city economy (see detailed discussion in *Focus 2: LGFVs: More than meets the eye in Asia Credit Alpha: Fault Lines*, 25 October 2018).

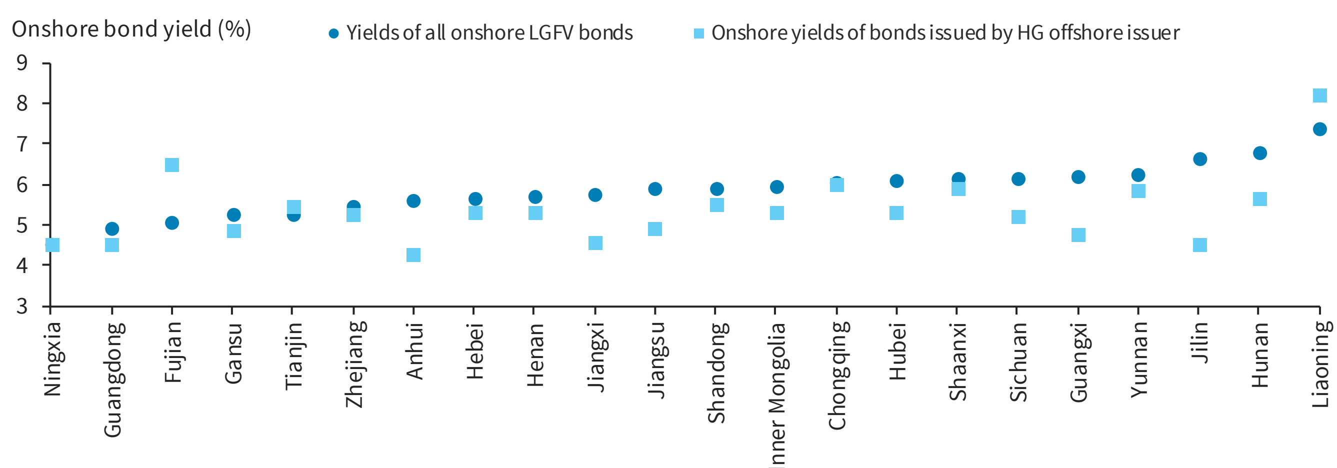
- **Local government's ability to support the LGFVs.** This depends on their financial positions, which we have assessed by looking at province level data such as GDP growth, fiscal position, debt levels and credit conditions.
- **Local government's willingness to support.** This depends on the LGFV's strategic importance, which can be based on its region of operations and its role in the economy.
- Lastly, we overlay the above parameters with **adjustment factors** (such as tenor, ratings and bond structures) to rank the LGFV bond universe.

Which provinces have better-known credits in the offshore market?

Onshore yields tell a story (Figure 22): We look at the offshore HG issuers in the context of all LGFVs by comparing the yields of onshore bonds issued by offshore entities with the yields of all LGFV onshore bonds related to a province.

- In Anhui, Jiangxi, Jiangsu, Hubei, Sichuan, Guangxi, Jilin, Hunan, the stronger or better-known credits issue bonds in the offshore market. This is suggested by the tighter-than-average onshore yields for bonds issued by these issuers compared with bond yields of all LGFV issuers in their respective provinces.
- In contrast, the onshore bond yields of offshore LGFV issuers from Fujian, Tianjin,

FIGURE 22
Onshore LGFV bond yields – all LGFVs vs offshore HG LGFV issuers



Source: We include only provinces that have offshore HG LGFV bonds, and exclude Beijing and Shanghai. Wind, Barclays Research

Liaoning provinces trade wider than the average for all onshore issuers in those provinces, which suggests that less favoured credits issue in the offshore market.

Tianjin SOEs financing challenges

In July 2019, Tianjin Binhai New Area Construction & Investment Group (BINHCO), postponed its proposed USD bond issue after releasing initial price guidance. This decision was likely a reflection of subdued investor risk appetite for bonds issued by LGFVs in Tianjin and likely financing problems for SOEs in the Tianjin region in general. For examples, the prices of bonds issued by another LGFV from the region, TEWOO Group, have been under pressure since March 2019.

SOEs company profiles

Aluminum Corp of China Ltd

Analyst
Eugene Tham

Company description: Aluminum Corp of China Ltd (Chalco, NR/BBB-Stb/BBB+ Stb) is one of the largest aluminum producers in China and globally. The group's operations consist of four business segments: 1) Alumina (8% of 2018 revenue) – Producing and selling alumina, mining and purchasing bauxite and other raw materials; 2) Primary aluminum (23%) – Producing, smelting, and selling aluminum and related products; 3) Trading (65%) – Trading of aluminum products, other non-ferrous metals, and crude fuels; 4) Energy (4%) – Coal mining and power generation. Chalco is listed on the Shanghai, Hong Kong, and New York stock exchanges. As of December 31 2018, Chalco is 33.9% directly owned by its parent company Aluminum Corp of China (Chinalco), which is in turn a wholly owned central SOE. Apart from the aluminum business which is housed under Chalco, Chinalco is also involved in the copper business.

CHALHK and CHALUM bonds

Bonds	Amt (mn)	Issuer	Guarantor	Keepwell provider
CHALHK 4.875% 21s (NR/NR/A-)	350	Chalco Hong Kong Investment Co Ltd (BVI)	Chalco Hong Kong Ltd	Aluminum Corp of China Ltd (Chalco, NR/BBB-/BBB+ Stb)
CHALHK 4.25% $Perp NC'21s (NR/NR/ BBB+)	500			
CHALUM 3.625% $'19s (A1/NR/NR)	500	Chinalco Finance Holdings Ltd	NA	Aluminum Corp of China
CHALUM 4.0% $'21s (NR/NR/NR)	800	Chinalco Capital Holdings Ltd	Aluminum Corp of China Overseas Holdings Ltd	
CHALUM 5.7% $Perp NC'20s (NR/BB/NR)	350	Chalieco Hong Kong Corp Ltd	China Aluminum International Engineering Corp Ltd	
CHALUM 4.25% $'22s (NR/NR/NR)	350	Chinalco Capital Holdings Ltd	Aluminum Corp of China	NA

Note: CHALUM 3.625% $'19s are backed by a standby letter of credit from Bank of China Ltd, Macau Branch

Financial snapshot (Chalco)

CNY mn	2018	2017	2016
Revenue	180,240	180,081	144,229
Gross Profit	13,211	14,406	10,555
Gross Profit Margin	7.3%	8.0%	7.3%
EBITDA	14,184	14,065	11,943
EBITDA Margin	7.9%	7.8%	8.3%
Total Debt	116,658	120,764	126,588
Net Debt/ (Cash)	97,527	93,013	102,708
Credit Metrics			
Total Debt/EBITDA	8.1 x	8.5 x	10.4 x
Net Debt/EBITDA	6.8 x	6.5 x	8.5 x
EBITDA/ Interest	2.7 x	2.7 x	2.3 x
Total Debt/Capital	65.2%	67.2%	73.4%

Source: Company reports, Barclays Research

Chalco main expansion projects in 2018 (CNY mn)

Project	Operational date	Expected investment	Incurred by the end of 2018
Wangwa mine	End-2019	3,063	1,462
Guangxi Hualei	End-2018	5,939	5,174
Guangxi Huasheng	Mid-2020	5,805	330
Inner Mongolia Huayun	Operational since 2017	6,450	5,640
Shanxi Zhongrun	Partially operational	3,909	2,660
Boffa, Guinea	March-2020	4,857*	440*

* Based on USDCNY of 6.88. Source: Company reports

Business highlights

- **Leading positions in primary aluminum/alumina markets.** Chalco maintained its leading position with market shares of 21.2% and 11.4% in terms of production in the domestic alumina and primary aluminum markets respectively in 2018. This affords Chalco some influence over domestic supply and demand.
- **Improving cost controls have put Chalco in the second quartile of the global aluminum producers' cost curve,** from the high-end in 2015, according to S&P. In 2018, its gross profit margin declined to 7.3% from 8.0% in 2017 (2016: 7.3%; 2015: 2.0%) due to higher raw material prices and power tariffs. The company continues to focus on cost control, such as improving its self-sufficiency in bauxite (a critical raw material for alumina). In 2018, 44% of its bauxite needs were self-supplied, which will rise to 70% after its Guinea mine ramps up and reaches full capacity.
- **Exposure to cyclical alumina and aluminum prices.** Due to its single-business concentration, Chalco's fundamental profile is vulnerable to both international economic and political factors (supply disruptions, global demand, trade tensions) as well as domestic factors (demand changes, government policies such as tighter environmental inspections, supply-side reforms). S&P estimates that a 1% change in alumina or aluminum prices will lead to 2-3% change in Chalco's EBITDA.
- **Expansion weighed on credit profile.** Chalco's debt/EBITDA improved to 8.1x from 8.5x in 2017 (10.4x in 2016), owing to higher production volumes and relatively stable market prices. Sizable capex for business expansion has slowed its deleveraging trend. The company reported capex of CNY9.1bn in 2018 and targets to spend c.CNY12.5bn in 2019.
- **Chinalco, which is more diversified than Chalco, is also the largest lead and zinc producer in Asia, and a top-three producer of copper and rare earth metals in China, according to Fitch.** Chinalco's unit also holds a 14.5% stake in Rio Tinto Plc's London-listed shares. Fitch expects the non-aluminum related business to increase to 60% of Chinalco's business profile in 2022, up from 50% in 2018. On the other hand, Chinalco, with net leverage of 11.8x according to Fitch, has a much weaker financial profile than Chalco (net debt/EBITDA of 6.8x).

ChemChina/China National Bluestar Group

Analyst
Eugene Tham

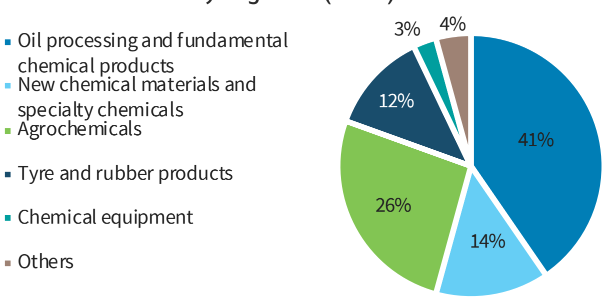
Company description: China National Chemical Corp (ChemChina, Baa2 Stb/BBB Stb/A- Stb) is the largest chemical company in China, and the third-largest globally. ChemChina was established in 2004 through the merger of China National Bluestar (Group) and China National Haohua Chemical (Group) Corp as part of a restructuring process for SOEs. Since the restructuring, ChemChina has been wholly owned by the central SASAC. The company employs a "3+1" strategy that focuses on materials science, life sciences, and advanced manufacturing, which are supported by basic chemicals and intermediate products. China National Bluestar (CNBG, 63.6% owned by ChemChina) is ChemChina's flagship platform for specialty chemicals, and accounted for 14.2% of ChemChina's gross profit and 12.8% of its total assets in FY18.

HAOHUA/CNBG bonds

Bonds	Amt (mn)	Issuer	Guarantor	Keepwell provider	EIPU	Liquidity support deed
HAOHUA $ bonds	12,250	CNAC (HK) Finbridge Company Limited	China National Chemical Corporation Ltd (onshore)	NA	NA	NA
	2,000	CNAC (HK) Synbridge Company Limited				
	600	CNRC Capitale Limited				
HAOHUA € bonds	700	CNRC Capitale Limited				
	1,200	CNAC (HK) Finbridge Company Limited				
CNBG $ 19s, 21s, 24s (NR/BBB/A-)	1,800	Bluestar Finance Holdings Limited	China National Bluestar Group Co Ltd (onshore)	NA	NA	NA
CNBG $ perp (Baa2/NR/BBB+)	300					
CNBG $ 20s (Baa2/BBB/A-)d	500			China National Chemical Corporation Ltd	Yes	No
SYNNVX $ bonds (Ba2/BBB-/BBB)	5,500	Syngenta Finance N.V.	Syngenta AG (offshore)	NA	NA	NA
SYNNVX € bonds (Ba2/BBB-/BBB)	1,000					

Source: Bloomberg, company offering circulars, Barclays Research

ChemChina revenue by segment (2018)



Source: Company report, Barclays Research

- **CNBG – holdco for specialty chemicals businesses.** CNBG made several acquisitions during 2007-15, purchasing companies in animal nutrition additives, electrolyser production, silicone, polyethylene and polymers. Its EBITDA margin of 14% in 2018 was higher than ChemChina's (10%). CNBG's strong financial linkage to ChemChina includes ChemChina guaranteeing 23% of CNBG's debt at June 2018.

Financial profile comparison (2018)

CNY mn	ChemChina	CNBG
Revenue	445,814	60,013
EBITDA	43,516	8,464
Total debt	448,156	58,049
Net debt	376,663	42,656
Total assets	798,849	102,239
Credit metrics		
EBITDA margin	10%	14%
EBITDA/Interest	2.2x	3.2x
Debt/EBITDA	10.3x	6.9x

Source: Company reports, Barclays Research

Business highlights

- **A leading chemicals company.** ChemChina acquired Syngenta in 2017 for USD43bn, the largest overseas acquisition by a Chinese SOE. The deal reinforced ChemChina's strategic status, given Syngenta's position as the largest crop protection and the third-largest seed producer globally. ChemChina's scale also means that it benefits from strong government support, as reflected by funding from policy banks and state-owned capital operation companies for large acquisitions. Its presence across various chemical sectors reflects a diversified business profile and its role as a consolidator in the industry.
- **Potential merger with Sinochem.** In June 2018, Caixin reported that the potential merger of ChemChina and Sinochem appears to be moving forward, with Sinochem's chairman taking on that role at ChemChina. Although there has been no official announcement, we think a merger would strengthen the combined company's strategic importance. In addition, the combined company's credit profile would improve, given that ChemChina's elevated debt would be offset in part by Sinochem's lower leverage (debt/EBITDA: 6.9x in FY18).
- **Highly leveraged financial profile, offset by focus on deleveraging following the Syngenta acquisition.** Moody's expects ChemChina's debt/EBITDA to fall below 8.5x by end-2020. If total debt remains unchanged, this would require EBITDA growth of 12% over two years. ChemChina has a track record of selling stakes in acquired subsidiaries via IPOs. Both ChemChina and Syngenta have also mentioned a three- to five-year timeframe for an IPO of Syngenta, which would help to reduce leverage at the group level.
- **2019 Outlook.** ChemChina has guided for broadly flat revenue growth this year. Syngenta, likely relied upon to spearhead growth by expanding sales into China, saw EBITDA (excluding the impact of divestments) decline 8% in 1H19. Expected deleveraging from earnings growth could thus be delayed.

China Communications Construction Co Ltd

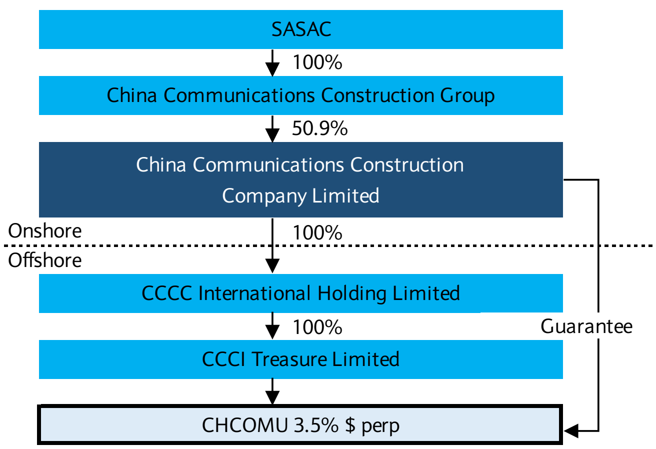
Analyst
Kai Chang

Company description: China Communications Construction Co Ltd (CCCC, A3 Stb/NR/A- Stb) is one of the largest infrastructure construction companies globally, mainly involved in road, bridge, port and railway design and construction. It is also the world's largest port design and construction company, as well as the largest dredging company. CCCC was founded by China Communications Construction Group Ltd (CCCG) in 2006, after the latter inherited the businesses of China Harbour Engineering Company Group (CHECG) and China Road & Bridge Group (CRBG). The company's main business segments include infrastructure construction (86.9% of 2018 revenue), dredging (6.6%), design (5.6%), and others (0.8%). Listed on both the Shanghai Stock Exchange (2012) and Hong Kong Stock Exchange (2006), CCCC is 50.9%-owned by CCCG, which is in turn wholly-owned by the central SASAC. Revenue from overseas operations, which span more than 139 countries and regions, accounted for 19.5% of 2018 revenue.

CHCOMU senior perp (A3/NR/NR)

Bonds	Amt (mn)	Issuer	Guarantor
CHCOMU 3.5% $ perp	1,100	CCCI Treasure Ltd	China Communications Construction Company Limited (Onshore)

Bond structure



Source: Company report

Financial snapshot

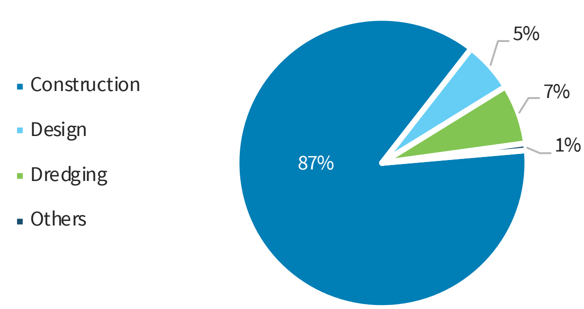
CNY mn	2018	2017	2016
Revenue	488,666	460,067	406,331
Gross Profit	86,293	81,454	75,019
Gross Profit Margin	17.7%	17.7%	18.5%
EBITDA	64,504	56,128	53,229
EBITDA Margin	13.2%	12.2%	13.1%
Total Debt	419,275	364,833	351,314
Net Debt	284,907	230,512	236,677
Credit Metrics			
Total Debt/EBITDA	6.5x	6.5x	6.6x
Net Debt/EBITDA	4.4x	4.1x	4.4x
EBITDA/Interest	3.9x	3.7x	3.7x
Total Debt/Capital	68.7%	67.4%	68.8%

Source: Moody's

Business highlights

- **Leading infrastructure construction provider in China.** CCCC has a track record of more than 60 years, having participated in the design and construction of almost all of China's major ports (including in its previous forms as CHECG and CRBG). The company's strategic importance to China stems from its leading market position in the domestic transportation infrastructure construction industries, as well as its role in carrying out the government's mandate to engage in global infrastructure projects. CCCC accounted for c.83.9% and 70.4% of its parent's revenue and assets in 2018, respectively, reflecting its position as the core subsidiary of CCCG.
- **Order backlog of CNY1.69trn at end-2018 (+23.1% y/y) is equivalent to c.3.5x annual revenue (2017: 3.0x).** More than 90% of the order backlog is in its core infrastructure construction unit – CNY1.53trn (+22.9% y/y). New contract value increased to CNY891bn in 2018 (+1.1% y/y) as a decline in overseas projects (-27.7% y/y) was offset by growth in revenue from municipal and environmental projects (+15.4% y/y). CCCC management expects new contracts to grow by at least 8% y/y in 2019.
- **Overseas exposure.** In line with the government's Go Abroad strategy and OBOR initiatives, CCCC has grown its overseas presence. In 2018, 20% of total revenue was generated from overseas operations as were 18% of new contracts gained. With its overseas expansion CCCC is exposed to geopolitical and FX risks.
- **Increasing investments in BOT/PPP projects.** CCCC has increased its number of BOT/PPP projects in the past few years. Such projects tend to be largely financed through long-term project loans, as they have long payback periods. Though expected to be profit positive in the long run, exposure to such projects creates financial risks in the short term as cash flow remains negative for several years.
- **Leverage:** Adjusted debt/EBITDA has been maintained at 6.5x in past two years as earnings growth has offset the rise in debt due to more investment in BOT/PPP projects.

Revenue breakdown in 2018



Source: Company report

China General Nuclear Power Corp

Analyst
Eugene Tham

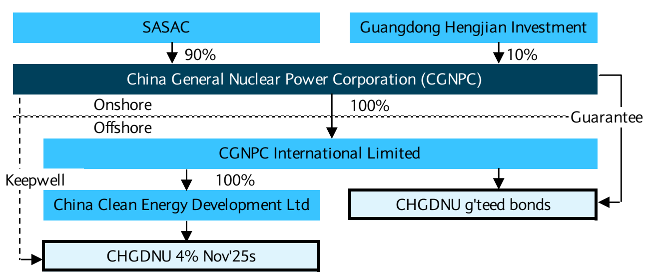
Company description: China General Nuclear Power Corp (CGNPC, A2 Stb/A-Stb/A Stb) is one of China's three nuclear power plant operators, with a nuclear power operating installed capacity of 24.3GW (7.4GW under construction) and 25.7 GW of non-nuclear generating capacity (of which 13.2 GW is wind-power capacity) at end-2018. Overseas businesses accounted for 20% of total revenue and 18.8% of total installed capacity. CGNPC has two listed subsidiaries: 1) 64.2%-owned CGN Power Co., Ltd. (CGN), the main nuclear power generation holdco, accounting for 55% of CGNPC's total assets; and 2) CGN New Energy, involved in non-nuclear energy projects in China (61.0%) and Korea (39.0%). CGNPC, is 90% owned by the central SASAC, and 10% owned by Guangdong government through Guangdong Hengjian Investment Holdings.

CHGDNU bonds

Bonds	Amt (mn)	Issuer	Guarantor	Keepwell provider	EIPU	Liquidity support
CHGDNU $'22s, $'23s, $'24s, $'Apr-25s, $'27s, $'48s	2,700	CGNPC International Ltd	China General Nuclear Power Corporation (onshore)	NA	NA	NA
CHGDNU €'24s and €'25s	1,000					
CHGDNU 4% $'Nov-25s	500	China Clean Energy Development Ltd	CGNPC International Ltd (offshore)	China General Nuclear Power Corporation	Yes	Yes

Note: CHGDNU $ and EUR bonds (onshore guarantee) are rated A2/NR/A, with the exception of the 4% $'Apr-25s which are rated A2/BBB+/A. CHGDNU USD keepwell bond is rated A3/NR/A. Amount of CHGDNU $ senior unsecured refers to aggregate amount outstanding as of Jun 2018. Source: Company report

Bond structure



Source: Company reports

- **High EBITDA margin and sales volume underpinned by favorable government policies, given government's support for clean energy.** CGNPC continues to maintain its EBITDA margin around 45%-50% in the past three years, due to government's preferential tariff policies and small exposure to fuel cost volatility.
- **Policy-driven domestic expansion pressures financial profile, but offset by increased scale.** CGNPC has incurred annual capex of around CNY35-41bn during 2016-2018, and there remain 6 more projects under construction across Guangdong, Guangxi and Liaoning Province. The increase in scale as new plants commence operations – the latest of which should be Unit 6 of Yangjiang plant – helps drive earnings growth and improvement in credit metrics. In addition, Caijing reported on 29 July 2019 that CGNPC recently obtained approval to commence construction on the Taipingling nuclear plant.

Financial snapshot of CGNPC

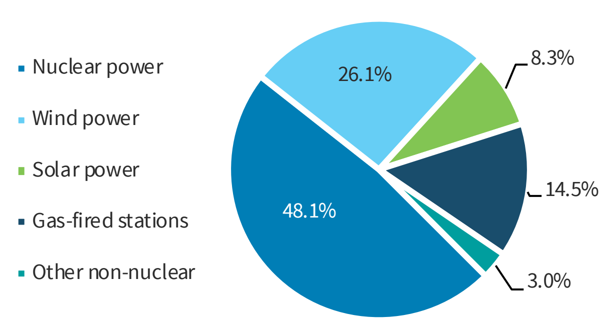
CNY mn	2018	2017	2016
Revenue	97,851	85,355	65,792
EBITDA	46,342	41,989	31,150
EBITDA Margin	47.4%	49.2%	47.3%
Total Debt	422,046	400,197	322,148
Net Debt	401,216	370,128	299,355
Credit Metrics			
Total Debt/EBITDA	9.1x	9.5x	10.3x
Net Debt/EBITDA	8.7x	8.8x	9.6x
EBITDA/Interest	2.6x	2.6x	2.3x
Debt/capital	70.3%	71.2%	69.8%

Source: Company reports, Barclays Research

Business highlights

- **Very high level of government support.** The Chinese government views the nuclear power industry as key to its national energy and economic strategy to meet its carbon emission targets. According to the 13th National Five Year Plan, the Chinese government is committed to increasing the portion of non-fossil fuel energy consumption to 15% in 2020 and 20% in 2030, as well as to increase the total operational installed capacity of nuclear power to 58GW by 2020, from 34GW at end-2016 (2018: 45GW).
- **Market leader in China's nuclear power generation.** CGNPC is the largest nuclear power company in China with a market share of 54.4% (by operating capacity) as of end-2018. It is also one of only two central SOEs to be granted the licence to import uranium into China. The uranium mine in Namibia which CGNPC owns is the third largest in the world by production capacity, and is expected to meet the group's nuclear fuel demand for 30 units with installed capacity of 1mn kW for 30 years.
- **Overseas investments diversify operations, but add execution risks:** In the past five years, CGNPC has invested in the UK, Europe, and Southeast Asia. CGNPC aligns its overseas expansion plans with China's "Go Global" and "Belt and Road" initiatives. Edra Power, in which it holds a 63% equity interest, has 13 power projects (attributable installed capacity of 5.6GW) in Malaysia, Egypt, Bangladesh, the UAE and Pakistan.
- **Proposed A-share listing** by core subsidiary CGN Power, received preliminary approval from the CSRC and would raise CNY15bn, of which CNY11bn is intended for project capex.

Breakdown by installed capacity (end-2018)



Source: Company reports

China Huadian Corp Ltd

Analyst
Kai Chang

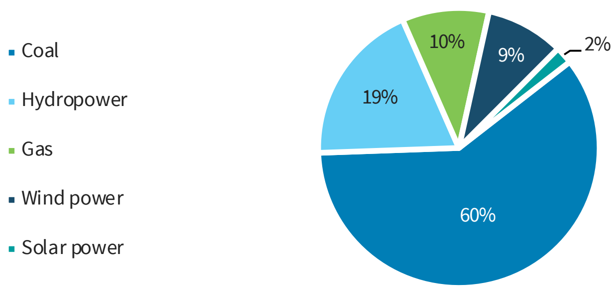
Company description: China Huadian Corp (A2/A-/A Stb) is one of the four largest state-owned power generation companies in China. CHD had consolidated installed capacity of 148GW in 2018, accounting for 8% of national installed capacity. Renewable energy sources powered 39.7% of CHD's installed capacity. CHD operates in three business segments: 1) power generation (85% of 2018 revenue); 2) coal mining (8%); and 3) others including technology services, engineering and financial services (7%). CHD is wholly owned and supervised by the central SASAC.

HUADIA Bond

Bond	Amt outstanding	Rating	Bond structure	Issuer	Guarantor
HUADIA 4% $ PERP	500	A2/NR/NR	Onshore Guarantee	China Huadian Overseas Development	China Huadian Corporation Ltd
HUADIA 3.875% $'23s	600	A2/NR/A			

Source: Company reports, Bloomberg

2018 Installed Capacity Distribution



Source: Company reports

Financial Statement

CNY mn	2018	2017	2016
Revenue	212,951	196,526	184,553
EBITDA	65,047	63,083	63,922
EBITDA margin	30.55%	32.10%	34.59%
Total debt	509,288	523,434	514,184
Net debt	489,643	507,744	497,745
Credit Metrics			
Gross debt/EBITDA	7.8x	8.3x	8.0x
Net debt/EBITDA	7.5x	8.0x	7.8x
EBITDA/interest	3.1x	3.1x	3.2x
Liabilities/assets	78%	79%	82%

Source: Company reports, Moody's

Business highlights

- **Government support:** CHD is systemically important as one of the major power suppliers in China. CHD has records of receiving fiscal subsidies and tax benefits. CHD has received CNY26.8bn financial subsidies and funding and CNY15.9bn tax benefits from both central and local government during 2010 to 2018.
- **Shift toward renewables:** The Chinese government aims to increase the use of renewable energy sources to 15% of national energy consumption by 2020. CHD's renewable energy sources include hydro, wind, solar, and gas, and accounted for 39.7% of CHD'S total installed capacity in 2018, and CHD plans to raise that share to 43-45% by 2020 and 67% by 2035.
- **Leverage:** CHD has a high leverage with a total liabilities/total assets ratio of 77.6% at end-2018. However, management expects to reduce that ratio to 75% by 2020. CHD plans to deleverage by increasing operating efficiency, controlling capex, and reducing equity in some of its current projects.
- **Coal price volatility mitigated by captive coal mining business:** Coal-fired power accounted for 60% of CHD's total capacity. Due to the inefficient cost pass-through mechanism, CHD's profit margin has compressed since 2H16 as coal prices rose. CHD's coal mining business partly mitigates its exposure to coal price volatility. CHD produced 50.8mn tons coal in 2018, supplying 20-25% of its coal consumption.
- **Shifting regulatory scheme:** In 2015, NDRC revised formula for grid tariffs to improve the pass-through mechanism for coal costs. However, the adjustment is based on an annual review, which leads to a delay in pass-through. In 2016, the government introduced a market-driven power sales (MPS) mechanism, which allows power plants and grid companies to negotiate tariffs and volumes of power purchases, and 43.6% of CHD's power is sold at market-based prices in 2018. The tariff under the MPS is lower than the benchmark on-grid tariff, but according to Moody's, CHD generates higher cash flow through incremental power sales under the MPS.

China Merchants Port Holdings

Analyst
Eugene Tham

Company description: China Merchants Port Holdings (CMPH, Baa1 Stb/BBB Stb/NR) is one of the largest port operators in China. The core ports business accounted for 93.9% of 2018 revenue, followed by bonded logistics (5.4%), and other port-related operations (1.5%). The company's port operations are located in Hong Kong, Shenzhen and Shantou (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). CMPH, with a market capitalisation of HKD45.5bn (c.USD5.8bn) as at 26 July 2019, was listed on the Hong Kong Stock Exchange in 1992 and has been a part of the Hang Seng Index since 2004. China Merchants Group, a wholly-owned central SOE ranking in the top 10 central SOEs by net profit, held 62.18% voting rights (directly and indirectly) in CMPH at end-2018.

CMHI Bonds (Baa1/BBB/NR)

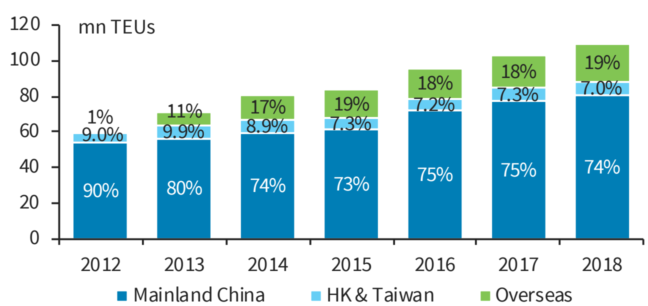
Bonds	Amt (mn)	Issuer	Offshore guarantor
CMHI 3.5% $'20s	200	China Merchants Finance Co Ltd	China Merchants Port Holdings Co Ltd
CMHI 5% $'22s	500		
CMHI 4.75% $'25s	500		
CMHI 4.375% $'23s	900	CMHI Finance BVI Co Ltd	
CMHI 5% $'28s	600		

Financial snapshot

HKD mn	2018	2017	2016
Revenue	10,160	8,692	7,976
Gross Profit	8,291	6,673	6,351
Gross Profit Margin	81.6%	76.8%	79.6%
EBITDA	4,593	3,828	3,774
EBITDA Margin	45.2%	44.0%	47.3%
Share of Results of JV/Associates	4,826	5,472	3,686
Dividends from JV/Associates	2,242	1,923	2,142
Total Debt	40,316	30,190	24,025
Net Debt/ (Cash)	33,141	20,943	20,388
Credit Metrics			
Total Debt/EBITDA	8.6 x	7.7 x	6.2 x
Net Debt/EBITDA	7.1 x	5.3 x	5.3 x
EBITDA/ Interest	2.3 x	2.7 x	3.5 x
Total Debt/Capital	31.4%	25.2%	24.6%
Revenue by geography	**2018**	**2017**	**2016**
Mainland China, HK and Taiwan	64%	80%	85%
Others	36%	20%	15%

Source: Company reports, Barclays Research

Container throughput by geography

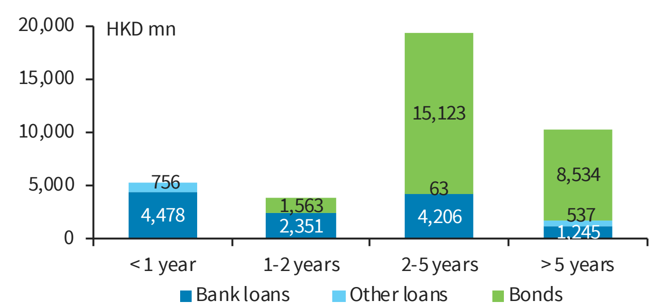


Source: Company reports, Barclays Research

Business highlights

- **Leading domestic market position.** CMPH has interests in seven of the top 10 container ports in China and Hong Kong, which handled about a third of China's domestic container throughput in 2018. In 2018, CMPH handled 109mn TEUs (+6% y/y) and 502mn tonnes of bulk cargo (-1% y/y). CMPH's interest in Shanghai port, which is the largest port globally in terms of container throughput, is through its 26.77% stake in Shanghai International Port Group (A1/A+ Stb).
- **Overseas footprint built through recent acquisitions.** Overseas revenue contributed for 36% of total revenue in 2018, up from 15% in 2016. Many of CMPH's investments are in ports in emerging market countries associated with the Belt and Road initiative, which exposes CMPH to execution and geopolitical risks.
- **Increasing proportion of non-listed JV assets.** This could affect control of cash flow at the operating level, and limit transparency on the valuation or performance of the operating entities.
- **Acquisitive appetite.** Rating agencies take into consideration expectation that the company's acquisitive appetite will continue. As a result of elevated capital spending in the past few years, most of which has been debt-funded, credit metrics have deteriorated, and are unlikely to significantly improve in the near term, according to Moody's. On the other hand, the agency notes that CMPH has demonstrated a willingness to lower debt by selling non-core assets and raising equity funding.
- **US-China tensions weigh on global trade outlook.** Sentiment remains fragile in the absence of a deal. Any potential re-escalation of tensions could weaken industry sentiment and likely weigh on cargo throughput at Chinese ports.
- **Overcapacity and policy drivers.** While Chinese port handling capacity has increased, demand has slowed, with container throughput increasing at a slower rate (5.2%, down 3.1pp) in 1H19, according to the National Bureau of Statistics. Fierce competition for container volume has also driven declines in port handling charges, and provided impetus for the government to pursue port consolidation within each province.

Debt maturity profile at end-FY18



Source: Company reports, Barclays Research

China Metallurgical Group Corp/MCC Ltd

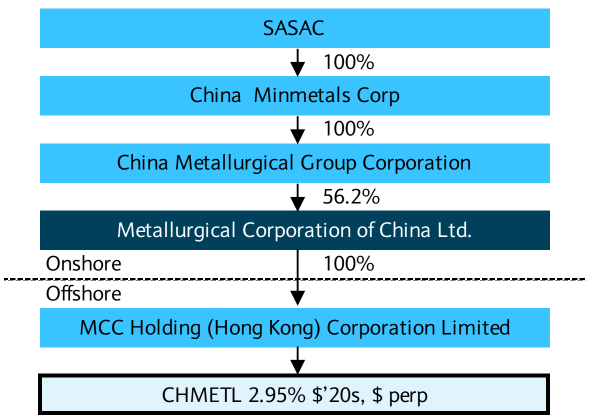
Analyst
Kai Chang

Company description: Metallurgical Corp of China Ltd. (MCC, Baa1/BBB+ / BBB+ Stb) is one of the largest metallurgical engineering and construction (E&C) companies in China (c.90% market share) and globally (over 60% market share). MCC is listed on both Shanghai and Hong Kong stock exchanges, and parent China Metallurgical Group Corp (CMGC) is a conglomerate wholly owned by the central SASAC through China Minmetals Corp (Minmetals). CMGC holds a 56.2% interest in MCC. MCC accounted almost all of CMGC's total revenue and total assets in 2018. CMGC was merged into Minmetals in 2017, and accounted for 55% of the combined entity's 2018 revenue and 50% of its assets.

MCC bonds (Baa1/NR/NR)

Bonds	Amt (mn)	Issuer	Guarantor
CHMETL 4.95% perp	500	MCC Holding HK Corp Ltd	Metallurgical Corp of China
CHMETL 2.95% 20s	1000		

Bond structure



Source: Company report, Barclays Research

Financial snapshot

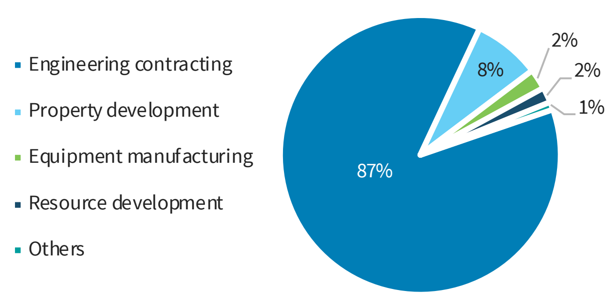
CNY mn	2018	2017	2016
Revenue	289,535	244,000	219,558
EBITDA	19,079	17,855	15,863
EBITDA margin	6.6%	7.3%	7.2%
Total debt	110,047	105,645	104,827
Net debt	65,569	62,051	59,964
Total assets	438,916	414,565	377,492
Credit metrics			
Debt/EBITDA	5.8x	5.9x	6.6x
Net Debt/EBITDA	3.4x	3.5x	3.8x
EBITDA/Interest	4.2x	3.6x	2.9x
Debt/Capital	56%	57%	59%

Source: Company reports, Barclays Research

Business highlights

- **Government support following consolidation with Minmetals.** China Minmetals Corp is the largest conglomerate and China's only state-owned capital investment platform in the metals and mining industry. MCC's leading position in the domestic metallurgical construction industry underpins its importance in implementing the central government's industrial integration and upgrading plans in this sector, given the high barriers to entry due to technology requirements and strict regulations.
- **Leading market position.** In 2017, MCC had a 60% share of the global metallurgical engineering market and a 90% share of the domestic market. The company plans to increase its global market share to 80% by 2020. MCC has engaged in the planning, design or construction of the primary production facilities for almost all of the medium- and large-scale iron and steel companies in China, including Baowu Steel, Shougang Group, China Minmetals.
- **Limited but increasing business diversification.** The E&C business accounted for 83-87% of MCC's total operating revenue in the past three years. However, in response to the downturn in the metallurgical E&C market, the company has focused more on non-metallurgical operations, which contributed 75% of the E&C business's revenue in 2018, up from 64% in 2015. Other operating segments include property development (7.7% of total revenue in 2018), resources development (1.8%), equipment manufacturing (2.4%) and others (1.2%).
- **Earnings visibility supported by steady growth in order backlog.** MCC's total order backlog increased 29% y/y, to CNY1105bn, at end-2018 (CNY766bn in 2017, CNY592bn in 2016). Outstanding contracts covered 3.8x of revenue in 2018 (3.1x in 2017, 2.7x in 2016). Growth in new contract orders rose 13% y/y in 2018, to CNY629bn (2017: CNY556bn, +22%y/y, 2016: CNY456bn).
- **Credit metrics.** Total debt/EBITDA improved to 5.8x in 2018 (2017: 5.9x; 2016: 6.6x), and net debt/EBITDA fell to 3.4x in 2018 (2017: 3.5x; 2016: 3.8x).

Revenue by business segment (2018)



Source: Company reports

China Minmetals Corp

Analyst
Kai Chang

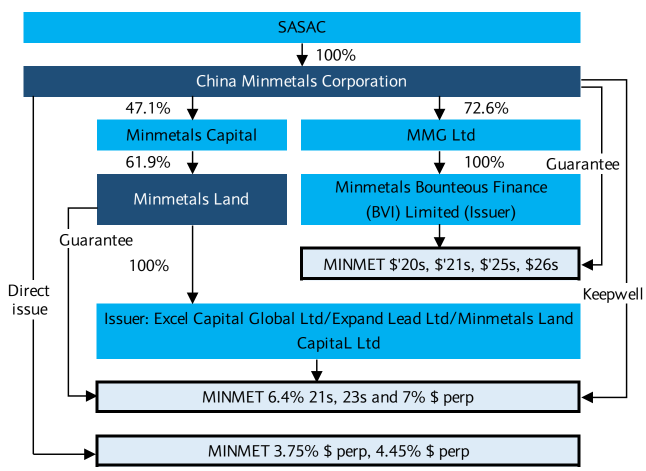
Company description: China Minmetals Corp (Baa1/BBB+/BBB+ Stb) is China's largest metals and mining conglomerate, and is involved in exploration, mining, smelting, and processing, and the trading of metals, minerals and industrial products. China Minmetals has a diversified metals and mining portfolio, including copper, zinc, iron ore, lead, bauxite, rare earth elements, tungsten and other nonferrous metals. Other businesses include financial services, real estate and property development. China Minmetals is wholly owned by the central SASAC and is a key platform for China to acquire overseas mining assets and secure mineral resources. The company acquired a 62.5% interest in the Las Bambas copper mine in Peru in July 2014, the largest overseas acquisition in the Chinese metals and mining industry. Minmetals merged with China Metallurgical Corp (CMGC), China's largest metallurgical engineering and construction company, in 2017. After the consolidation, CMGC contributed 55% of the combined entity's 2018 revenue and 37% of its EBITDA.

MINMET bonds

Bonds	Amt (mn)	Issuer	Guarantor	Keepwell Provider
MINMET 4.45% perp (Baa1)	400	China Minmetals Corp	NA	NA
MINMET 3.75% perp (Baa1)	1,000			
MINMET 20s, 3.125% 21s, 25s and 26s (Baa1/NR/BBB+)	2,000	Minmetals Bounteous Finance (BVI) Ltd	China Minmetals Corp	NA
MINMET 6.4% 21s (NR)	300	Expand Lead Ltd	Minmetals Land Ltd	China Minmetals Corporation
MINMET 23s (NR)	125	Minmetals Land Capital Ltd		
MINMET 7% perp (NR)	200	Excel Capital Global Ltd		

Source: Bloomberg

Bond structure



Source: Company reports

Financial snapshot

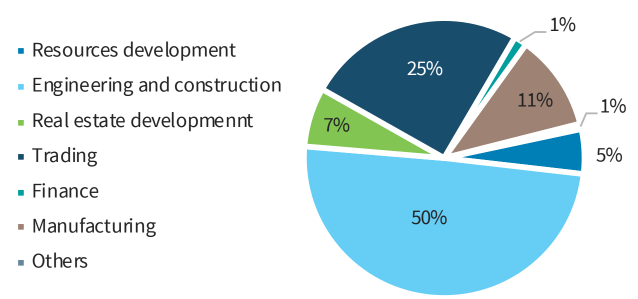
CNY mn	2018	2017	2016
Revenue	524,847	489,600	432,691
EBITDA	47,895	43,412	28,543
EBITDA margin	9.1%	8.9%	6.6%
Total debt	366,967	364,211	331,658
Net debt	270,403	268,144	233,729
Total assets	896,845	855,272	759,818
Credit metrics			
Debt/EBITDA	7.7x	8.4x	11.6x
Net Debt/EBITDA	5.6x	6.2x	8.2x
EBITDA/Interest	3.3x	3.2x	2.5x
Debt/Capital	69%	71%	73%

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

Business highlights

- **Ownership of significant metals resources underpins strategic importance.** Minmetals is one of China's largest producers of key industrial metals, including rare earth elements, and at end-2016 controlled 65%, of the country's copper resources, and 11% of its zinc resources and of its 40% tungsten resources. As a key supplier of minerals, it is also a leader in industrial transformation and upgrading. It has the world's largest reserves of tungsten, antimony and bismuth, and is a leading producer of antimony oxides. As at end of 2017, Minmetals had 32.3mnt of copper, 3.1mnt of lead and 13.8mnt zinc.
- **Key role in industry consolidation and "One belt, one road" initiative.** Minmetals is one of the 53 "backbone" SOEs directly supervised by the central SASAC and one of the 10 companies selected to create "world class enterprises" in the 13th Five-Year Plan. Minmetals is involved in a number of belt-and-road-related mining and construction projects in Afghanistan, Pakistan, Vietnam, Singapore, Indonesia, Malaysia and Sri Lanka.
- **Credit profile less cyclical following merger.** The merger with CMGC doubled Minmetals' revenue, making it among the largest mining companies globally. Although Minmetals' business profile has been cyclical, given its need to undertake capital-intensive projects with long payback periods and its volatile trading business, it is now more diversified. Mining, trading and processing of metals contributed 41.8% of total revenue in 1Q18 compared with 90.9% in 2014. In addition, the merger created business synergies (eg, mine design and exploration).
- **Cost controls and increased profitability helping to drive improvement in credit profile, but debt reduction minimal.** The Las Bambas copper mine became fully operational in 2017 and produced 385,299 tons of copper concentrate, contributing c.20% of Minmetals' EBITDA in 2018, according to Moody's. The increased output from the mine,and reduced cash costs drove revenue and profit growth.

2018 consolidated revenue by segment



Source: Company reports

China National Offshore Oil Corp/CNOOC Ltd

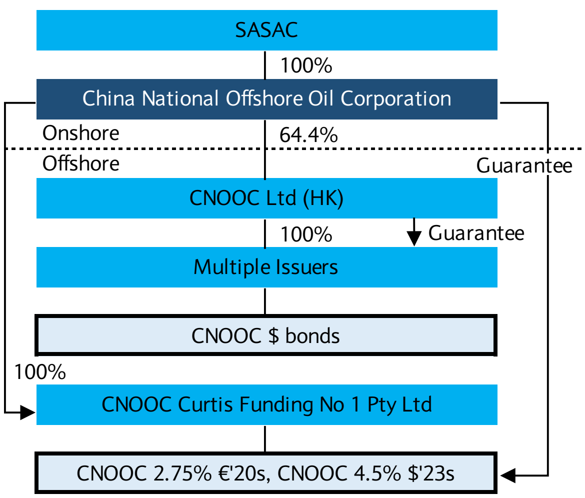
Analyst
Eugene Tham

Company description: CNOOC Ltd (A1/A+/A+ Stb) is one of the three national oil and gas companies in China, focusing on offshore oil and gas exploration and production. CNOOC Ltd operates in China, Europe, Africa and North America with offshore production accounting for 35% of total production in 2018. Parent China National Offshore Oil Corporation (CNOOC) is wholly owned by the central SASAC and owns a 64.4% stake in CNOOC Ltd. In 2018, CNOOC Ltd accounted for 32% of CNOOC's revenue and 56% of total assets. At end-2018, CNOOC Ltd had oil and natural gas proved reserves of 4.96bn boe and its production reached c.475mmboe. CNOOC also owns a 50.5% stake in China Oilfield Services (COSL), and CNOOC contracts account for the majority of COSL's annual revenue.

CNOOC bonds

Bonds	Amt (bn)	Issuer	Guarantor
CNOOC $ bonds (A1/A+/A+)	USD 5.05	Multiple issuers	CNOOC Ltd (offshore)
CNOOC $ bonds (A1/A+/NR)	USD 13.5		
CNOOC $'23s CNOOC 2.75% €'20s (A1/A+/NR)	USD 1.3 € 0.5	CNOOC Curtis Funding No I Pty Ltd	China National Offshore Oil Corporation (onshore parent)

Bond structure



Source: Company reports, Barclays Research

- **Production to rise.** Target net production is 480-490mmboe (up 1%-3% y/y) in 2019 and CNOOC also expects to raise production to 535-545mm boe by 2021. The Bozhong gas field project and Guyana exploration with total recoverable resources reaching 5.5bn boe will contribute to production growth in the future.

Production profile at 2018

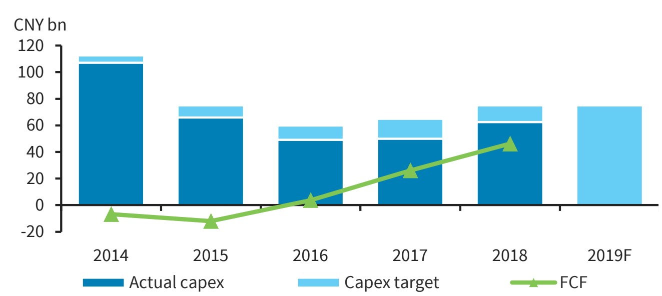
Production	2018	2017	%
Production (mm boe)	475.0	470.2	1%
Crude and liquds (mm bbl)	383.5	380.1	1%
Natural gas (bcf)	530.2	421.5	26%
Realised price per-unit			
Realised oil price (USD/bbl)	67.2	52.7	28%
Realised gas price (USD/mcf)	6.4	5.8	10%
Amount in CNY mn			
Oil and gas revenue (CNY mn)	185,872	151,888	22%
Total revenue	226,963	186,390	22%
Capex	62,600	50,100	25%

Source: Company reports, Barclays Research

Business highlights

- **Strategic importance.** As the third largest oil and gas producer with dominant offshore upstream operations in China, CNOOC serves to secure national oil and gas supply. Amid elevated trade tensions, the government requires CNOOC to increase its oil and gas exploration and development to ensure national energy security. The government has also granted CNOOC rights to establish production-sharing agreements with other international companies.
- **Earnings highly sensitive to oil prices,** given CNOOC's focus on upstream operations and its limited downstream operations. CNOOC's revenue and EBITDA rose 21.8% and 22.6% respectively in 2018 largely due to a rise in its realized oil price (+27.7% y/y to USD67.2/bbl).
- **Capex could rise sharply on government's call for increased production.** Capex guidance in 2019 is CNY70-80bn compared with actual capex of CNY62.6bn in 2018 and CNY50.1bn in 2017. While CNOOC had previously managed capex flexibly to maintain strong cashflow, there is a risk that its focus now turns to achieving policy objectives.
- **Significant proved reserves.** Reserve life was extended to 10.5 years as a result of discoveries and extensions in offshore China. Its reserve replacement ratio was 126% in 2018.
- **Execution risks** with offshore operations can be high, and some of CNOOC's projects have experienced delays in late 2017 and early 2018, leading to back-loaded capex in 2018.
- **Good cost control** helped drive all-in costs lower in each of the past six years, to USD30.4/boe in 2018 from USD45.0/boe in 2013. This enabled CNOOC to maintain profitability even amid weak oil prices in 2015-16.
- **Solid credit metrics.** With the recovery in oil prices, CNOOC's debt/EBITDA declined to 1.2x in 2018 from 1.3x in 2017 and 2.1x in 2016. CNOOC remained in a net cash position as of end-2018. Solid credit metrics provide a buffer to oil price volatility and a potential increase in capex.

Capex control has also helped improved cashflows



Note: Capex targets used here reflect mid-point of CNOOC's announced capex target range, except for 2016. Source: Company reports, Barclays Research

China National Petroleum Corp

Analyst
Eugene Tham

Company description: China National Petroleum Corp (CNPC, A1/A+/A+ Stb) is China's largest oil and gas producer, accounting for c.60% of the country's production and holding c.60% of its oil and gas reserves, according to Moody's. CNPC also has a large midstream business, which includes oil refining, chemicals, oil and gas transmission, and downstream marketing networks. CNPC is China's second-largest oil refiner and second-largest chemicals producer. It owns c.70% of the country's oil and gas pipelines, and approximately one-fifth of China's LNG capacity. CNPC is wholly owned by the central SASAC and conducts business mainly through its 81.03%-owned listed subsidiary PetroChina. PetroChina accounted for 86% of CNPC's total revenue and 59% of its total assets in 2018. In 2018, PetroChina produced 1,492mm boe of oil and gas and had proved reserves of 20bn boe with a reserve life of 13.7 years.

Bond structure

Bonds	Amt (mn)	Issuer	Guarantor	Keepwell provider
CNPCCH 19s	700	CNPC General Capital Ltd	CNPC	n.a.
CNPCCH 21s, 41s	1150	CNPC HK Overseas Capital Ltd	CNPC Finance HK Ltd	China National Petroleum Corp & China Petroleum Finance Company Limited
CNPCCH 22s, 23s	1250	CNPC General Capital Ltd		

Note: The CNPCCH '19s are rated A1/A+/A+, and the remaining CNPCCH bonds are rated A2/A/A+. Source: Company reports

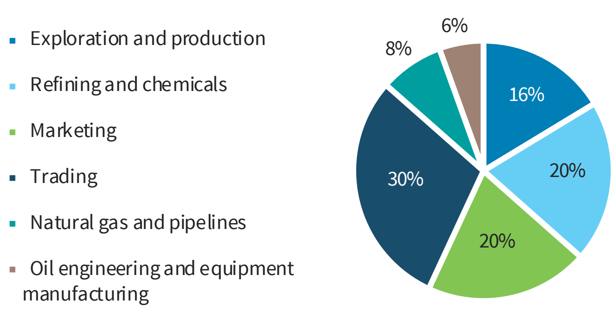
Financial Snapshot

CNY bn	2018	2017	2016
Revenue	2,739	2,340	1,872
EBITDA	367	332	256
EBITDA margin	13.4%	14.2%	13.7%
Total Debt	499	571	591
Net Debt	86	168	207
Total Equity	2,390	2,404	2,445
Total Assets	4,132	4,099	4,070
Credit metrics			
EBITDA/Gross Interest	15.4x	13.5x	10.1x
Total Debt/EBITDA	1.4x	1.7x	2.3x
Net Debt/EBITDA	0.2x	0.5x	0.8x
Total Debt/Total Capital	17%	19%	19%

Source: Company reports and Barclays research

- **CNPC Finance HK** plays an important role in managing CNPC's overseas financing and treasury operations. It is held under China Petroleum Finance (40% owned by CNPC, 32% owned by PetroChina, and 28% owned by CNPC Capital), which in turn manages CNPC's treasury functions.

Revenue breakdown for CNPC in 2018

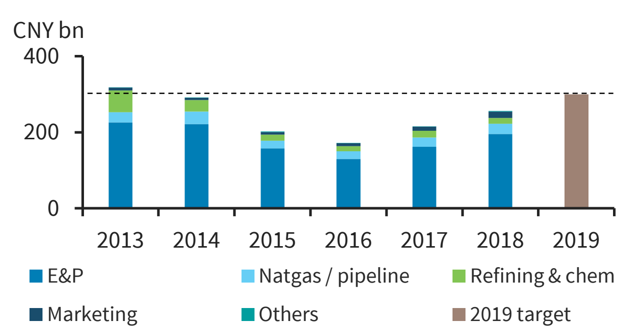


Source: Company reports

Business highlights

- **Strategic importance as the largest oil and gas producer in China.** As one of the three national oil companies, CNPC helps to secure China's energy supplies. CNPC is also one of the largest SOEs directly owned and supervised by the central SASAC.
- **Integrated business reduces oil price-related volatility.** CNPC has maintained an EBITDA margin of 13-15% for the past few years, even during oil price slump in 2016, helped by balanced revenue contributions from across the oil & gas value chain.
- **Strong credit profile.** CNPC has strong credit metrics and adequate liquidity with debt/EBITDA of 1.4x and cash/ST debt of 1.8x as of 2018. CNPC also has a good access to funding, given its scale and strategic importance in China.
- **High capex under government guidance.** PetroChina raised its planned capex to CNY300.6bn in 2019 from CNY256bn in 2018, as the government pushes for the oil majors to bolster China's energy security. In 2019, CNPC targets to raise natural gas production to 116bcm (2018: 109.4bcm), maintain domestic crude oil production above 100mn tons, and raise overseas oil & gas output to at least 100mn tons (2018: 98.18mn tons).
- **Current oil price favours integrated energy companies.** Current Brent crude prices in the low-60s per barrel still support margins at CNPC's upstream business, as its all-in production cost is less USD40/bbl. Barclays forecasts an average Brent crude price of USD72/bbl in 3Q19 and USD71/bbl in 4Q19. CNPCs downstream operations, especially refining and marketing, may see high competition and margin pressure.
- **Oil & Gas pipeline reforms.** On March 2019, China's Deepening Reform Committee approved the proposed reforms of the country's oil and gas pipeline system, which include the formation of a national oil and gas pipeline corporation. CNPC may spin off its pipeline assets into this new pipeline company, and, according to Jiemian, could potentially take 3 of the 7 seats (including the chairmanship) on the board of this new company.
- **Kunlun Energy a key subsidiary,** 62%-owned by CNPC (mainly through PetroChina), and which accounts for most of CNPC's LNG business. Kunlun operates 15 LNG plants, with LNG processing and terminal volume of 22.8bcm during 2018.

2019 capex target back above 2014 levels



Source: Company reports and presentations

China National Travel Service Group Corp Ltd/ China Travel Service Holdings Hong Kong Ltd

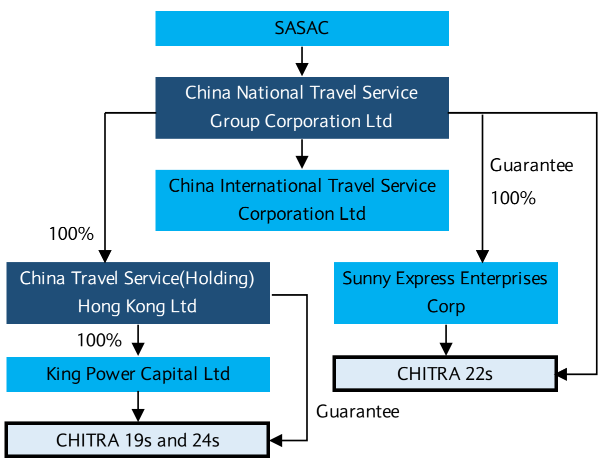
Analyst
Kai Chang

Company description: China National Travel Service (CNTS) is the largest state-owned tourism enterprise in China, 100% owned by the central SASAC. CNTS is engaged in providing travel services, tourism investment, retailing (mainly duty-free shops), hotel operations and tourism finance. In 2016, CNTS merged with China International Travel Services Group Corp, and its China International Travel Services Corp Ltd (CITS) unit has become a key subsidiary of CNTS (53.3% owned). CITS primarily operates travel agencies and duty-free shops, and accounted for 74% CNTS's revenue and 27% of its assets in 2018. China Travel Service Holdings Hong Kong Ltd (CTS HK) is CNTS' other key subsidiary and is wholly owned. CTS HK has three main businesses: travel services, real estate development and financial services. CTS HK represented 38% and 44% of CNTS' total revenue and assets respectively in 2017.

CHITRA bonds

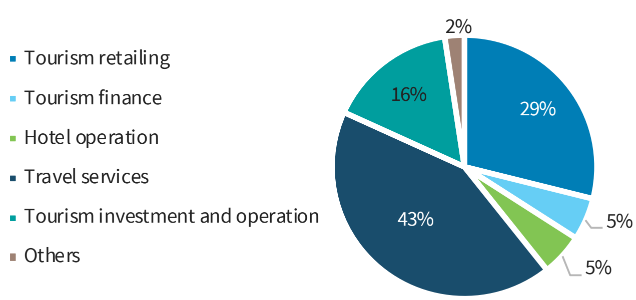
Bonds	Amt (USD mn)	Issuer	Guarantor
CHITRA 19s and 24s (A3/BBB+/NR)	1,000	King Power Capital Ltd	China Travel Service Holdings Hong Kong Ltd (offshore)
CHITRA 22s (A3/NR/NR)	500	Sunny Express Enterprises Corp.	China National Travel Service Group Corp Ltd (onshore)

Bond structure



Source: Offering circular, Barclays Research

Revenue breakdown of CNTS in 1H18

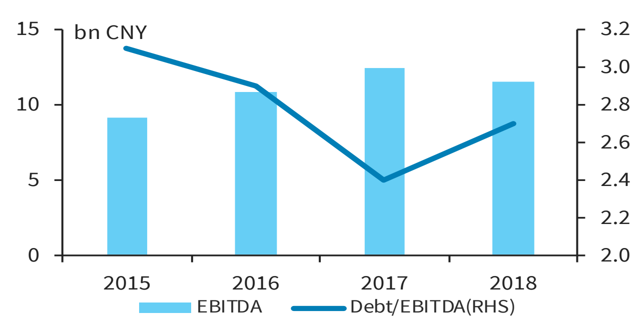


Source: Netroad Show, Barclays Research

Key points to highlight

- **Government support.** As the largest travel-services company directly supervised by the central SASAC, CNTS plays a key role of carrying out government's strategy in tourist industry. Its key subsidiary, CTS HK provides services for processing and administering travel documents to residents of Hong Kong, Macao and Taiwan. CTS HK is the only agency in Hong Kong authorized to issue home return permits to Hong Kong residents and Mainland travel permits to Taiwan residents.
- **Steady growth in demand for travel in China.** Supported by the increase in China's disposable per capita income and growing middle class, demand for leisure travel has risen strongly. Domestic travel rose to 5.54bn trips in 2018 from 3.26bn in 2013, a CAGR of 11%. Tourism's contribution to China's GDP reached 9.5% in 2017. Large potential and steady growth of travel demand support CNTS and CTS HK' business.
- **Duty-free operations:** CNTS is one of the largest operators of duty-free shops globally and has a dominant position in China with an expected 80% market share in 2018 according to the company. CNTS acquired Sunrise Duty Free (Beijing) in 2017 and Shanghai Sunrise in 2018 to strengthen its position. In 1H18, tourism retailing (239 duty-free shops and 11 retail outlets) contributed 28.9% of CNTS' total revenue, and 48.7% of its net profit. Moody's expects CNTS' revenue to grow 26% in 2019 driven by the expansion of its duty-free operations.
- **Risks related to tourism investment and operations:** The tourism investment and operations segment includes tourist attractions, real estate development, and transportation investment. Real estate development exposes CNTS to risks of changes in government regulation and a potential increase in leverage to acquire land The tourist business exposes the company to execution risk given high costs and long investment periods.
- **Credit metrics:** Debt/EBITDA of CNTS was 2.7x in 2018, and Moody's expects the ratio to decline over the next two years on higher earnings and lower debt.

EBITDA fell in 2018 higher expenses and a smaller contribution from real estate development



Source: Moody's

China Oilfield Services Ltd

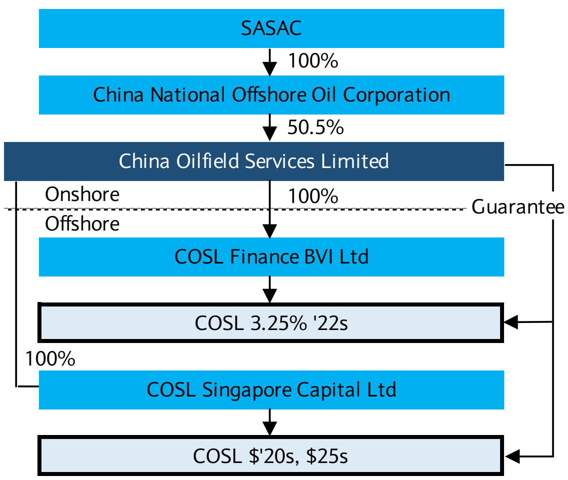
Analyst
Eugene Tham

Company description: China Oilfield Services Ltd (COSL, Baa1 Stb/BBB Pos/A Stb) is the largest integrated provider of offshore oilfield services in China. The company operates in four core business segments: drilling services, well services, marine support services, and geophysical and surveying services. COSL is a major supplier in China offshore drilling services, operating 48 drilling rigs and 5 module rigs. CNOOC, one of the three national oil and gas companies in China, is the largest shareholder of COSL (50.5% stake) and its largest customer (76% of the total 2018 revenue of CNY21.9bn). COSL operates globally with rigs in China's offshore fields, Southeast Asia, the Middle East, North America, and Europe. Revenue generated from overseas markets accounted for 25.9% of total revenue in 2018.

COSL bonds (Baa1/BBB/A)

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

Bond structure



Source: Company reports, Barclays Research

Financial snapshot

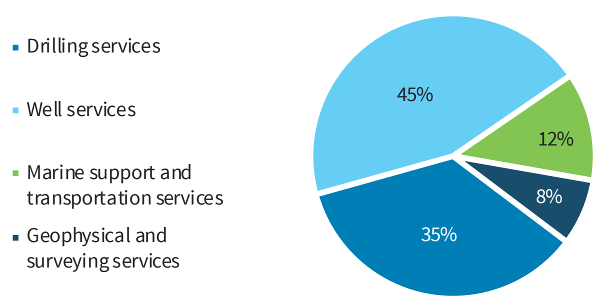
CNY mn	2018	2017	2016
Revenue	22,171	17,783	15,305
EBITDA	5,445	6,045	363
EBITDA Margin	24.6%	34.0%	2.4%
Total Debt	27,925	28,755	33,327
Net Debt	22,863	19,717	20,201
Credit Metrics			
Total Debt/EBITDA	5.1x	5.0x	45.8x
Net Debt/EBITDA	4.2x	3.4x	28.6x
EBITDA/Interest	4.0x	4.8x	0.5x
Revenue by geography			
Mainland China	74.1%	75.2%	68.1%
Overseas	25.9%	24.8%	31.9%

Source: Company reports, Barclays Research

Business highlights

- **Captive oilfield services provider to CNOOC:** COSL's revenue depends heavily on CNOOC's capex. CNOOC Ltd (core subsidiary and listco of CNOOC) has managed its capex flexibly (CNY63bn in 2018, CNY50bn in 2017, and CNY49bn in 2016), and COSL's operating performance has been sensitive to those changes. CNOOC Ltd plans capex of CNY70-80bn in 2019 in response to the Chinese government's call to increase upstream activity and gas output. Assuming CNOOC Ltd's capex goes according to plan, we believe the increased activity would be positive for COSL.
- **Parent support:** COSL is a strategically important subsidiary of CNOOC, carrying out most of the drilling, well services and marine support activities for CNOOC. CNOOC also has provided financial support to COSL, such as loan guarantees.
- **Operations improve as upstream activity recovers:** Revenue increased 24.7% y/y in 2018 and 72.3% y/y in 1Q19. Cash flow from operations improved to positive CNY5.0bn in 2H18 (from negative CNY849mn in 1H18) and negative CNY5.3mn in 1Q19 (1Q18: negative CNY847.9mn). The drilling rig available-day utilisation rate rose to 77% in 1Q19 and 73% in 2018 from 60% in 2017. However, COSL's earnings are vulnerable to significant declines in oil price that could result in lengthy periods of reduced upstream activity by oil and gas producers if the oil price outlook remains suppressed.
- **Profitability:** The EBITDA margin fell to 24.6% in 2018 from 34% in 2017 due to lower day rates for drilling rigs, increased expenses for supplies and materials related to delays at some CNOOC projects. In the drilling services segment, utilisation increased, but day rates will likely continue to face downward pressure due to overcapacity. Day rates declined to USD93k in 2018 from USD98k in 2017.
- **Credit metrics improved in 1Q19 as EBITDA growth offset debt increase.** Debt/LTM EBITDA declined to 4.6x (estimated) in 1Q19 from 5.1x in 2018.

2018 revenue by segment



Source: Company reports, Barclays Research

China Railway Construction Corp

Analyst
Eugene Tham

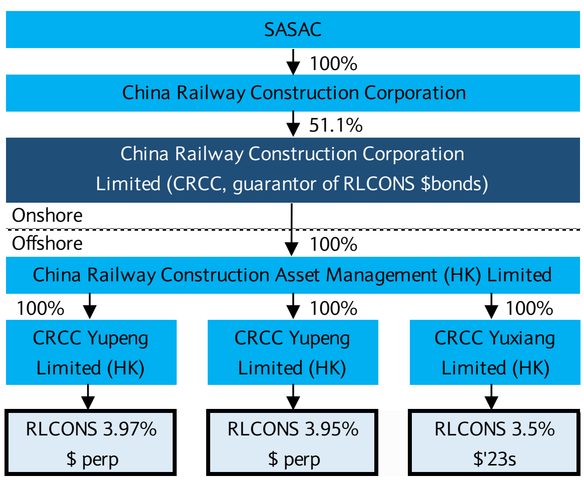
Company description: China Railway Construction Corporation (CRCC, A3/A-/NR both Stb) is one of the largest construction companies globally, mainly involved in railways, roads, urban transit systems construction, as well as construction and municipal engineering. CRCC is 51% owned by the Chinese government through its wholly state-owned parent, China Railway Construction Group. CRCC's principal business segments are: construction (82% of 2018 revenue); real estate (6%); survey, design and consultancy related to infrastructure construction (2%); manufacturing including equipment manufacturing, material production and production of precast concrete (2%); and logistics, trading and others (8%).

RLCONS bonds (A3/A-/NR)

Bonds	Amt (USD mn)	Issuer	Guarantor
RLCONS 3.95% $perps (A3/NR/NR)	800	CRCC Yupeng Ltd	China Railway Construction Corp Ltd (onshore)
RLCONS 3.97% $perps(Baa1/NR/NR)	1,000	CRCC Chengan Ltd	
RLCONS 3.5% $'23s(A3/A-/NR)	800	CRCC Yuxiang Ltd	

Note: * RLCONS 3.97% perp is rated Baa1 by Moody's due to subordination

Bond structure



Source: Company reports, Barclays Research

Financial snapshot

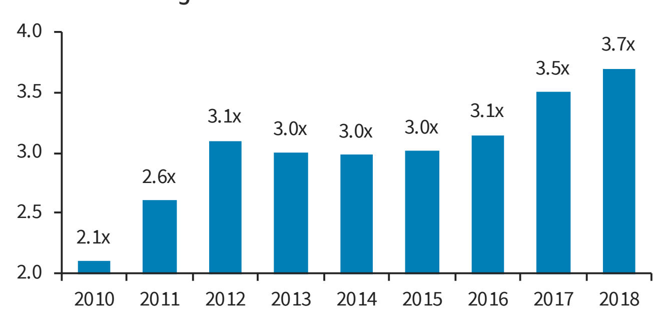
CNY mn	2018	2017	2016
Revenue	730,123	680,981	629,327
EBITDA	47,187	39,802	33,738
EBITDA Margin	6.5%	5.8%	5.4%
Total Debt	209,980	167,431	165,795
Net Debt	66,179	26,225	37,093
Credit Metrics			
Total Debt/EBITDA	4.5x	4.2x	4.9x
Net Debt/EBITDA	1.5x	0.7x	1.1x
EBITDA/Interest	6.5x	6.6x	3.6x
Debt/capital	53.7%	50.7%	54.5%

Source: Company reports

Business highlights

- **Market position:** CRCC enjoys a duopoly with China Railway Group (CRG) in the Chinese national railway engineering and construction market, with a market share of 45-50%, according to Moody's.
- **Continued railway and other infrastructure investments benefit CRCC.** In the National Development and Reform Commission's (NDRC) 13th Five-Year Plan (2016-20), CNY3.5trn was earmarked for investment in railway infrastructure, including high-speed, intercity and heavy haul railways, which would expand China's railway network to 150,000km by end-2020 (end-2015: 121,000km). After more than CNY800bn investment in the past three years, the government said that the railway construction investment would remain high in 2019. It also announced an increase in infrastructure investment, including the regional infrastructure construction to support economic growth.
- **Order backlog provides good revenue visibility.** CRCC's outstanding orders of CNY2.71trn as at end-2018 were equivalent to c.3.7x 2018 revenue. CRCC secured CNY1.58trn in new contracts in 2018, up 5.1% from 2017, as growth in building construction and municipal engineering construction orders offset a decline in road and urban railway transit construction.
- **Cyclical nature of infrastructure business.** Risks include cost overruns on projects due to labour productivity, equipment costs, fluctuations in raw material costs and changes in scope/length of projects (due to any unanticipated delays or policy changes).
- **Reliance on China Railway Corp (formerly Ministry of Railways), CRCC's biggest customer.** China Railway Corp's high bargaining power has resulted in moderate margins for railway construction work by CRCC. However, fast growth of high profit margin segments such as civil engineering and construction, as well as non-construction business could improve CRCC's profitability.
- **Credit metrics.** Debt/EBITDA rose to 4.5x in FY18 from 4.2x in FY17 as higher debt (+25% y/y) offset EBITDA growth (19%). CRCC's debt rose as a result of an increase in investment and capex in real estate, BOT and PPP projects. BOT/PPP projects usually enjoy higher margins but have longer payback periods and large working capital demands in the near term.

Contract backlog versus revenue



Source: Company reports, Barclays Research

China Railway Group Ltd

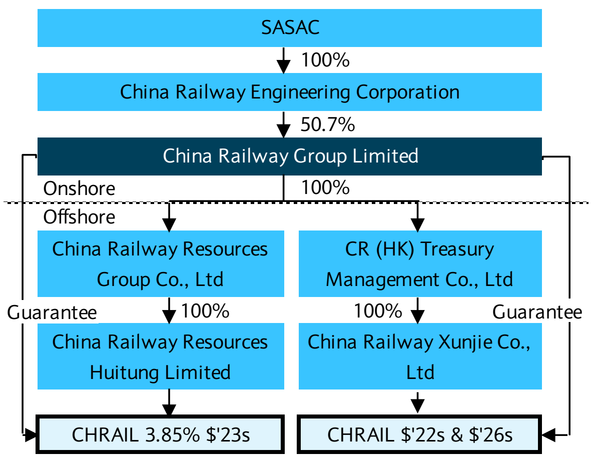
Analyst
Eugene Tham

Company description: China Railway Group Ltd (CRG, A3 Stb/BBB+ Pos/A- Stb) is one of the largest integrated construction groups in the world, with a leading position in China's domestic railway construction market. The company is majority owned by the central SASAC through China Railway Engineering Corporation (50.7% stake as of end-2018). CRG is primarily involved in infrastructure construction, including railways, highways, bridges, housing, urban metro systems, ports, airports, and hydroelectric plants, which generated 84.7% of FY18 revenue of CNY740bn. Other businesses include: survey, design and consulting; manufacturing; real estate; and mining, trading, and financial services.

CHRAIL bonds

Bonds	Amt (mn)	Issuer	Guarantor
CHRAIL 2.875% $'22s (A3/NR/A-)	500	China Railway Xunjie Co Ltd (BVI)	China Railway Group Limited (Onshore)
CHRAIL 3.25% $'26s (A3/NR/A-)	500	China Railway Xunjie Co Ltd (BVI)	China Railway Group Limited (Onshore)
CHRAIL 3.85% $'23s (NR/BBB+/A-)	500	China Railway Resources Huiting Limited	China Railway Group Limited (Onshore)

Bond structure



Source: Company prospectus, Barclays Research

- **Asset restructuring remains ongoing.** CRG's plan to sell equity interest in four of its subsidiaries for CNY11.6bn to equity investors including China Reform Holdings, announced back in mid-2018, remains ongoing. The CSRC has issued approval for the plan in late-May 2019, and CRG has said it will expedite the share sale plan. CRG has also said that the proceeds will be used to pay down debt, which should help marginally reduce leverage.

Financial snapshot

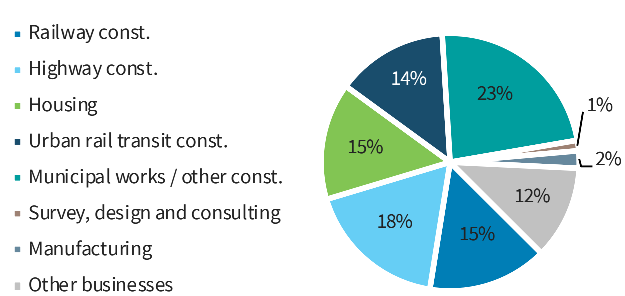
CNY mn	2018	2017	2016
Revenue	740,383	688,773	632,856
EBITDA	43,545	38,090	29,109
EBITDA Margin	5.9%	5.5%	4.6%
Total Debt	225,386	187,168	185,537
Net Debt	107,618	70,480	70,707
Credit Metrics			
Total Debt/EBITDA	5.1 x	4.9x	6.3x
Net Debt/EBITDA	2.5 x	1.8x	2.4x
EBITDA/Interest	5.8 x	7.3x	4.8x
Debt/capital	54.3%	54.3%	57.5%

Source: Company reports, Barclays Research

Business highlights

- **Leader in railway/light rail construction; long track record:** CRG ranked as the second-largest global contractor in 2018, according to the *Engineering News-Record*. It has a 45-50% share of China's domestic duopoly in railway construction, and held a 58% share in construction of China's medium- and large-sized railway in 2018.
- **Ongoing diversification into other infrastructure construction sectors** reduces reliance on the government's railway investment. New orders from railway and urban rail transit systems accounted for less than 30% of total orders in 2018 and 1H19. This is lower than the combined proportion of the contract backlog in 2017 (38.1%). Diversification mitigates potential new order volatility because of changes in the government's railway investment plans, and provides CRG with exposure to other infrastructure investment segments.
- **Steady growth in new contracts, ample backlog.** The company's order backlog amounted to CNY2.9trn as of end-2018 (+12.8% y/y), or 3.9x FY18 revenue. The core infrastructure construction business accounted for CNY2.67trn, comprising municipal works/others (CNY1.6trn), railway (CNY558bn), and highway (CNY515bn). The growth in its contract backlog in 2018 was driven mainly by highway construction (+27% y/y) and municipal works and others (+34% y/y), in particular housing construction.
- **Increase in debt-funded BOT and PPP projects:** Owing mainly to CRG's investments in BOT and PPP projects, adjusted net debt rose 53% y/y, to CNY108bn, in 2018, pushing net debt/EBITDA up to 2.5x (2017: 1.8x). Given their higher long-run returns, CRG is likely to maintain sizable investments on these types of projects. New orders for infrastructure investment projects fell 11.2% y/y in 2018, driven in part by a cleanup of PPP projects in China, but rose 63.5% y/y in 1H19. CRG announced a CNY49.9bn increase in debt in 1H19 (+22% on 2018 gross debt).
- **Execution risk and overseas expansion:** CRG is exposed to cost overruns, volatility in raw material costs, and unexpected delays. While new overseas contracts accounted for less than 10% of total new contracts over the past five years (6.2% in 2018), involvement in large-scale, high-profile projects in new regions keeps operational risk high. This is balanced by CRG's long operating track record and recent successful openings of projects, such as the Addis Ababa-Djibouti railway and the Hong Kong-Zhuhai-Macau bridge.

2018 new orders breakdown



Source: Company report, Barclays Research

China Resources Gas Group Ltd

Analyst
Eugene Tham

Company description: China Resources Gas Group Ltd (CR Gas, A3/A-/A- Stb) is one of the largest city gas distributors in China. The company is principally involved in piped natural gas sales to industrial, commercial and residential consumers, and the construction and operation of gas pipeline networks. The company also constructs and operates CNG and LNG refuelling stations for vehicles, and sells gas appliances. As at end-2018, CR Gas operated 248 projects across 22 provinces, three direct administrative municipalities, and 73 prefecture-level cities in China, serving 34.6mn customers with a gas penetration rate of 50.3% (2017: 48.4%). Listed on the Hong Kong Stock Exchange with a market cap of HKD86bn (c.USD11bn), CR Gas is 63.95% owned by China Resources Holding (CRH), which in turn is wholly owned by the central SASAC. As one of the largest conglomerates in China, CRH's operations include retail, power utility, real estate, cement, city-gas and pharmaceutical businesses.

CHIRES bond (A3/A-/A-)

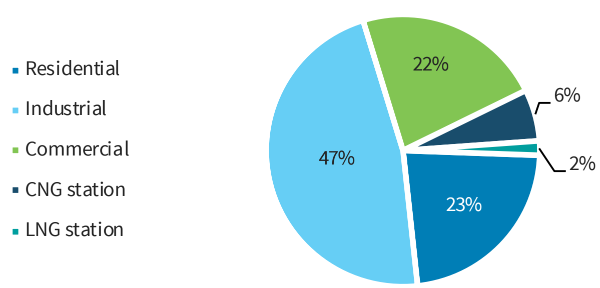
Bonds	Amt (mn)	Issuer
CHIRES 4.5$ $'22s	750	China Resources Gas Group Ltd (Bermuda)

Financial snapshot

HKD mn	2018	2017	2016
Revenue	51,165	39,837	32,916
Gross Profit	13,622	11,916	11,184
Gross Profit Margin	26.6%	29.9%	34.0%
EBITDA	9,033	7,611	7,173
EBITDA Margin	17.7%	19.1%	21.8%
Total Debt	9,204	11,585	12,312
Net Debt/ (Cash)	(1,188)	1,229	2,786
Credit Metrics			
Total Debt/EBITDA	1.0 x	1.5 x	1.7 x
Net Debt/EBITDA	-0.1 x	0.2 x	0.4 x
EBITDA/ Interest	17.2 x	14.3 x	12.2 x
Total Debt/Capital	22.6%	28.4%	34.2%
PBT margin by operations	**2018**	**2017**	**2016**
Gas sales	12.4%	11.9%	13.5%
Connection fee	41.6%	44.9%	48.2%

Source: Company reports, Barclays Research

2018 gas sales volume breakdown

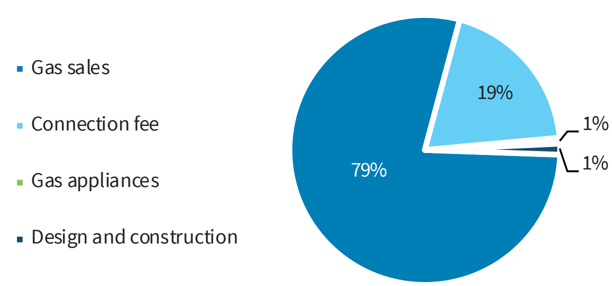


Source: Company reports, Barclays Research

Business highlights

- **Long-term contracts with local governments for piped gas operations.** The company's exclusive concession rights, which range from 20-30 years and are granted by local governments, provide cash flow visibility and stable returns over the long term.
- **Government "coal-to-gas conversion" plan supports volumes.** Driven by the continued promotion of environmental protection policies, China's natural gas consumption increased 18.1% y/y to 280.3bn cubic metres in 2018. The company reported gas sales of 24.3bn cubic metres in 2018, a y/y increase of 23.4%. The government's "coal/oil-to-gas conversion" plan is likely to continue to support gas sales growth over the next few years.
- **Transmission pipelines – gas tariff reform.** NDRC released a new tariff mechanism for gas distribution in June 2017 and aligned residential and nonresidential upstream gas prices in June 2018. The new tariff framework for city gas distribution is based on a cost-plus–return approach, which provides a clearer view on costs and investment returns as well as better regulatory transparency. According to Moody's, the return on CR Gas' current projects is 3-5%, while the permitted return cap is 7%, hence, the impact from the new tariff mechanism should be limited to existing projects.
- **Exposure to commercial and industrial (C&I) customers allows timely pass-through of increases in upstream gas costs to end-users.** Nearly 70% of CR Gas's gas volumes are sold to the C&I segment, where the company has more flexibility to adjust gas prices. For the residential segment (c.23% of gas volumes), price adjustments often take 6-12 months due to concerns about inflation and public-hearing processes.
- **Credit metrics and liquidity.** CR Gas' debt/EBITDA ratio improved to 1.0x in 2018 (2017: 1.5x), owing to EBITDA growth (+19% y/y) and lower debt (-21% y/y). The company reported net cash of CNY1.2bn at end-2018 compared with net debt of CNY1.2bn the previous year. It has good access to low-cost bank loans, with HKD6.6bn and CNY3.0bn of unutilized, unsecured banking facilities as at end-2018.

Gas sales accounted for almost 80% of 2018 revenue



Source: Company reports, Barclays Research

China Shenhua Energy Co Ltd

Analyst
Kai Chang

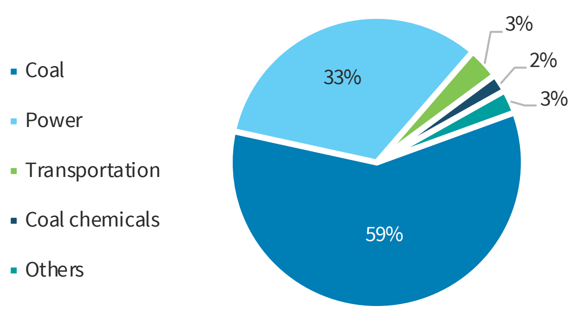
Company description: China Shenhua Energy Co Ltd (Shenhua, A1 Stb/A+ Watch Neg/A+ Stb) is an integrated state-owned coal company. It is one of the largest coal suppliers globally by sales volume (2018: 460.9mn tons), with premium resources in multiple mines across Northwest China. Shenhua operates in six business segments - coal, power, railways, ports, shipping transportation, and coal-to-olefins. As of end-2018, Shenhua had marketable coal reserves of 8.3bn tons, representing a reserve life of more than 17.9 years. Shenhua also dispatched 267.6bn kWh power output, and its self-owned railways completed 283.9bn tonnes km of turnover volume in 2018 (+4.0% y/y). Shenhua's parent, Shenhua Group Corporation Limited, merged with China Guodian Corporation, one of the five largest power generation companies in China, to form China Energy Investment in 2017 as part of the SOE reform agenda. Following the merger, and a transfer of c.3.61% shares by China Energy Investment to Beijing Chengtong Investment and Guoxin Investment in January 2019, Shenhua is 69.45% owned by China Energy Investment (itself in turn wholly owned by the central SASAC).

SHENGY (A2/A/A+) bonds

Bond	Amt outstanding	Rating	Bond structure	Issuer	Guarantor	Keepwell provider	Maturity	EIPU	Liquidity support deed
SHENGY 3.125% $'20s	500	A2/A/A+	Offshore Gurantee	China Shenhua Overseas Capital	Shenhua Hong Kong Limited	China Shenhua Energy Co. Ltd	20-Jan-20	Yes	No
SHENGY 3.875% $'25s	500						20-Jan-25		

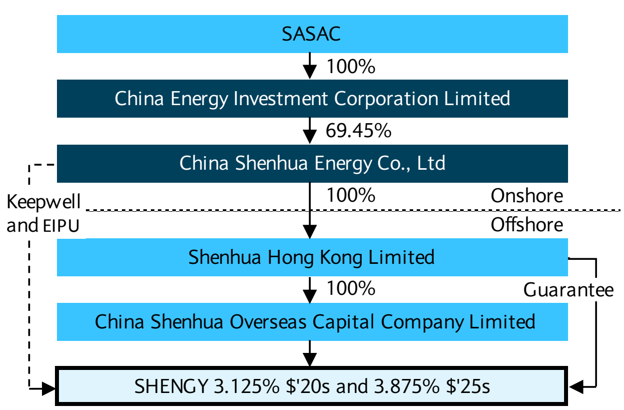
Note: Bond credit ratings – Moody's/S&P/Fitch. NR = not rated by the agency. Source: Company reports

2018 revenue breakdown by segment



Source: Company reports

Bond structure



Source: Company reports

Business highlights

- **One of the world's largest coal producers, with significant vertical integration.** Shenhua produced 300.7mn tons coal in 2018, equivalent to 8-9% of China's total coal production.. It also has a large power generation business with a total installed capacity of c.62GW as of 2018. Shenhua said that its power plants consumed 83% of its coal production in 2018. In addition, Shenhua can also leverage on its railway business to provide transportation needs for coal. The vertically integrated business model helped support stable EBITDA margins of 38-42% in the past few years.
- **Strong government support.** Given its large coal production and important role in coal transportation, Shenhua is strategically important to the China government. Coal accounted for 60% energy consumption in China in 2017, and the government has mandated Shenhua to manage the country's strategic coal reserves and production bases, including the Shendong mines.
- **Credit profile.** Shenhua's credit profile has improved in the past few years, with debt/EBITDA declining to 0.6x in 2018 from 1.6x in 2015. This was supported by a recovery in coal prices and improved operational efficiency.
- **Merger with China Guodian.** The merger of Shenhua and China Guodian into China Energy Investment created a much larger business. However, Shenhua's credit profile may be affected by the impact of Guodian's high leverage on the consolidated credit metrics of Shenhua's parent. S&P has kept the company's rating at Watch Negative since 2017 due to a potential deterioration of the parent's credit metrics after the restructuring.
- **Power plant JV with GD Power:** The JV is 42.53% owned by Shenhua and 57.47% by GD Power Development (a unit of Guodian, holding the equity interests and assets of relevant coal-fired power companies). After the JV agreement became effective on 31 January 2019, Shenhua's assets injected into the JV were deconsolidated and the revenue contribution to Shenhua will be recognised using the equity method. This contributed to a 9.5% y/y decrease in revenue in Q1 2019, and a 49.4% decrease in controlled power generation installed capacity.
- **Mixed outlook for coal industry.** Overcapacity and supply side reform is likely to refocus on preventing already eliminated capacity from returning to production. Demand for coal could be weak, given the mix of slowing economic growth and preferential dispatch for renewable energy projects over coal-fired plants.

China Southern Power Grid Co Ltd

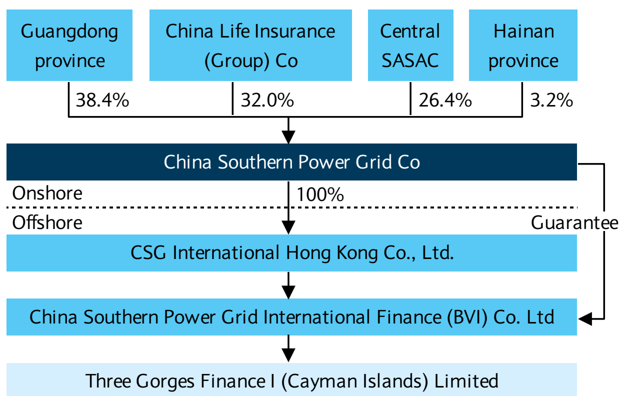
Analyst
Eugene Tham

Company description: China Southern Power Grid (CSPG, A1/A+/A+ Stb) is one of two major electricity transmission and distribution companies in China, and is the sole owner/operator of the power grid in five southern China provinces – Yunnan, Guizhou, Guangxi, Guangdong and Hainan. In 2018, CSPG recorded power sales of 970bn kWh, and had over 220,000km of transmission lines in operation covering an area of 1mn sq. km and a population of 252mn. CSPG ranked 110th among the Fortune Global 500 enterprises in 2018. Established in 2002, CSPG is 26.4% owned by SASAC under China's State Council, 38.4% owned by the Guangdong SASAC, 32% owned by the China Life Insurance (Group) Company, and 3.2% owned by the Hainan SASAC as of 31 December 2018.

SOPOWZ bonds (A1/A+/A+)

Bonds	Size (mn)	Issuer	Guarantor
SOPOWZ 2.750% $'22s	$600	China Southern Power Grid International Finance (BVI) Co. Ltd	China Southern Power Grid Co (onshore)
SOPOWZ 3.500% $'27s	$900		

Bond structure



Note: Central SASAC's 26.4% is held through wholly-owned entity China Reform Holdings Corporation Ltd. Source: Company report, Barclays Research

- **Significant capex,** which averaged CNY68-100bn annually between 2014 and 2018. CSPG has said it expects to continue incurring heavy capex for construction and upgrade of transmission and distribution projects. Moody's estimates CNY75-92bn of annual capex over the next three years.
- **Overseas acquisitions.** In 2018, CSPG announced the acquisition of a 27.8% interest in ETC Transmission Holding, the parent of the largest regulated electricity transmission company in Chile, for USD1.3bn. It also announced the purchase of a 37% stake in Edra Global Energy Bhd (an independent power producer in Asia and the Middle East) from China General Nuclear for USD380mn. CSG also owns a 30% equity stake in Hong Kong genco Castle Peak, acquired in 2013.

Financial snapshot

CNY mn	2018	2017	2016
Revenue	532,641	488,989	472,174
EBITDA	86,396	81,551	89,694
EBITDA margin	16.2%	16.7%	19.0%
Total debt	299,024	256,403	240,445
Net debt	277,801	232,462	221,010
Credit Metrics			
Total debt/EBITDA	3.5 x	3.1 x	2.7 x
Net debt/EBITDA	3.2 x	2.9 x	2.5 x
EBITDA/interest	7.6 x	8.6 x	9.3 x
Debt/capital	48.5%	46.8%	46.8%

Source: Company reports

Business highlights

- **High strategic importance deriving from role in electricity transmission and distribution.** CSPG is vital to ensuring stable electricity distribution, particularly in Guangdong, China's key manufacturing hub and the largest province by 2018 GDP. Its responsibilities also include balancing supply and demand conditions through power resource allocation by transmitting electricity from south-west provinces, which have greater availability of power, such as Yunnan and Guizhou, to the higher-consumption Guangdong province.
- **Government support:** The government provides support through grants and subsidies (CNY17.8bn in total between 2010-18) and capital injection (CNY40bn since establishment in 2002).
- **Regulatory control of tariffs and electricity prices.** The NDRC reviews key electricity prices, including: 1) the on-grid tariffs (based on fuel types) that CSPG pays to power generating companies; and 2) the electricity sales prices that CSPG receives from end customers.
- **New tariff mechanism.** The NDRC's new tariff-setting framework, which allows for permitted returns on regulated assets, has been rolled out in the provinces where CSG has operations. Under this framework, the equity return is set on the basis of an equity premium (not more than 4%) over the 10y Treasury bond yield. The new framework improves transparency in revenue generation by shifting to a "cost plus reasonable return" approach, although the parameters used in tariff determination remain somewhat opaque and a track record of stability has not been established.
- **Pressure to lower electricity costs.** The NDRC requested that grid companies further lower retail tariffs to commercial and industrial users by 10% in 2019 (continuing from the 10% reduction in 2018). In May, the NDRC also cut the value-added tax for power grids, part of additional measures to lower electricity costs. Migrating towards an "approved costs plus reasonable returns" approach increases transparency of pricing, although price certainty is clouded by the need for approval by the NDRC.
- **Credit metrics provide rating headroom.** S&P and Moody's both view CSPG's financial profile as strong. According to Moody's, FFO/debt and debt/total capital ranged between 27-33% and 47-54%, respectively, over 2014-17, providing rating headroom given downgrade triggers of below 20% and above 60%, respectively.

Peer comparison – Key statistics

2018	CSPG	State Grid
Revenue (CNY mn)	532,641	2,546,989
EBITDA margin	16.2%	16.5%
Total assets (CNY mn)	814,238	3,949,953
Gross debt/capital	48.5%	31.5%
Power sales (bn kWh)	970	4,240
Coverage population (mn)	252	1,100
Transmission lines (km)	220,000	1,033,400

Source: Company reports, Barclays Research

China State Construction Engineering Corp Ltd

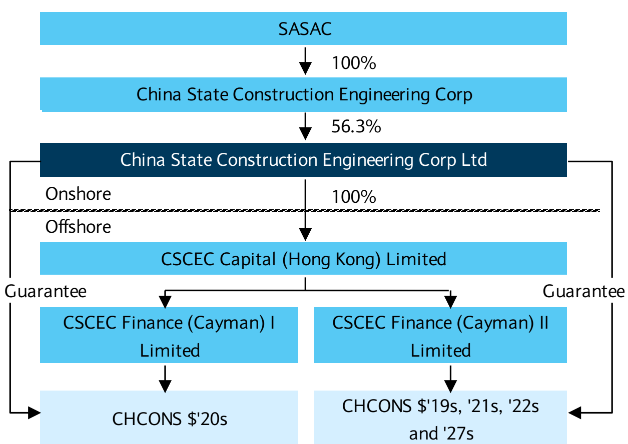
Analyst
Eugene Tham

Company description: China State Construction Engineering Corp. Ltd (CSCECL, A2 Stb/A Stb/A Stb) is one of the largest construction companies in China, and is engaged in the construction of residential and commercial buildings (59% of 2018 revenue), infrastructure construction and investment (23%), property development (15%), engineering design & survey (1%), and others (1%). The company generated revenue of CNY1.2trn in 2018, with c.92% from mainland China. Apart from mainland China, CSCECL undertakes projects in Hong Kong and Macau through its Hong Kong-based subsidiaries, China Overseas Land & Investment (CHIOLI, Baa1/BBB+/A- Stb) and China State Construction International (CSCI, Baa2 Stb/BBB Neg/BBB+ Stb). Listed on Shanghai Stock Exchange in 2009, the company was 56.3% owned by China State Construction Engineering Corporation (CSCEC) as at end-2018, and the latter is wholly owned by the SASAC of the State Council of China.

CHCONS bonds (A2/A/A)

Bonds	Amt (mn)	Issuer	Guarantor
CHCONS 2.95% $'20s	500	CSCEC Finance Cayman I Ltd	China State Construction Engineering Corp Ltd (onshore)
CHCONS 2.25% $'19s	500	CSCEC Finance Cayman II Ltd	
CHCONS 2.70% $'21s	500		
CHCONS 2.90% $'22s	500		
CHCONS 3.50% $'27s	500		

Bond structure



Financial snapshot

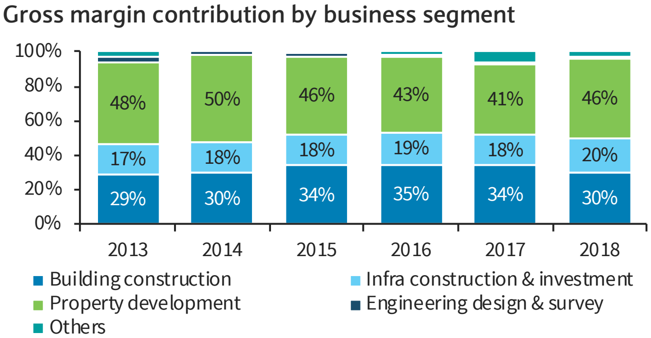
CNY mn	2018	2017	2016
Revenue	1,199,325	1,054,107	959,765
EBITDA	101,500	81,042	65,427
EBITDA Margin	8.5%	7.7%	6.8%
Total Debt	475,758	392,853	366,854
Net Debt/ (Cash)	158,258	119,600	45,994
Credit Metrics			
Total Debt/EBITDA	4.7x	4.8x	5.6x
Net Debt/EBITDA	1.6x	1.5x	0.7x
EBITDA/ Interest	5.3x	4.6x	4.9x
Total Debt/Capital	56.4%	54.7%	57.2%

Source: Company prospectus

Business highlights

- **Large scale and leading player in construction.** CSCECL is the largest global contractor in terms of revenue in 2018, according to Engineering News-Record. It undertakes more than 90% of the 300-meter-tall building construction in China. Its large business scale provides diversification and alleviates the idiosyncratic risk of its projects as each project accounts for a small portion of its total revenue. Revenue derived from its top five customers represented c.1.9% of 2018 consolidated revenue.
- **Profit margins helped by growth in real estate development sector.** CSCECL engages in property development mainly through CHIOLI. The property development arm plays an important role as a stable profit contributor – the business segment contributed c.15% of CSCECL's revenue in the last five years, but c.40-50% of its gross profit during the same period.
- **Order backlog and new contract wins.** In 2018, CSCECL won CNY1.68trn of new contracts in building construction (+13.9% y/y), while new contracts in the infrastructure construction segment declined to CNY635.5bn (-13.8% y/y). Total new contract orders (excl. property contracted sales) were equivalent to more than two times 2018 revenue.
- **Overseas business and government support.** CSCECL aligns its growth with the government's "One Belt One Road" initiative and has increasingly expanded overseas. This potentially exposes the company to higher execution risks (e.g. cost overruns, delays, legal and geopolitical risks). This is partly offset by likely government support through its parent CSCEC, given the latter's status as the only construction company among the state-owned 'backbone' companies.
- **Improved leverage.** Debt/EBITDA has decreased to 4.7x in 2018 (2017: 4.8x; 2016: 5.6x), due to the company's financial management, abiding by the central government policy to lower SOE leverage, and earnings growth. The company had focused more on build-transfer (BT) and public-private partnerships (PPP) in its infrastructure segment, which have long payback periods. The company mitigates this risk by narrowing the gap between committed investments and operating cash flow, by being selective on projects, speeding up cash collections and driving asset turnover.

Gross margin contribution by business segment



Source: Company reports

China State Construction International Holdings Ltd

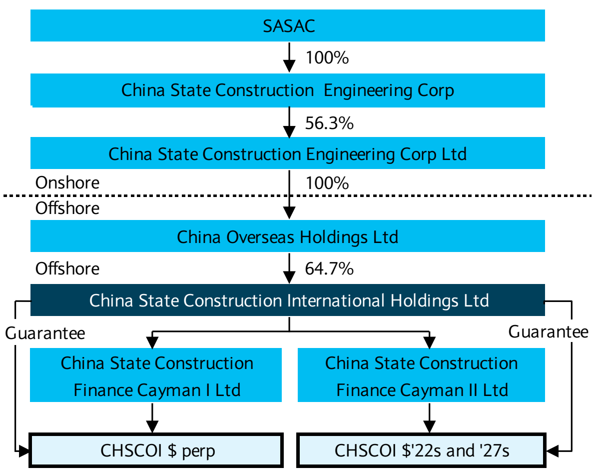
Analyst
Eugene Tham

Company description: China State Construction International (CSCI, Baa2 Stb/BBB Neg/BBB+ Stb), one of the largest construction companies in Hong Kong and Macau, started its operations in mainland China in 2007. CSCI is primarily engaged in: 1) Building construction and civil engineering works in Hong Kong and Macau (39% of 2018 revenue); 2) Affordable housing and infrastructure, especially PPP (public-private partnerships), BT (Build-Transfer) and BOT (build-operate-transfer) projects in mainland China (55%); and 3) Contracting and project operation and management service business through its subsidiary Far East Global (FEG) Group (6%). The company is 64.6% owned by China Overseas Holdings Limited (COHL), which in turn, is wholly owned by China State Construction Engineering Corp Ltd (CSCEC, A2 Stb/A Stb/A Stb), a central SOE and one of the largest construction companies in China. Listed in the Hong Kong Stock Exchange in 2005, the company had a market capitalisation of HKD40.4bn (c.USD5.2bn) at 25 July 2019.

CHSCOI bonds (Baa2/NR/BBB+)

Bonds	Amt (mn)	Issuer	Guarantor
CHSCOI 6% $ perp	500	China State Construction Finance Cayman I Ltd	China State Construction International Holdings Ltd (Offshore)
CHSCOI 3.375% $'22s	500	China State Construction Finance Cayman II Ltd	
CHSCOI 3.875% $'27s	500		

Bond structure



Source: Company report, Barclays Research

Financial snapshot

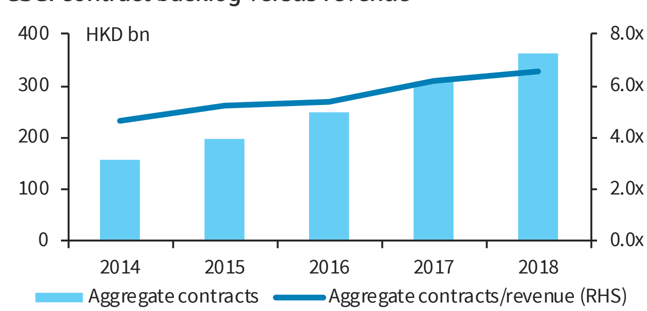
HKD mn	2018	2017	2016
Revenue	55,626	50,153	46,208
EBITDA	7,682	6,584	5,238
EBITDA margin	13.8%	13.1%	11.3%
Total debt	45,048	33,413	21,307
Net debt	27,122	15,820	9,822
Credit Metrics			
Total debt/EBITDA	5.9x	5.1x	4.1x
Net debt/EBITDA	3.5x	2.4x	1.9x
EBITDA/interest	4.3x	6.0x	7.4x
Debt/capital	53.5%	46.5%	45.4%

Source: Company reports, Barclays Research

Business highlights

- **Contract orders increase steadily.** Between 2015 and 2018, aggregate attributable and new contracts increased by CAGRs of 22.3% and 19.7%, respectively, to HKD365.3bn and HKD120.2bn. Total contracts were equivalent to 6.6x revenue in 2018 (2015: 5.3x), while the coverage ratio for new contracts to revenue was 2.2x (2015: 1.8x). The 2019 new order target is HKD120bn, unchanged from actual new orders in 2018.
- **Increasing revenue contribution from mainland China.** Revenue from the mainland China market reached 55% of total revenue in 2018 compared with 39% in 2015. This shift is likely to continue as China accounts for 80% of the contract backlog (68% of new orders in 2018). The China business largely comprises infrastructure investment projects, which has shifted towards higher-margin PPP projects in 2016-17. However, as a result of increased scrutiny of PPP projects, the company signaled a shift in focus towards cash construction projects in late 2018, which suggests the proportion of new orders from China will decline steadily.
- **Financial profile and rating outlook.** Gross debt/EBITDA rose to 5.6x in 2018 from 4.1x in 2016, driven by higher debt. To achieve its net gearing ratio target, in late 2018 CSCI issued a USD500mn perpetual bond with a 500bp coupon step up on the first call date (which is viewed as debt by Moody's). CSCI's increasing focus on capital-intensive investment projects, which tend to be on a PPP/BT/BOT basis, may constrain its cash flows, and lower its deleveraging prospects, according to S&P, which drives the agency's negative outlook. Going forward, cash expenditure is expected to be HKD20bn in 2019, down from HKD24.8bn in 2018 (2017: HKD16bn), while the company will also look towards financing options such as asset securitisation to raise funding.
- **Parent support.** CSCI acts as CSCEC's sole construction platform for Hong Kong and Macau projects, and is also important for the latter's onshore infrastructure investments. Rating agencies expect support for CSCI in the form of cooperation with sister companies on project selection and evaluation, financial support from parent's equity subscriptions in CSCI, and lower funding cost from domestic bank loans given CSCEC's central SOE role.

CSCI contract backlog versus revenue



Source: Company reports, Barclays Research

China Three Gorges Corp

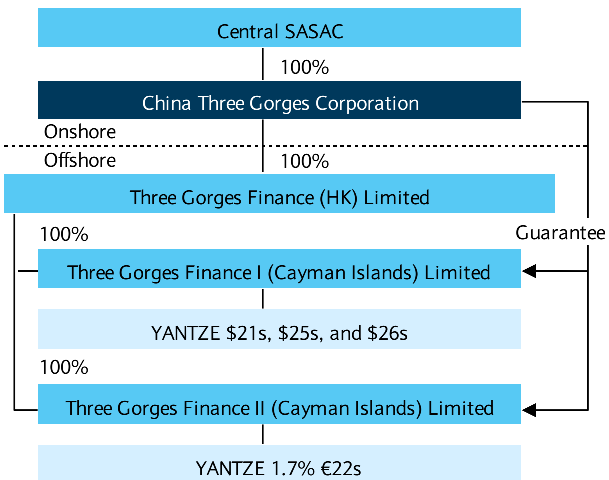
Analyst
Eugene Tham

Company description: China Three Gorges Corp. (CTG, A1/A/A+ Stb) is one of the largest hydropower enterprises in the world in terms of installed capacity (70.3GW as at end-December 2018). The company is wholly owned by the Government of China through SASAC. Four projects – Three Gorges (22.5GW), Xiluodu (13.9GW), Xiangjiaba (6.4GW) and Gezhouba (2.7GW) – together account for 92% of CTG's domestic hydropower installed capacity, and 65% of total installed capacity. With a total installed domestic hydro capacity of c.49.4GW as of end-2018, CTG is the largest hydropower company in China, accounting for c.14% of total domestic hydropower installed capacity. In 2018, CTG generated 225.4 terawatt hours through hydropower, accounting for 18.8% of China's total hydropower generation.

YANTZE bonds (A1/NR/A+)

Bonds	Amt (mn)	Issuer	Guarantor
YANTZE 3.700% $'25s	$700	Three Gorges Finance I (Cayman Islands) Limited	China Three Gorges Corporation (Onshore)
YANTZE 2.300% $'21s	$500		
YANTZE 3.150% $'26s	$1,000		
YANTZE 1.700% €'22s	€700	Three Gorges Finance II (Cayman Islands) Limited	
YANTZE 1.300% €'24s	€650		

Bond structure



Source: Company report, Barclays Research

Overseas M&A in the recent years:

- 30yr concession in 2 Brazil hydropower projects (c.USD3.7bn, 2015)
- 80% stake in WindMW GmbH (offshore windfarm, EUR650mn, 2016)
- Duke Brazil (hydropower) (enterprise value of USD1.2bn, 2016)
- Chaglla hydroelectric plant in Peru (EV USD1.4bn, group acq.)
- Proposal of acquisition Energias de Portugal, S.A. (EDP) for up to EUR10.2bn in May 2018 was terminated in April 2019 due to EDP's shareholders' rejection on lifting voting right limit.

Financial snapshot

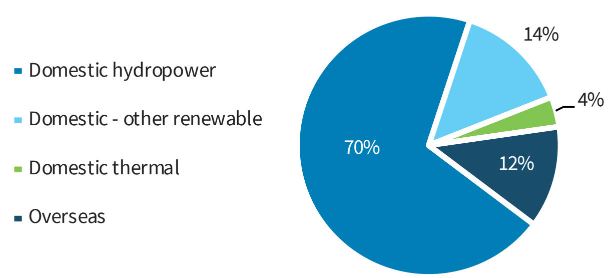
CNY mn	2018	2017	2016
Revenue	93,938	90,017	78,310
EBITDA	60,186	58,678	53,528
EBITDA margin	64.1%	65.2%	68.4%
Total debt	287,970	240,831	236,404
Net debt	250,671	208,480	193,114
Credit Metrics			
Total debt/EBITDA	4.8 x	4.1 x	4.4 x
Net debt/EBITDA	4.2 x	3.6 x	3.6 x
EBITDA/interest	6.3 x	6.5 x	5.9 x
Debt/capital	42.1%	39.2%	40.3%

Source: Company reports

Business highlights

- **Scale and diversity.** CTG's Three Gorges, Xiluodu, and Xiangjiaba projects rank as the first, third and eighth largest hydropower projects by capacity in the world. The planned starts of two more hydropower plants, Wudongde (10.2GW) and Baihetan (16.0GW), by 2021, would make it the largest hydropower company in the world. Domestic hydropower's contribution to total installed capacity has declined from 91% at end-2014, to 70% at end-March 2019, reflecting a more diversified business profile.
- **Strategic importance indicates very high likelihood of government support.** Apart from power generation, CTG plays a key role in delivering social benefits along the Yangtze river, including flood control and drought relief, promotion of water conservancy and improvement of navigation conditions. CTG has received CNY138bn of capital injection since its establishment via the Three Gorges Project Construction Fund and other forms of support such as financial subsidies, low project loan interest rates and preferential tax policies.
- **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 power generation output aside from priority output volume will gradually be determined by market forces in some regions.
- **Heavy capex program.** CTG's capex plans around Wudongde and Baihetan hydropower projects in the next 3-4 years entail significant cash outlays, given the size of the two projects (at a combined 26.2GW, larger than the Three Gorges Project). According to the company, the combined total projected capex was CNY276bn, of which CNY165bn had been invested at end-1Q 2019.
- **Execution risk:** Risks of cost overruns and project delays are mitigated by CTG's track record, given the timely commencement of Xiluodu and Xiangjiaba in 2014. CTG is also involved in greenfield projects in Pakistan, Nepal and Laos, which carry a higher country risk.

Installed capacity by energy source (end-Mar 2019)



Source: Company prospectus, Barclays Research

CITIC Ltd

Analyst
Eugene Tham

Company description: CITIC Ltd (A3/BBB+/NR Stb) is a large diversified conglomerate, with leading positions across multiple industries. Within the financial division, CITIC is involved in banking, securities, trust, insurance, and fund and asset management. The non-financial operations are divided into: 1) resources and energy – exploration, mining, processing, trading, and power generation; 2) manufacturing – specialty steels, lightweight automotive parts and advanced equipment; 3) engineering contracting – infrastructure, housing, industrial construction, and municipal engineering projects; 4) real estate; and 5) others – information, environment, modern agriculture, publishing and general aviation. The financial services segment (mainly CITIC Bank) is the largest contributor to revenue (31% of total in 2018) and profit (59%). CITIC Group, which is wholly owned by the central SASAC, is the largest shareholder of CITIC Ltd with a 58.1% stake. CT Bright, an investment vehicle jointly owned by Itochu and Charoen Pokphand Group, holds a 20% stake. CITIC Ltd is listed on the Hong Kong Stock Exchange and had a market capitalisation of HKD305bn (c.USD39bn) at 26 July 2019.

CITLTD bonds (A3/BBB+/NR)

Bonds	Amt (mn)	Issuer
CITLTD 6.375% $ '20s	500	
CITLTD 6.625% $ '21s	750	
CITLTD 2.8% $'21s	500	
CITLTD 3.125% $'22s	500	
CITLTD 6.8% $ '23s	1,400	CITIC Ltd
CITLTD 3.5% $'23s	250	
CITLTD 3.7% $'26s	750	
CITLTD 3.875% $'27s	750	
CITLTD 4% $'28s	500	

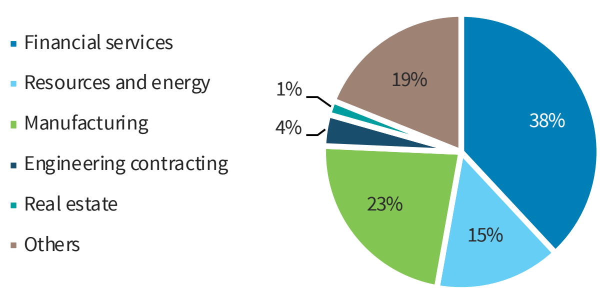
Note: Excludes private placement bonds, which total USD2.155bn.

Financial snapshot

HKD bn	2018	2017	2016
Revenue	533.3	450.5	381.7
Gross Profit	262.4	227.7	215.3
Gross Profit Margin	49.2%	50.5%	56.4%
EBITDA	99.3	78.9	77.1
EBITDA Margin	18.6%	17.5%	20.2%
Total Debt	901.8	803.7	664.9
Net Debt/ (Cash)	68.7	(120.9)	(262.5)
Credit Metrics			
Total Debt/EBITDA	9.1 x	10.2 x	8.6 x
Net Debt/EBITDA	0.7 x	-1.5 x	-3.4 x
EBITDA/ Interest	7.6 x	6.3 x	7.7 x
Total Debt/Capital	53%	51%	49%
Moody's adjustments			
Adjusted Debt	290.7	296.3	245.3
Adjusted EBITDA	58.4	46.7	38.9
Adjusted Debt/EBITDA	5.0x	6.3x	6.3x

Note: CITLTD perps are accounted for as 100% debt. Moody's did not consolidate CITIC Bank's debt, and EBITDA includes only dividends received by CITIC Ltd from CITIC Bank.
Source: Moody's, Barclays Research

FY18 segment revenue

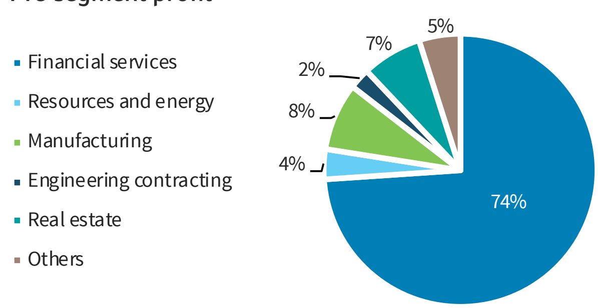


Source: Company reports

Business highlights

- **Strategic importance.** CITIC Group was one of the first companies chosen by the Chinese government for restructuring under the SOE reform program, and is one of the pioneers of mixed-ownership reform. CITIC Ltd accounted for more than 99% of CITIC Group's assets at end-2018, and we believe it is likely to receive government support if needed. Based on total assets at end-2018, CITIC Securities was China's largest securities firm and CITIC Trust was the country's largest trust company. Together with CITIC Bank, they are systemically important to China's financial system.
- **Diversified profile reduces sector-specific risks.** CITIC's nonfinancial segments' portion of total revenue rose in 2017 and 2018 (58% and 62%, respectively, versus 51% in 2016). Margins in these businesses also improved in 2018 due to the rally in commodity prices, cost savings from the restructuring of its nonfinancial segments and improving business sentiment. The improved performance of Sino Iron project should further increase the mining segment's profit in 2019, particularly if iron ore prices remain elevated for a sustained period of time. However, CITIC remains exposed to cyclical nature of these businesses.
- **Controlling financial risks a government priority.** Given its position as a central SOE in the financial sector and the central government's moves to reduce financial risks, we believe CITIC Bank is likely to scale down its off-balance-sheet activities. However, the outlook for CITIC Bank's asset quality remains clouded by the rise in its risk-weighted assets that has outpaced the increase in total assets and could result in pressure on capital, which rating agencies view as modest as compared with domestic banking peers.
- **M&A: Focused on new economy; acquisitions at the Group level.** In July 2017, a consortium comprising CITIC Ltd, CITIC Capital and Carlyle paid USD2.08bn for a controlling stake in McDonald's Corp's stores in China. This is aligned with the group's plan to shift its business profile away from "old economy" sectors, and to also gain exposure to domestic consumption growth. However, the group has said that it remains prudent in seeking acquisition targets.

FY18 segment profit



Source: Company reports

Kunlun Energy

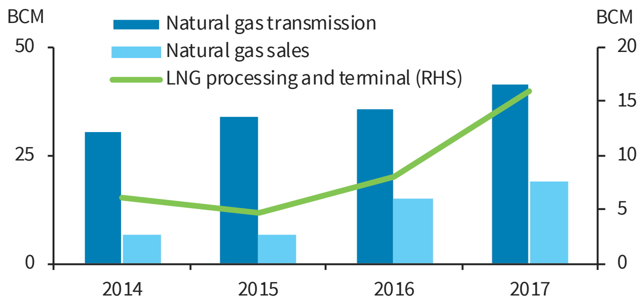
Analyst
Kai Chang

Company description: Kunlun Energy (A2 Stb/A Stb/A Stb) is one of the largest integrated natural gas companies in China and is PetroChina's flagship subsidiary for its downstream natural gas and LNG-related business. Kunlun operates in four business segments: 1) Natural gas sales; 2) Natural gas transmission mainly through its long distance Shaan-Jing pipelines; 3) LNG processing and LNG terminal operations; 4) Upstream exploration and production. At end-2018, Kunlun operated 1,170 CNG and LNG stations in 29 provinces and autonomous regions across China. Kunlun also owns 15 LNG plants and three LNG terminals. In 2018, Kunlun Energy had total gas sales of c.22bn cubic metres and secured 890,000 new residential users, and 5,680 industrial and commercial users. Kunlun Energy also transmitted 52.9bn cubic metres of natural gas and produced 13.3mn barrels of crude oil in six countries. PetroChina owns 58.3% of Kunlun Energy while CNPC (the major shareholder of PetroChina) directly owns 3.4%.

KUNLEG bonds (A2/A/A)

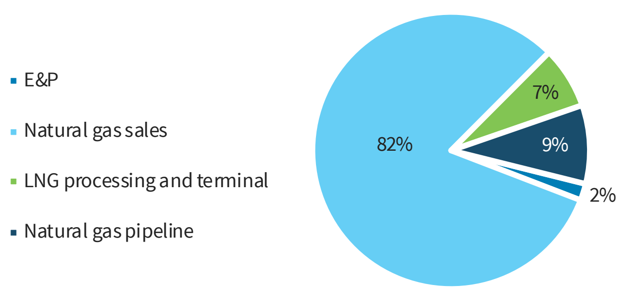
Bonds	Amt (USD mn)	Issuer
KUNLEG 2.875% $'20s	500	Kunlun Energy Company Limited
KUNLEG 3.75% $'25s	500	

Demand for natural gas and LNG



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

FY18 revenue by segment



Source: Company reports

Natural gas sales volume breakdown

	FY18	FY17	Change
Natural Gas (100 mn m3)	219.9	187.7	17%
City Gas	147.1	118.2	24%
CNG	26.1	25.4	3%
LNG	42.3	38.4	10%
Others	4.4	5.7	-23%

Source: Company reports

Business highlights

- **Profitable gas transmission business.** With the company's 60%-owned Shaan-Jing Lines I, II, III and IV (Beijing Gas owns the other 40%), Kunlun Energy runs the main midstream gas pipeline serving the Beijing, Tianjin and Hebei region. Despite the pipeline transmission tariff cut in September 2017, the natural gas pipeline business still enjoys a relatively high PBT margin (52% in 2018) and accounted for 41.9% of the company's profit before tax, helping offset the lower margin natural gas sales (3.0%), as well as the volatile upstream segment.
- **Demand growth helped by government strategy.** China's government aims to increase the share of natural gas in the country's primary energy consumption to c.10% in 2020 and 15% in 2030, from 7% in 2017. In 2018, Kunlun Energy reported gas sales growth of 17% y/y and gas transmission volume growth of 26.9%y/y.
- **Regulatory changes.** In August 2017, the NDRC announced a cap on long-distance gas transmission returns of 8% and tariff cuts for 13 transmission pipelines including Shaan-Jing Lines. In 2018, the PBT of Kunlun Energy's gas transmission business fell 25% y/y due to the tariff cuts, despite an increase in gas transmission volumes (26.9%). The government also plans to set-up a national oil and gas pipeline company, which will operate and manage the pipeline networks owned by the three national oil companies. Kunlun Energy is highly likely to be involved in this initiative, as it controls most of CNPC's long distance gas pipeline assets. Kunlun Energy's gas sales' business is exposed to an inefficient cost pass-through mechanism, which is mitigated by its high percentage of commercial and industrial users.
- **Volatility in oil and gas prices.** Kunlun Energy operates primarily midstream and downstream businesses, and sources its gas supply from parent CNPC. It is thus largely shielded from fluctuations in oil and gas prices.
- **Support from PetroChina and CNPC.** Kunlun Energy is CNPC's key subsidiary in gas transmission, LNG related business and downstream gas sales. CNPC has a record of providing support, including injecting assets and lending to Kunlun Energy. At end-2018, c.59% of Kunlun Energy's debt was in the form of intergroup borrowing.
- **Credit metrics.** Kunlun Energy' Debt/EBITDA ratio improved to 2.1x in FY18 from 2.8x in FY17 on both EBITDA growth and debt reduction. After completion of Shaan Jing pipeline IV construction, Moody's expects Kunlun Energy's capex to decline in the next 1-2 years, contributing to further improvements in credit metrics.
- **LNG business.** Kunlun Energy owns all three of CNPC's LNG terminals and 15 LNG processing plants. With the LNG processing industry in oversupply and high prices for some LNG import contracts signed in previous years, the company has little incentive to import LNG beyond its minimum commitments.

Overseas Chinese Town Enterprises Co.

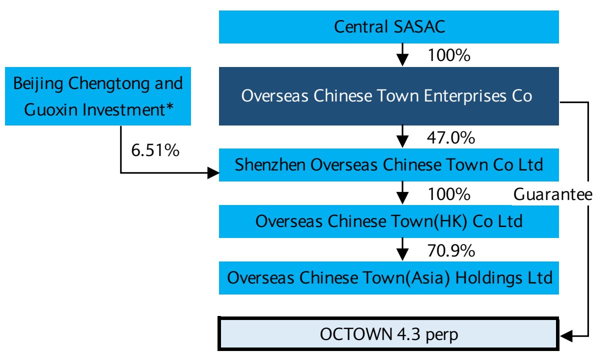
Analyst
Kai Chang

Company description: Overseas Chinese Town Enterprises (OCT, NR) is a wholly owned central SOE and directly supervised by the central SASAC. Incorporated in 1987 and operating as a holding company, OCT holds equity stakes in several listed companies and mainly uses a "travel and property" business model. Its key subsidiaries include i) Shenzhen OCT (47.0% interest), the main listco for the group's cultural and tourist developments and related property projects; ii) Konka (30.0% interest), an electronics manufacturer; and iii) the issuer Overseas Chinese Town (Asia) Holdings (indirectly controlled by OCT through Shenzhen OCT, 33.3% effective interest). OCT has an AAA onshore rating from Lianhe.

OCTOWN bonds (NR/NR/NR)

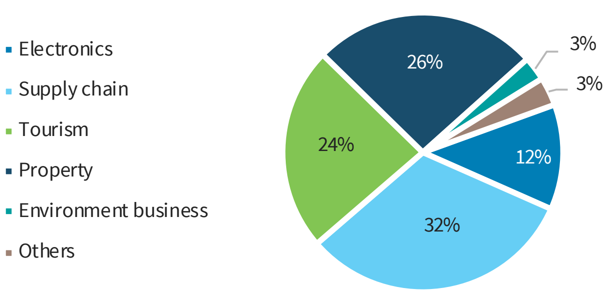
Bonds	Size (mn)	Issuer	Guarantor
OCTOWN 4.3 Perp	800	Overseas Chinese Town Asia Holdings Limited	Overseas Chinese Town Enterprises Co Ltd

Bond structure



* A unit of China Chengtong owns a 3.24% stake in Shenzhen OCT, and a unit of China Reform owns a 3.27% stake as a result of a transfer from OCT; holdings as of 1Q 2019. The change-of-control clause is triggered only if: 1) the guarantor ceases to have control over the issuer (including ownership below 25%), 2) guarantor ceases to have control of Shenzhen OCT or Shenzhen OCT ceases to have control of the issuer (including ownership below 50%); 3) the central SASAC ceases to have control of the guarantor (including ownership below 100%); or 4) the stake of OCT held by a person other than the SASAC rises above 50%. Source: Company reports, Barclays Research

Revenue breakdown by segment (2018)

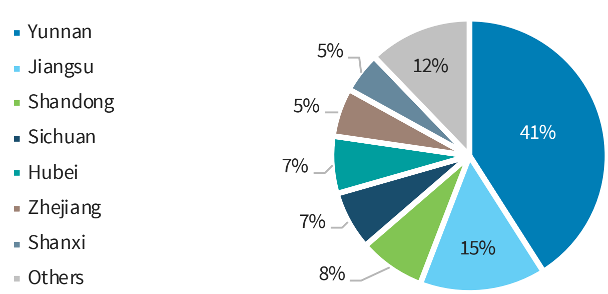


Source: Onshore OC

Business highlights

- **Leading positions in travel, property, cultural areas.** OCT is a leading theme park operator in China, with 17 tourist attractions including Happy Valley theme parks in Beijing, Shanghai, Tianjin, Wuhan and Shenzhen; Window of the World parks in Shenzhen and Changsha; and OCT East. In 2018, the group's theme parks were visited by approximately 49.4mn tourists, ranking fourth among global theme parks, according to TEA and AECOM. OCT also has 30 hotels in the PRC with nearly 6,000 rooms. OCT plans to open six to eight more luxury hotels and 40-50 themed hotels over the next three years.
- **Unique themed property projects.** OCT has a strategy of "cuture+travel+urbanisation" for property development and employs "themed town+property", "healthcare+property" models. After gained "culture and travel" projects and cheap land around, OCT raise the property price through construction of tourist attraction and urbanization, leading to high profitability. Gross margin of property development maintained over 53% since 2010.
- **Low profitability in electronics segment:** Electronics products accounted for 44.2% of total revenue in 2018, but only 8.2% of gross profit. The segment's gross profit margin declined to 5.7% in 2018 from 14.8% in 2016 due to competition and high input cost, as well as the termination of a policy subsidy.
- **Geographical exposure and land assets.** OCT owned approximately 10.65mn sqm of land reserves at 1Q19. The land plots are located across Tier 1 cities, provincial capitals and tourism cities.
- **Financial profile:** OCT reported cash of CNY48.1bn at end-2018 versus short-term debt of CNY36.2bn. Gross debt/capital rose to 49% in 2018 from 43% in 2016 on rapid growth of total debt (CAGR:+78.6% y/y). The increase in leverage was largely in line with the increase at the main listco, Shenzhen OCT, which sped up land acquisitions and increased property inventories over the past two years.

Land bank of OCT as of 1Q19



Source: Onshore OC

Power Construction Corp of China

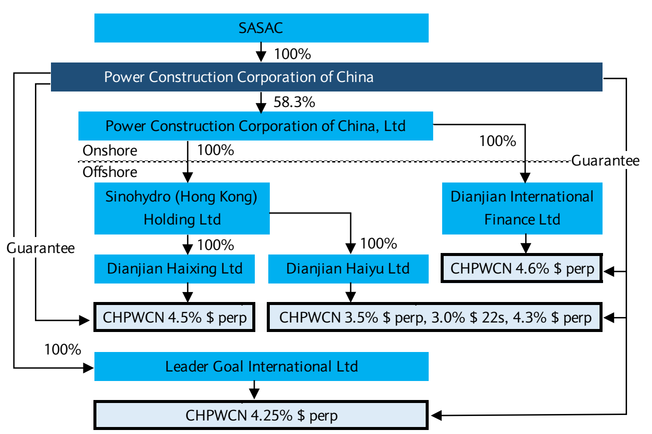
Analyst
Kai Chang

Company description: Power Construction Corporation of China (PowerChina, Baa1 Neg/BBB+ Neg/A- Stb) is a large first-tier central SOE wholly owned by SASAC of the State Council, which is involved in construction and engineering of power plants (hydro, wind, thermal), water conservancy, new energy, power grids and other large infrastructure projects in China and overseas. PowerChina was formed through the restructuring and combination of Sinohydro Corp and HydroChina Corp in September 2011, which were formerly subsidiaries of the State Grid Corp of China and China Southern Power Grid Co., Ltd, respectively. PowerChina's major businesses include construction contracting, engineering design and consultancy (c.82.6% group of FY18 main operating revenue), energy project investment and operations (3.8%), equipment leasing and manufacturing (2.5%), real estate development (5.3%), and others (5.7%). PowerChina was mandated in new energy constructions and has participated c.60% of the new energy development projects since 1950. PowerChina owns a 58.3% stake in PowerChina Limited, which is listed on the Shanghai Stock Exchange with a market capitalisation of CNY73.7bn as at 2 August 2019.

CHPWCN bonds

Bonds	Amt (mn)	Issuer	Guarantor
CHPWCN 4.05% $ perps	500	Dianjian Haixing Ltd	Power Construction Corporation of China (onshore)
CHPWCN 4.25% $ perps	500	Leader Goal Internationdes al Ltd	
CHPWCN 4.60% $ perps	300	Dianjian International Finance Ltd	
CHPWCN 3.00% $'22s	300	Dianjian Haiyu Ltd	
CHPWCN 3.50% $ perps	500		
CHPWCN 4.3% $ perps	500		

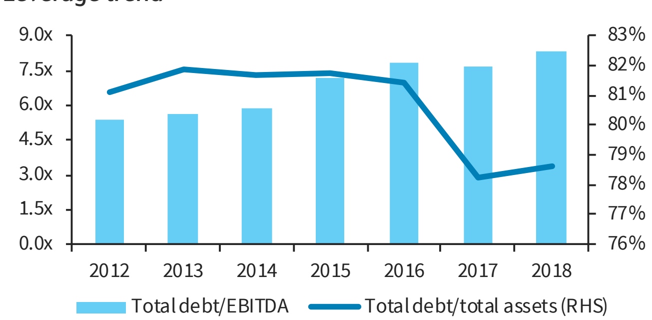
Bond structure



Source: Company report, Barclays Research

- **High leverage.** According to Moody's, the company's debt/EBITDA further weakened to 8.3x at end-2018 from 7.7x in 2017 due to increasing investment and high working capital needs for BOT, PPP projects.

Leverage trend

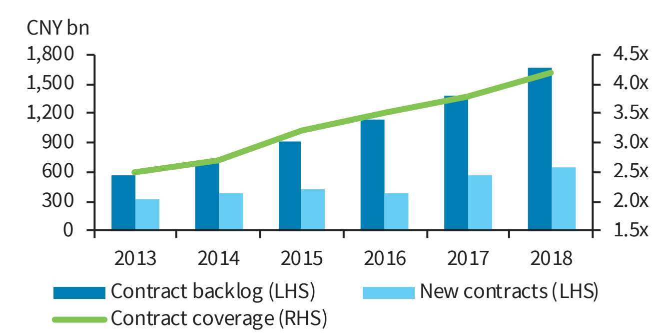


Source: Moody's, company reports, Barclays Research

Business highlights

- **Strong government support** given PowerChina's involvement in several landmark hydropower projects (ie, Three Gorges, Xiaolangdi and hydropower stations in Longtan and Ertan), key large-scale government policy mandates (West-East Electricity Transfer, South-to-North Water Diversion), as well as in implementing the central government's 13th Five-year Plan and OBOR Initiatives. PowerChina is wholly owned by central SASAC and its senior management team are mainly appointed by SASAC. PowerChina also has records of receiving equity injections and subsidiaries from the government.
- **Solid market position in power construction and engineering.** PowerChina has been involved in the construction of more than 65% of the medium-large hydropower and water conservancy projects in China, representing over 200GW of installed capacity since 1950. PowerChina also participated c.50% of thermal power projects and over 80% of preliminary engineering planning and design work for hydropower and water conservancy construction projects in China during the same period.
- **High order backlog.** At end-2018, the group had a CNY1,673bn order backlog (+21.2% y/y), 53% of which comes from infrastructure projects including roads, railway, subway and other municipal projects, representing c.4.2x FY18 revenue (2017:3.8x). New order wins totaled CNY641bn in FY18 (+12.1% y/y). China's long-term investments in infrastructure, electricity networks and power construction, together with an increasing usage plan for clean energy, are likely to support PowerChina's order pipeline.
- **International growth.** PowerChina is heavily involved in the government's Go Global and OBOR initiatives, and has been expanding its overseas footprint. It operates in over 116 countries, which together generated 24% of FY18 revenue and represented 46% of the order backlog. In 2018, PowerChina signed CNY219bn of new contracts for overseas projects. However, overseas expansion could expose PowerChina to execution risks.

Contract levels and coverage



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

Sinochem Hong Kong/Sinochem International

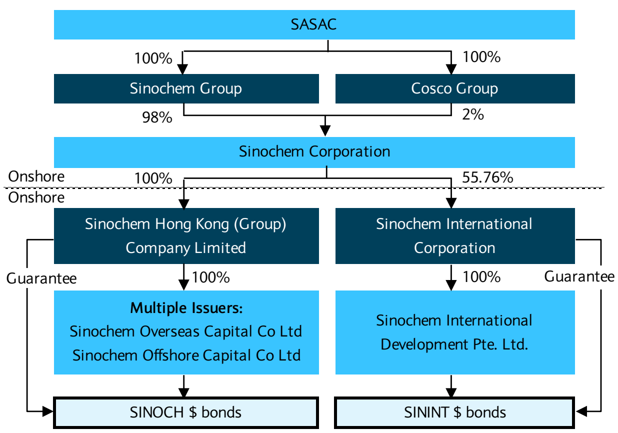
Analyst
Kai Chang

Company description: Sinochem Hong Kong (Group) Co. Ltd (Sinochem HK, A3/A-/A) and Sinochem International (Baa1/BBB+/A-) are subsidiaries of Sinochem Group, a state-owned enterprise that is wholly owned by the central SASAC. Sinochem Group has five main business segments: agriculture, chemicals, energy, real estate, and finance. Sinochem Group is a key SOE, given its mandate to stockpile fertiliser reserves through Sinofert, and its role in supporting energy security through its energy trading and refining business. Sinochem HK (98% owned by Sinochem Group) accounted for 11% of revenue and 68% of total assets of the group at end-2018. At end-2018, Sinochem HK owned 52.65% of Sinofert, and 49.85% of China Jinmao (which operates its real estate business). China Jinmao contributed 93.3% of the Sinochem HK's profit in 2018. Sinochem International (55.76% owned by Sinochem Group) is involved in seven major segments with the chemicals sector and is a key platform in this industry for Sinochem Group. Sinochem International is listed on the Shanghai Stock Exchange, and had a market capitalisation of CNY15.1bn (c.USD2.2bn) as of 22 July 2019.

SINOCH/SININT bonds

Bonds	Amt (mn)	Issuer	Guarantor
SINOCH 4.5% $'20s	1,500	Sinochem Overseas Capital Co Ltd	Sinochem Hong Kong (Group) Company Limited (Offshore)
SINOCH 6.3% $'40s	500		
SINOCH 3.124% $'22s	300	Sinochem Offshore Capital Co Ltd	
SININT 3.125% $'22s	300	Sinochem International Development Pte. Ltd.	Sinochem International Corporation (Onshore)

Bond structure



Source: Company reports, Barclays Research

Key Sinochem entities

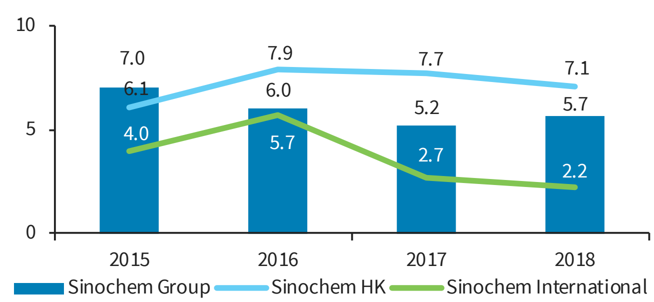
CNY bn	Sinochem Group	Sinochem HK	Sinochem Int'l
Revenue	591	65	60
% of group		*11%*	*10%*
EBITDA	32.6	14.7	4.4
% of group		45%	13%
Total assets	490	331	50
% of group		*68%*	*10%*

Source: Company reports, Barclays Research

Business highlights

- **Strategic roles played by Sinochem HK and Sinochem International:** Sinochem HK is viewed as an integral part of Sinochem Group, due to its role as Sinochem International's overseas funding platform and its ownership of Sinofert, which has a government mandate to stockpile fertiliser reserves. Sinochem International carries out Sinochem Group's strategy in the chemical sector.
- **Sinochem HK:** Dominant market position in the fertiliser industry. Sinofert is the largest fertiliser company in China and the only company that can produce all four of the major types of fertilisers – potash, nitrogen, phosphates and compound fertilisers. Sinofert imports potash for domestic needs and manages the nation's fertiliser reserves to ensure stable supplies, which makes the company vulnerable to inventory write-offs when prices decline. Nutrien Ltd, the largest potash producer globally, is the second-largest shareholder of Sinofert (22.26% stake).
- **Sinochem International:** Leading market positions in various chemical segments. Sinochem International has a 40% global market share in PPD (p-Phenylenediamine, used as an anti-oxidant in producing rubber products) and has an 11% global market share in natural rubber processing capacity (1.6mn tons/year). In agrochemicals, Sinochem International sells products from leading global companies, including Monsanto and Syngenta, in China.
- **Sinochem Group's restructuring changed Sinochem HK's credit profile:** The group has restructured its business units and organised them across five major segments. As a result, Sinochem HK transferred the energy trading business to the parent in 2017, ahead of a planned IPO of this business in 2019. Although the sale of the energy trading business reduces the links between Sinochem HK and Sinochem Group, profitability could improve due to the trading segment's low profit margins.
- **Potential ChemChina-Sinochem merger:** Given that Sinochem Group chairman Frank Ning assumed the chairman's role at ChemChina, this has renewed speculation that Sinochem and ChemChina will merge.

Adjusted debt/EBITDA of Sinochem entities



Source: Moody's, Barclays Research

SINOPEC Corp/SINOPEC Group

Analyst
Eugene Tham

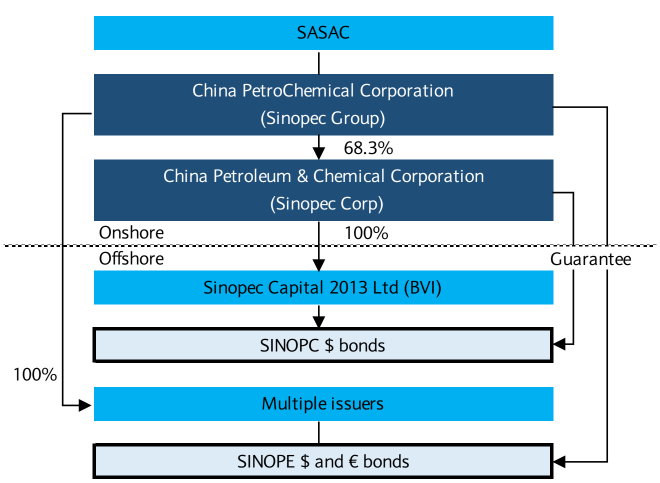
Company description: Sinopec Group (A1/A+/NR Stb) is China's largest refined oil and petrochemical producer and the largest distributor of refined oil products. It is also the second-largest oil and gas producer in China, with total production of 531mm boe and proved reserves of 3.3bn boe in 2018. In 2018, Sinopecaccounted for 40.8% of China's total crude oil processed and its ethylene production (chemical segment) represented 62.5% of China's total production total ethylene production. In retail distribution of refined products, Sinopec had 30,671 service stations as of March 2019 and accounted for c.58% domestic sales volume. Sinopec Corp (A1/A+/A+ Stb) is the main operating subsidiary of Sinopec Group and is 68.3% owned by Sinopec Group. Sinopec Corp accounted for more than 70% of Sinopec Group's assets and 98% of its revenue in 2018.

SINOPC/SINOPE bonds (A1/A+/NR)

Bonds	Amt (bn)	Issuer	Guarantor
SINOPC $ bonds	1.75	Sinopec Capital 2013 Ltd (BVI)	Sinopec Corp (onshore)
SINOPE $ bonds	26.75	Multiple issuers	Sinopec Group (onshore)
SINOPE € bonds	1.2		

Note: SINOPE $ 2.5% 24s, 29s and 49s are rated A+ by S&P only, SINOPE $ 2.375% 20s, 3% 22s, 3.625% 27s and 4.25% 47s are rated A1 by Moody's only.

Bond structure



Source: Company reports, Barclays Research

Production profile of Sinopec Corp

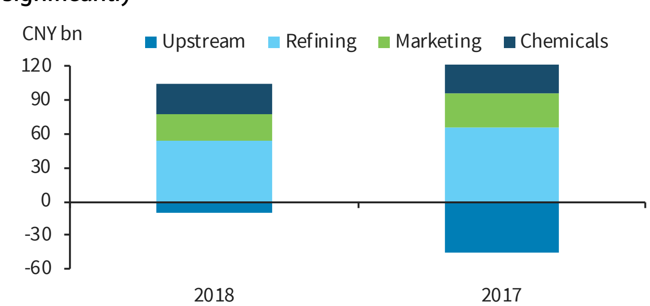
Production	2018	2017	%
Production (mm boe)	451.5	448.8	0.6
Crude and liquids (mm bbl)	288.5	293.7	-1.8
China	248.9	248.9	0.0
Overseas	39.6	44.8	-11.6
Natural gas (bcf)	977.3	912.5	7.1
Realized price per-unit			
Oil (USD/bbl)	66.84	48.83	36.9
Natural gas (USD/mcf)	6.03	5.44	10.8
Refinery			
Throughput (mn tonnes)	244.01	238.5	2.3
Refining margin (USD/bbl)	9.49	10.29	-7.8
Amount in CNY mn			
Revenue	2,891,179	2,360,193	22.5
EBITDA	192,231	186,780	2.9

Source: Company reports, Barclays Research

Business highlights

- **Strategic importance as one of three national oil companies.** Sinopec plays a key role in securing China's energy supplies due to its large refining capacity and wide retail distribution network. China's government also has a record of injecting capital into Sinopec Group over the past few years.
- **Role in carrying out government's energy strategy.** Sinopec Corp changed its product mix to lower the diesel-to-gasoline ratio to 1.06 in 2018 from 1.19 in 2016, in line with China's clean-energy and environmental protection policies. Sinopec Corp also increased planned capex to CNY136bn in 2019 from CNY118bn in 2018 to boost upstream exploration and production and ensure national energy security.
- **Weak but improving upstream profitability.** With recovery of oil prices, Sinopec Corp's upstream segment reported an operating profit of CNY2.1bn in 1Q19 compared with a marginal loss in 1Q18. Despite still-high production costs compared with CNPC and CNOOC, Sinopec Corp's strategy to reduce costs and develop profitable projects should help to increase upstream profitability. Recent cooperation agreements signed with CNPC and CNOOC could help facilitate technology sharing and improve Sinopec's exploration and production business, in our view.
- **Pressure on midstream and downstream businesses.** Sinopec Corp's refining and marketing business could face margin pressure, primarily because of narrowing spreads, given increasing competition and China's slowing economic growth. In 1Q19, Sinopec Corp's EBITDA declined 6.4% y/y on weak performance at its midstream and downstream businesses. 2Q19 could see further negative impact as wholesale price indices of refined oil products show broad-based declines in May.
- **Solid credit profile.** Sinopec Corp reported a net cash position as of 2018, which provides a buffer for potential negative cash flow on elevated capex and pressure on profits in 2019.
- **Potential IPO of marketing and distribution business.** After selling 29.9% in its oil marketing business to 25 domestic and foreign investors for CNY105bn in 2015, Sinopec Corp approved a proposal for an IPO of its marketing unit in June 2017. Though no timeline announced yet, the potential listing of marketing operations would help to raise funds for capex, as well as potentially further improve operating transparency and efficiency, in our view.

Operating profit by segment: Upstream losses shrank significantly



Source: Company reports, Barclays Research

State Development & Investment Corp

Analyst
Eugene Tham

Company description: State Development & Investment Corp Ltd (SDIC, A2/A/A+ Stb) is a wholly state-owned policy investment company in China. Established in 1995 by the State Council following the Chinese central government's plan to reform state investment mechanisms, SDIC operates as a platform to implement national strategies focused on the development and restructuring of the economy. The group has four main business segments: 1) Infrastructure-related industries (representing 44% of 2018 revenue, among which electricity, mineral mining, and transportation account for 36.3%, 4.2%, and 3.5%, respectively); 2) Strategic emerging industries (15.5%) – non-public equity investment funds business such as VC, PE; 3) Financials and services (11.8%); and 4) International businesses (30.4%), involving outbound direct investment, international trade, etc.

SDIC bonds

Bonds	Amt (mn)	Issuer	Guarantor
SDIC 2.875% $'22s (A2/A/A+)	500	Rongshi International Finance Ltd	State Development & Investment Corp Ltd (Onshore)
SDIC 3.25% $'24s (A2/NR/A+)	500		
SDIC 3.625% $'27s (A2/A/A+)	500		
SDIC 3.75% $'29s (A2/NR/A+)	500		

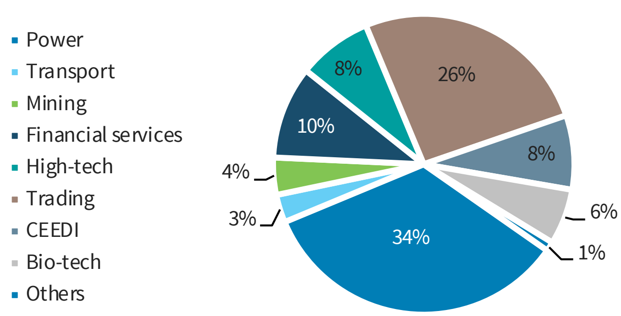
Consolidated financials

CNY mn	2018	2017	2016
Revenue	121,380	89,403	87,045
EBITDA	29,942	26,685	29,322
EBITDA Margin	24.7%	29.8%	33.7%
Adjusted Total Debt	310,556	249,794	232,129
Net Debt/ (Cash)	265,741	202,442	174,983
Total Shareholders' Equity	184,874	155,703	134,671
Total Assets	582,283	493,552	459,829
Credit Metrics			
Total Debt/EBITDA	10.4x	9.4x	7.9x
Net Debt/EBITDA	8.9x	7.6x	6.0x
EBITDA/ Interest	3.2x	3.4 x	3.7x
Total Debt/Capital	67.6%	66.2%	67.3%

Source: Company report, Barclays Research

- **Credit contagion to investees:** Moody's views this risk as moderate, given strict intercompany funding policy and independent financing decisions at its listed investees. According to S&P, SDIC also positions itself as a model company for corporate governance and risk management among the Chinese SOEs, setting high operational standards.

Investment portfolio in 2018

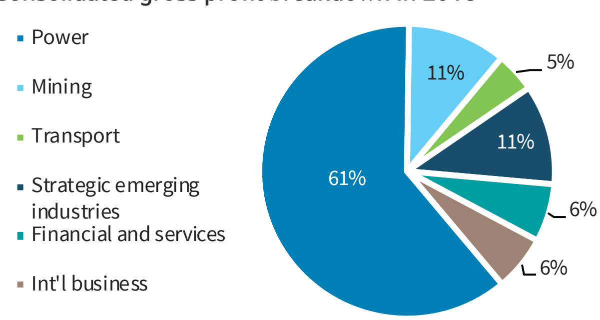


Source: Company reports, Barclays Research

Business highlights

- **Government support given strategic importance.** SDIC's role as a platform to implement key national policies underpins its strategic importance. Its investment focus is in industries critical to the national economy, such as energy, transportation, fertilizers, financial services, and trade. Examples of key national initiatives in which SDIC participates include the implementation of supply-side structural reforms, SOE reform, Belt and Road Initiative, development of the Beijing-Tianjin-Hebei area, Yangtze River Economic Belt, and "Made in China 2025".
- **Diversification across business:** SDIC has invested across electric power, transportation, mining, financial services, high tech, trading and biotechnology, and conducts businesses in 30 provinces, municipalities and autonomous regions. Its three largest investees account for around 50% of total portfolio value.
- **Execution risks for emerging investments.** Although aligned to government policies, investments in strategic emerging industries, including advanced manufacturing, bio-energy, healthcare, Internet-plus, pose higher risks due to the relative immaturity of these new fields compared with traditional industries such as power or construction. Risks are partly offset by SDIC's track record of developing investments into strong businesses.
- **Capital recycling:** Rating agencies take comfort from SDIC's proactive asset disposal track record, which is driven by both government mandate and management's commercial decisions. Moody's estimated SDIC achieved exit multiples of 5.1x, 8.5x, and 22.0x in the disposal of its investments in BOCI International, Shanghai GKN Drive Shaft, and Humen bridge projects, respectively.
- **Investment portfolio:** Listed assets accounted for slightly more than half of SDIC's portfolio value. While this could cause greater volatility in market value-based leverage metrics (which both S&P and Moody's use), this also allows for greater portfolio valuation transparency and flexibility in divestments. Access to liquidity at the investment level is also improved. SDIC Power Holdings has reportedly hired banks for a planned listing in London via the Stock Connect scheme, and could raise USD0.5-1.0bn, according to Reuters (24 July 2019).

Consolidated gross profit breakdown in 2018



Source: Company reports, Barclays Research

State Grid Corp of China

Analyst
Kai Chang

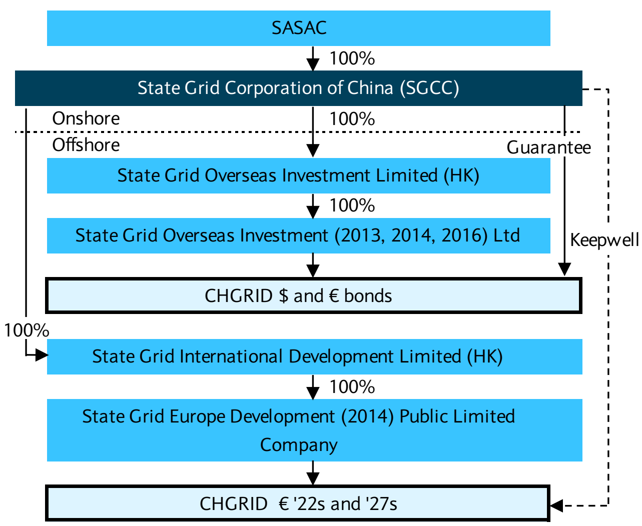
Company description: State Grid Corporation of China (State Grid, A1 Stb/A+ Stb/A+ Stb) is the largest public utility and power grid company in the world by revenue, ranking as the largest corporation in China and second largest on the Fortune Global 500. Established in May 2003, State Grid's power grid network covers 26 provinces with a population of 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 the platform for investing and operating State Grid's overseas transmission and distribution businesses, notably in Australia, Brazil, the Philippines, Portugal, Greece and Italy.

CHGRID bonds

Bonds	Amt (mn)	Issuer	Guarantor	Keepwell provider	EIPU	Liquidity support
CHGRID $ senior unsecured	11,500	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, 1.375% €'25s, 2.125% €'30s	1,850	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	No	No

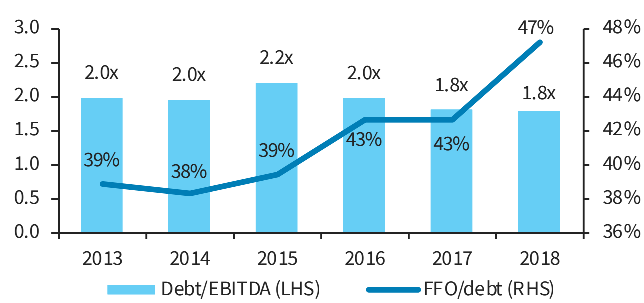
Note: CHGRID $ and EUR bonds (onshore guarantee) are rated A1/A+/A+. CHGRID EUR keepwell bonds are rated A2/A/A+. Amount of CHGRID $ senior unsecured refers to aggregate amount outstanding as of Jun 2018. Source: Company report

Bond structure



Source: Company reports, prospectus

Improving credit metrics



Source: S&P, Moody's

Business highlights

- **Very high government support given State Grid's dominant role in power transmission and distribution.** State Grid's importance reflects the Chinese government's policy priority to secure a stable power supply and maintain reasonable end-user tariffs to ensure steady economic growth. In addition, State Grid has many projects that are highlighted in the plans to expand and upgrade cross-regional transmission networks in the 13th Five-Year for China's power sector development.
- **Stable track record, with experience of operating large complex networks with a wide range of on-grid power plants.** The company has maintained a record of long-term safe and stable operation of the power grid network with world's largest transmission and distribution capacity and highest voltage level.
- **Technological and innovation capability.** State Grid has the capability to independently develop, construct and commission 1,000 kV AC and ±800 kV DC demonstration projects. The company has commercialized UHV AC/DC transmission and smart grid technology on a large scale, and is also developing its UHV transmission technology to improve its operational efficiency.
- **International expansion diversifies business profile.** Through its subsidiary State Grid International Development Co, Ltd, the company has strategic equity investments in electricity and gas transmission and distribution assets in countries such as the Philippines, Brazil, Portugal, Australia, Italy and Hong Kong.
- **Financial profile underpinned by rising power demand and steady cash flow, despite sizable capex and acquisitions.** According to S&P, total debt/EBITDA gradually fell from 2.1 x in 2014 to 1.8x, while debt/capital fell from 36.2% to 31.2%. On Moody's calculations, FFO/debt rose from 39.4% in 2015 to 46.9% in 2018.
- **Pressure to lower electricity costs.** NDRC requested that grid companies lower retail tariffs to commercial and industrial users a further 10% in 2019 (on top of the 10% reduction in 2018). In May, the NDRC also cut the value-added tax for power grids, an additional measure to lower electricity costs. Power sector reforms help to improve transparency by migrating towards an "approved costs plus reasonable returns" approach, although price certainty is clouded by the need for approval by the NDRC.

State Power Investment Corp

Analyst
Eugene Tham

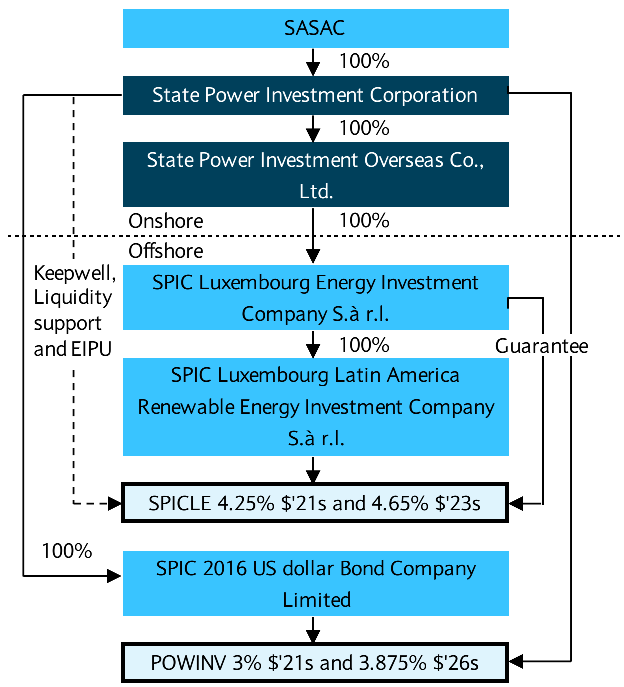
Company description: State Power Investment Corp (SPIC, A2 Stb/A-/A Stb) is one of the five largest power generators in China, with total installed capacity of 140.2GW as of end-2017. Thermal power accounted for 56.1% of total installed capacity, followed by hydropower (17.0%), wind power (11.8%), and others (15.0%, comprising solar power and nuclear). SPIC accounted for 7.4% and 7.1% of China's total installed capacity and power generation, respectively, in 2018. The company is one of the three nuclear power development operators in China, and owns sub-licensing rights of AP1000 and CAP1400 nuclear technology. In addition to power generation, which accounted for 65.3% of FY18 revenue of CNY197.1bn, the group is also involved in aluminium production (16.3%), the heat supply business (3.7%), coal (2.6%), and others (12%). 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 (CPIC) in 2015.

POWINV (A2/NR/A) and SPICLE (NR/NR/A-) bonds

Bonds	Amt (mn)	Issuer	Guarantor	Keepwell provider	EIPU	Liquidity support
POWINV 3% $'21s POWINV 3.875% $'26s	900 300	SPIC 2016 US dollar Bond Co Ltd	State Power Investment Corporation (Onshore)	NA	NA	NA
SPICLE 4.25% $'21s SPICLE 4.65% $'23s	300 500	SPIC Luxembourg Latin America Renewable Energy Investment Company S.à r.l.	SPIC Luxembourg Energy Investment Company S.à r.l.	State Power Investment Corporation (SPIC)	Yes	Yes

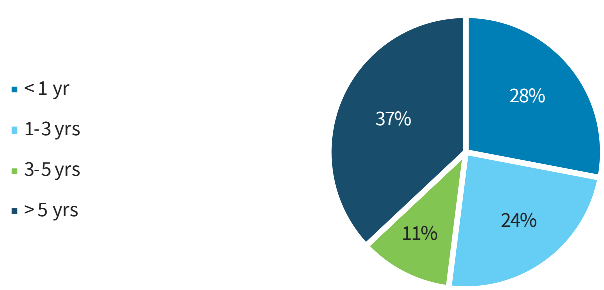
Source: Company report

Bond structure



Source: Company report, Barclays Research

Debt maturity by tenor as at 30 June 2018

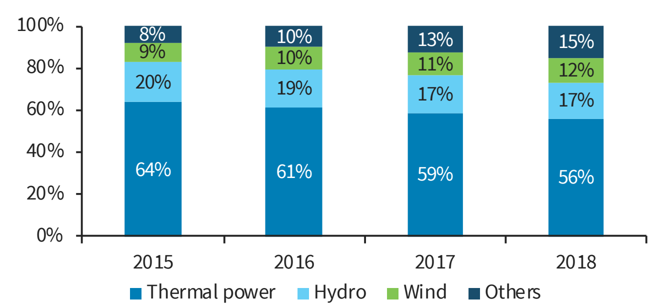


Source: Company reports

Business highlights

- **Strategic importance and strong government support.** The central government has injected various municipal power plants, R&D assets, and specialized funds into the group. SPIC plays a key role in policy formulation and implementation in the power sector. SPIC leads a number of national special R&D projects, and is participating in two of the 17 major national special sci-tech projects.
- **Ownership of nuclear power technology.** SPIC is the sole license owner of third-generation CAP1400 nuclear technology in China, and was first to introduce AP1000 third-generation nuclear reactors to China. Major nuclear power projects controlled or invested by SPIC include the Shandong Haiyang nuclear power project and Liaoning Hongyan River Power Project.
- **Growing clean energy assets.** Nuclear, hydro, wind and solar power accounted for 44.9% of SPIC's total installed capacity in 2018, up from 40.1% in 2015, and closing in on the target of 50% in clean energy in 2020. SPIC has the highest proportion of clean power assets among China's top 5 power producers, reducing its exposure to high coal prices.
- **Aluminium.** This business accounted for c.16% of revenue in 2018, and is vulnerable to price volatility. Gross profit margin for this sector (7.9% in 2018) is lower than SPIC's overall GPM (19.2%).
- **Overseas expansion.** SPIC is also expanding overseas in response to government's Belt-and-Road Initiative. Increasing overseas projects may bring execution risks.
- **Reducing leverage** through introduction of private capital at listed subsidiaries. SPIC's total liability/total asset ratio has fallen in the past three years to 78.4% (2016-2017: 81.7%-82.3%), amid the government's push for central SOEs to lower leverage.

Fuel mix by installed capacity



Source: Company reports, Barclays Research

Local SOEs and LGFVs company profiles

Beijing Enterprises Holdings/Beijing Gas Group

Analyst
Kai Chang

Company description: Beijing Enterprises Holdings (BEH, Baa1 Stb/BBB+ Stb/NR) is a holding company with diversified operations across natural gas distribution (72% of 2018 revenue), brewing (18%), and solid waste treatment (10%). The company's wholly owned subsidiary, Beijing Gas, is a natural gas distributor in Greater Beijing. At end-March 2019, BEH held a 24.91% stake in China Gas, which supplies natural gas nationwide via 365 city piped-gas projects and 177 township "coal-to-gas replacement" projects. Beijing Gas owns 20% of the PJSC Verkhnechonskneftegaz (Vgaz) natural gas project, which recorded its first full year of operations in 2018. Beijing Gas also holds a 40% equity interest in PetroChina Beijing Pipeline, which transports natural gas from the second-largest gas field in Changqing to the Beijing-Tianjin-Hebei region. Transmission capacity volume rose 27.9% y/y to 49.4bcm in 2018, although BEH's share of net profit fell 26.6% y/y as a result of adjustments to inter-provincial pipeline transmission pricing since September 2017. BEH's brewery operation is carried out through Yanjing Brewery (45.79% effective interest), one of the largest breweries in China by production volume. The company also operates a sewage & water treatment business through its associate, Beijing Water (42.4% stake), which has a total daily water processing capacity of 36.8mt (million tonnes) as of end-2018. Beijing SASAC owns 61.96% of BEH.

BEIENT (Baa1/BBB+), BJGASG (A3/A-/A), BJEHF (NR) bonds

Bonds	Amt (mn)	Issuer	Guarantor
BEIENT EUR			
1.435% '20s	500	Talent Yield Euro Ltd	Beijing Enterprises Holdings Limited (offshore)
1.3% '22s	800	Talent Yield European Ltd	
BEIENT USD			
5% '21s	600	Mega Advance Investments Ltd	
6.375% '41s	400		
4.99% '40s	200	Top Luxury Investment Ltd	
4.5% '22s	800	Talent Yield Investments Ltd	
BJGASG 2.75% $'22s	500	Beijing Gas SG Capital	Beijing Gas Group Co Ltd (onshore)
BJEHF 4.95% $'23s	500	Beijing Enterprises Water Capital Management Ltd	Beijing Enterprises Water Group Ltd (offshore)*

Note: *Letter of support from Beijing Enterprises Holdings Limited.

Financial snapshot of BEH

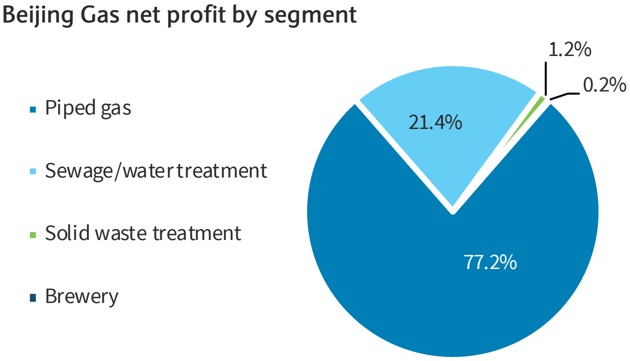
HKD mn	2018	2017	2016
Revenue	67,765	57,508	55,959
Gross Profit	10,564	9,363	9,436
Gross Profit Margin	15.6%	16.3%	16.9%
EBITDA	6,450	5,779	5,680
EBITDA Margin	9.5%	10.0%	10.2%
Total Debt	60,127	61,139	51,237
Net Debt	42,192	43,297	35,265
Credit Metrics			
Total Debt/EBITDA	9.2x	10.4x	8.9x
Net Debt/EBITDA	6.4x	7.4x	6.1x
EBITDA/Interest	3.1x	3.5x	3.7x
Debt/capital	42.6%	43.6%	43.0%
Segment gross margin	**2018**	**2017**	**2016**
Piped gas operations	10.6%	11.4%	10.9%
Brewery operations	30.3%	28.5%	33.9%
Solid waste treatment	24.9%	25.4%	25.1%

Source: Company reports

Business highlights

- **Strategically important to Beijing Municipal Government.** BEH is the primary supplier of natural gas and water to China's capital. The monopoly on gas distribution in Beijing extends to 2032. The company had c.6.18mn piped gas subscribers in Beijing, and c.23,500km of operational gas pipelines. It is tasked with securing natural gas supply particularly across winter months for Beijing.
- **Supportive government policy towards natural gas distribution.** BEH benefits from ongoing conversion to natural gas usage in Beijing, consistent with the central government's policy stance to increase the proportion of natural gas in China's energy mix (targeting 10.0% by 2020 from 6.4% as end of 2016) and growing awareness of environmental protection in China.
- **Steady cash flow from a resilient and diversified business portfolio.** The regulated gas and water businesses are defensive and relatively resilient in a potential economic slowdown. Amid pressure on the beer brewery business as a result of a shift in consumption trend towards middle- and high-end products, the natural gas business has driven strong EBITDA growth.
- **Focus on deleveraging to gradually improve standalone credit profile, following overseas acquisitions of EEW in 2016 and the stake in Vgaz in 2017.** Beijing Enterprises has lowered gross debt/EBITDA back to 9.2x (2017: 10.4x; 2016: 8.9x; 2015: 7.8x), and FFO/debt up to 8.9% (2017: 7.4%; 2016: 9.8%; 2015: 12.6%), mainly driven by earnings growth. Investments are likely to remain elevated, slowing credit profile improvement, given the capital intensity of the businesses and capital contribution to investees.
- **Evolving regulatory frameworks.** Beijing Gas has a track record of passing on fuel cost increases to end-users, but there remains a time lag in recovery, as well-head prices and transmission tariffs are controlled by the central government, while adjustment of end-user prices is left to the local government. For associate BEW, the central government's focus on environmental protection is supportive and has led to a more favourable water tariff framework. There is limited transparency in implementation of the tariff system (which are set by local government authorities).

Beijing Gas net profit by segment



Source: Company reports

Beijing Infrastructure Investment

Analyst
Yimin Weng

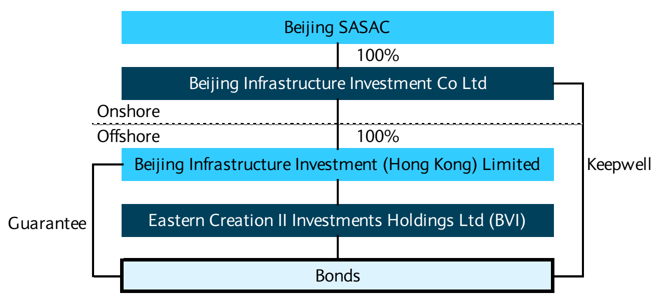
Company description: Beijing Infrastructure Investment (BII, A2 Stb/A+ Stb/A+ Stb), wholly owned by the Beijing SASAC, is the sole investment and financing platform for metro rail network serving Beijing's urban and suburban districts in. It has three primary business segments: 1) railway transport investment, construction and operation; 2) land and real estate development; and 3) equipment manufacturing, IT services for railway transit, finance, other urban infrastructure construction. The Beijing subway network comprises 22 interconnecting lines (BII operates 16) with 637km of subway track as of end 2018. Land and real estate development involves residential and commercial properties above or adjacent to railway lines or railway facilities, and, along with the other businesses, generates income to support railway construction.

BEIJHK bonds (A2/A/A+)

Bond	Amt (USD mn)	Bond structure	Issuer	Offshore guarantor	Keepwell provider	Maturity
BEIJHK 2.75 20	700	Keepwell	Eastern Creation II Investment Holdings Ltd	Beijing Infrastructure Investment Hong Kong Ltd	Beijing Infrastructure Investment Co Ltd	26-Sep-20
BEIJHK 3.25 20	300					20-Jan-20
BEIJHK 4.15 21	400					04-Dec-21
BEIJHK 2.8 22	300					15-Jul-22

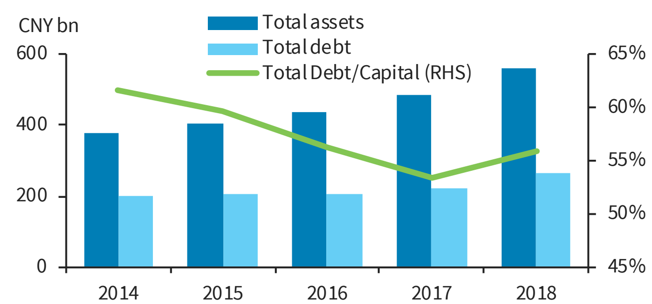
Note: Bond credit ratings– Moody's/S&P/Fitch ('22s only rated by Fitch, 2.75 '20s not rated by S&P, '21s not rated by Moody's. Source: Company reports

Structure chart



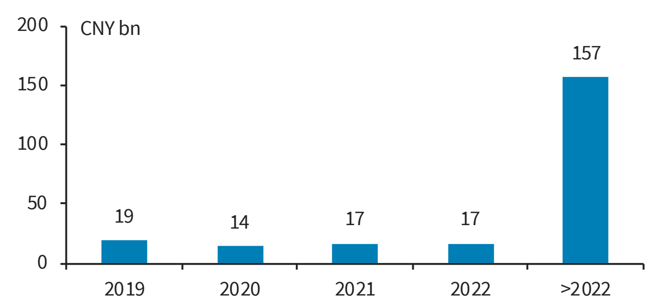
Source: Company reports

Asset, debt and leverage as end 2018



Source: S&P, company reports

Debt maturity profile as of June 2018



Source: S&P reports

Business highlights

- **Strategic importance:** Located in China's capital, Beijing Infrastructure has a close relationship to central government. The company's market share in urban rail transit in Beijing is over 85%, and railway passenger flow accounted for more than 50% of Beijing's public transport in 2018. The Beijing municipal government closely monitors BII's financing and debt, and allocates funds to BII on an annual basis. Development of its rail network also needs approval from the NDRC. BII also has intercity railway projects in Tianjin and Hebei to facilitate the nation strategy of Beijing-Tianjin-Hebei integrated development plan. BII has a policy role as the sole metro platform.
- **Track record of government support:** The municipal government is committed to provide CNY29.5bn a year in capital grants during 2016-45 through the authorize-build-and-operate (ABO) model for new projects. During 2008-15, the municipal government allocated funds to the company, ranging from CNY10bn to 15.5bn, in the fiscal budget. BII also receives subsidies to cover operating losses.
- **Diversified with increasing exposure to property sector.** BII's primary land development projects follow a cost-plus 8-12% margin structure, as committed by Beijing's municipal government. Its property development business (through 32%-owned Metro Land Corp, or MLC) started pre-sales in 2014, and its contribution to BII's revenue has increased steadily (2018: 43.72% of total revenue). The company has expanded into intercity railways, suburban rail lines, national railway construction and highways. In 2016, BII was selected to build a new highway linking Beijing to the new Daxing Airport, which is expected to open before September 2019.
- **Relatively weak credit metrics.** BII's operating results and credit metrics improved over the past few years on the fare mechanism changes, but it still faces high leverage due to its policy-driven capital spending. However, financing pressures are mitigated by the BII's debt profile (largely long-term) and government support. BII reported a cash balance of CNY2.38bn and short-term debt of CNY35bn, which accounted for ~13% of total debt at end-2018. According to Moody's, more than 50% of BII's total debt had an average tenor of more than 15y at end-June 2018.

Beijing State-Owned Assets Management

Analyst
Yimin Weng

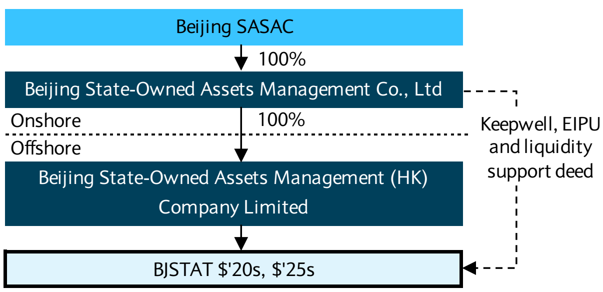
Company description: Beijing State-owned Asset Management (BSAM; A2 Stb/A Stb/A Stb) is an investment and financing platform for Beijing's strategic development, wholly owned by the Beijing SASAC. Focused on the Greater Beijing area, the Group invests in a diversified portfolio of businesses including financial services, urban functional area development, technology, and culture, creative, leisure and sports. The group also engages in strategically-important development projects, which are usually granted premium land plots.

BJSTAT bonds

Bond	Amt (USD mn)	Rating	Bond structure	Issuer	Guarantor	Keepwell provider	Maturity	EIPU	Liquidity support deed
BJSTAT 3 20	300	A3/A-/A	Keepwell	Beijing State-Owned Assets Management (Hong Kong) Company Limited	NA	Beijing State-Owned Assets Management Co Ltd	26-May-20	Yes	Yes
BJSTAT 4.125 25	700						26-May-25		

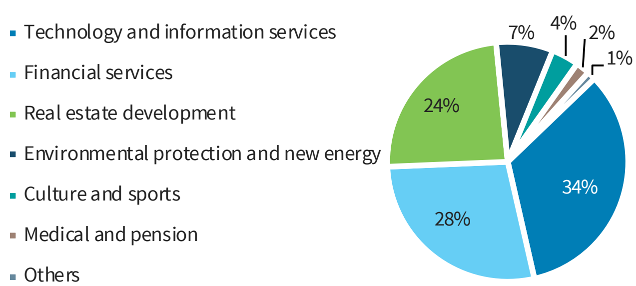
Note: Bond credit ratings – Moody's/S&P/Fitch. Source: Company reports

Structure chart



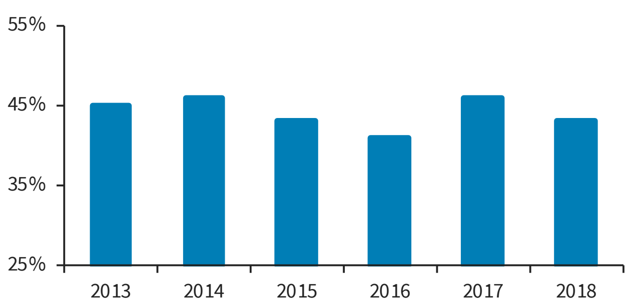
Source: Company reports

Breakdown of BSAM's revenue, 2018



Source: Company reports

BSAM Holdco market value-based leverage (MVL)



Source: Moody's

Business highlights

- **High likelihood of government support** the reason for rating uplifts at both S&P (5 notches) and Moody's (4 notches). BSAM has completed a number of strategically important projects for the government, including initial investments in the Beijing Municipal Subway and Beijing Capital Highway, as well as the Bird's Nest and Water Cube for the 2008 Olympics. In addition to urban development services, BSAM is involved in the construction of Beijing's financial system by undertaking significant projects such as the Beijing Equity Exchange and CAPINFO (an IT R&D centre).
- **Management of investment portfolio.** In 2018, BSAM made limited new investments. Noticeable changes in its portfolio last year included the disposal of a 3% stake in Beijing Rural Commercial Banks, which raised CNY762.85mn, and the listing of Dynagreen Environmental Protection Group on the HKEx. The company is also involved in several early-stage projects that are in line with the government's policy goals, such as BAIC Motor and BOE Technology.
- **Diversified investment portfolio.** BSAM's primary revenue contributors are technology industry development and information services (2018: 34%), financial services (28%), and real estate development (24%). BSAM is also playing a leading role in developing Beijing's financial sector as well as technology platforms and operators through its subsidiary network, by investing selectively in developing regional SMEs, green energy, and healthcare companies.
- **Income from disposal of long-term assets and good access to onshore funding. Investment returns from subsidiaries act as the major source of revenue, contributing to 98% of total revenue in 2018, according to S&P**. In addition, the company has access to various financing channels, built on long-term relationships with various domestic banks, and has having issued bonds onshore in each of the past three years. As at end-March 2019, BSAM had access to bank facilities of CNY65bn, of which CNY61.62bn was unused.

Chongqing International Logistics Hub Park Construction

Analyst
Yimin Weng

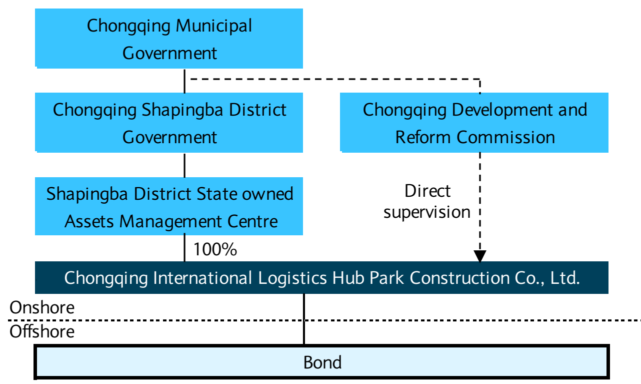
Company description: Established in 2007, Chongqing International Logistics Hub Park Construction Co Ltd (previously known as Chongqing Western Modern Logistics Industry Zone Development Construction Co Ltd) (CQLGST, NR/NR/BBB Stb) is the sole platform responsible for the operation, development and management of the Chongqing Logistics City. CQLGST is wholly owned by Chongqing Shapingba SASAC under the Shapingpa district government in Chongqing, which is one of four municipalities in China. CQLGST has four primary business segments: 1) development and management of Logistics City (33% of 2018 revenue); 2) land development (64% of 2018 revenue); 3) property management; and 4) the construction and sale of resettlement housing (though it has started no new work since completion of previous projects in 2015). CQLGST is also engaged in joint-ventures with enterprises in the Logistics City. CQLGST has a AA+ onshore rating from China's Chengxin.

CQLGST bond (NR/NR/BBB)

Bond	Amt outstanding (USD mn)	Bond structure	Issuer	Maturity
CQLGST 3.25 21	500	Direct issue	Chongqing International Logistics Hub Park Construction Co Ltd	06-Sep-21

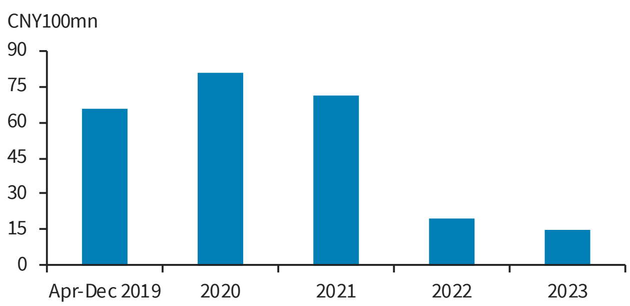
Note: Bond credit ratings – Moody's/S&P/Fitch. NR = not rated by the agency. Source: Company reports

Bond structure



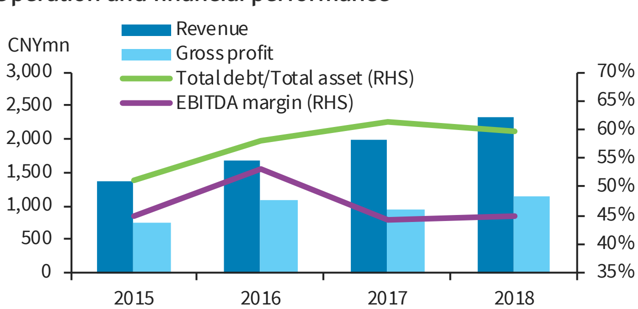
Source: Prospectus, Company reports

Debt maturity profile as end March 2019



Source: Wind, Company reports

Operation and financial performance



Source: S&P, Company reports

Business highlights

- **Strategic importance.** Though the Logistics City is at an early stage of development and it makes a limited financial contribution to the Chongqing government, it is strategically positioned as a national logistics hub designed to facilitate access to inland cities, connecting areas along the belt-and-road initiative and the Yangtze River delta region, and implement opening-up policies, such as strategic cooperation with Singapore. Chongqing municipality experienced rapid economic development in the past decade but there are signs of growth slowing. GDP growth fell to 6% in 2018 (below the average for China) from 10.7% in 2016. CQLGST is vulnerable to risks affecting the development of the Logistics City or any economic slowdown in Chongqing given its business concentration.
- **Government support and favourable policies.** 1) Most of CQLGST's revenue comes from management fees for the development and management of Logistics City, which are paid in instalments each year by the Shapingba district government. Since 2015, the percentage of total expenditures that CQLGST is allowed to receive as management fees has increased to 18% from mid- to high-single digits. Also since 2015, CQLGST has been authorised to receive an additional annual management fee from Shapingba District government calculated based on CQLGST's year-end financing balance. 2) CQLGST has approval for a fixed gross profit margin of 18% for the resettlement housing projects. 3) CQLGST has received grants and subsidies from the Chongqing municipal and Shapingba district governments, as well as capital injections from Shapingba SASAC.
- **Scale and growth.** At end-2018, CQLGST had total assets of CNY54bn, more than double the amount since end-2014, and total equity of CNY21.75bn. This is relatively small compared with other LGFV/local SOEs in Chongqing. Revenue in 2018 was reported at CNY2.3bn, an increase of 16.4% y/y, while the three year CAGR in revenue was 19%.
- **High leverage and large near term debt maturities.** Total debt/capital and total liabilities/total assets ratios were high in 2018 at 55.1% (2016: 56.6%) and 59.7% (2017: 61.3%), respectively. The company also faces large debt maturities in the next three years. Capex is also likely to be sizable due to construction needs.
- **Liquidity.** At end-2018, CQLGST had cash of CNY2.3bn (2017: CNY6.5bn) and short-term debt of CNY7.4bn. As at end-March 2019, approved bank credit facilities for CQLGST totalled CNY15.1bn, of which CNY11.86bn had been used.

Chongqing Nan'an Urban Construction & Development

Analyst
Yimin Weng

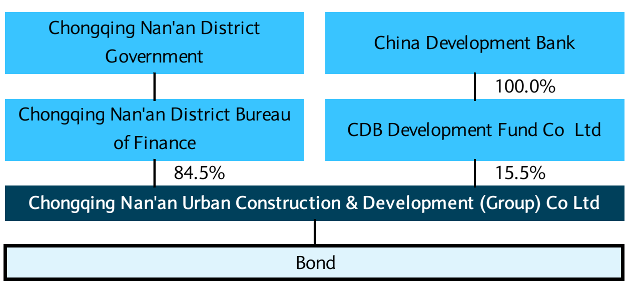
Company description: Chongqing Nan'an Urban Construction & Development (NAUCD, NR/BBB/BBB+) is involved in the construction and financing of infrastructure investment in the Nan'an district, one of the nine core districts in Chongqing (one of four municipality governments in China). NAUCD has six main business areas: 1) primary land development; 2) infrastructure construction; 3) property leasing and management; 4) loan financing; 5) supply-chain finance; and 6) tourism. The Chongqing Nan'an District government owns 84.5% of NAUCD through its finance bureau. NAUCD has an AA+ onshore rating from China's Chengxin rating agency. Chongqing ranked 25th by real GDP growth rate in 2018 (6.0%) and 17th by 2018 GDP among China's 31 provinces/municipalities. Its rankings were 4th and 17th in 2017 respectively. The Nan'An district contributed 3.56% of Chongqing's 2018 GDP (2017: 4.06%).

CQNANA bonds (NR/BBB/BBB+)

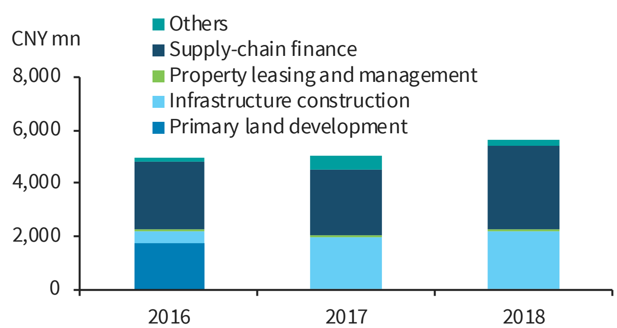
Bond	Amt outstanding (USDmn)	Bond structure	Issuer	Maturity
CQNANA 3.625 21	500	Direct issue	Chongqing Nan'an Urban Construction & Development (Group) Co., Ltd	19-Jul-21
CQNANA 4.5 26	200	Direct issue		17-Aug-26
CQNANA 5.88 22	300	Direct issue		18-Jun-22
CQNANA 4.66 24	500	Direct issue		04-Jun-24

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

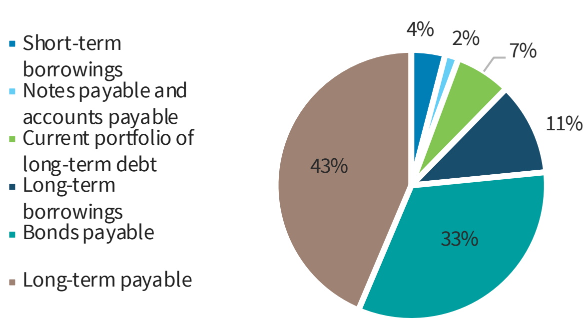
Bond Structure



Revenue breakdown



Debt profile: 12.33% of debt is short-term maturities



Source: Company bond prospectus, Barclays Research

Business highlights

- **Strategically important to Chongqing Nan'an District government.** NAUCD is the largest LGFV mandated by the district government to undertake infrastructure construction projects. It is also the sole platform to do shantytown renovation projects in Nan'an District. Its assets amount to more than 50% of the total assets of SOEs owned by the District Government.
- **Significant land reserves.** At end 2018, NAUCD had 3.7mn sqm of land under development, representing about 65% of the total land reserves in the district, which it valued on its balance sheet at CNY8.99bn.
- **Volatile revenue in its primary land business.** Commercial industries have become its biggest segment by revenue but with low margins. Revenues from primary land development and infrastructure construction are lumpy, and can vary significantly year to year. In the past three years, NAUCD has expanded into supply-chain finance, which has become its largest revenue contributor. However, the margin for this business segment is very low (56% of revenue, gross margin of 3.58% in 2018).
- **High dependency on government for revenues.** The Nan'an Bureau of Finance is NAUCD's largest debtor, accounting for 67% of 2018 total receivables (or CNY14.1bn). Payments for project buybacks and land development fees are usually made in instalments over two to five years, but can be delayed for various reasons, such as changes in the budget of the district government. Accounts receivables represented 11% of NAUCD's total assets at end-2018, while other receivables made up of 22% of total assets.
- **Significant inventories.** Between end-2013 and end-2018, inventories rose to CNY22.38bn from CNY17.4bn, representing more than 35% of the group's total assets. Inventories are mainly primary land and completed infrastructure projects yet to be purchased by the district government. High inventories could increase pressure on cash flow and raise the possibility of provisions for potential asset impairments.
- **Liquidity:** At end 2018, cash was CNY5.8bn and short-term debt was CNY3.7bn. NAUCD also had CNY18.4bn of credit facilities from policy banks, China's big four banks and other joint-stock banks, of which CNY16.2bn was unused.

Guangdong Hengjian Investment Holding

Analyst
Yimin Weng

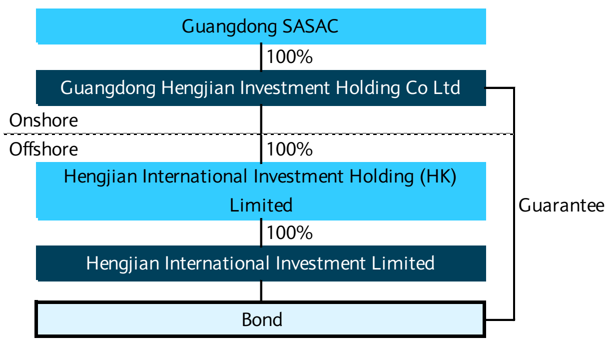
Company description: Guangdong Hengjian Investment Holding Co Ltd (GDHJ, A3 Stb/A Stb/A+ Stb) is Guangdong SASAC's provincial platform for state-owned capital operations. Its role is to invest in key provincial projects including infrastructure, and it is focused on power generation, policy-directed investment, and asset management. Key assets include a 76% stake in Guangdong Energy (previously known as Yudean), one of the largest power generation companies in Guangdong by market share, and minority stakes in China Southern Power Grid (CSG, 38.4% interest) and China General Nuclear Power Corp (CGN, 10%), held on behalf of the Guangdong province. GDHJ also has stakes in Pearl River Delta Inter-City Railway Co (21%), China Baowu's steel opcos in Zhanjiang (10%), Shaoguan steel (49%) and an aviation company (10%). Total portfolio value was CNY145bn as September 2018. GDHJ is wholly owned by the Guangdong province, and has a AAA onshore rating from China's Chengxin rating agency.

GDHJIN bond (A3/NR/A+)

Bond	Amt outstanding (USD mn)	Bond structure	Issuer	Onshore guarantor	Maturity
GDHJIN 2.75 20	500	Onshore guarantee	Hengjian International Investment Ltd	Guangdong Hengjian Investment Holding Co Ltd	06-Sep-21

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

Bond structure



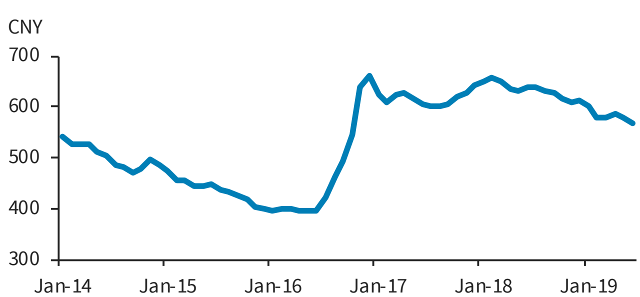
Source: Company reports, Barclays Research

Financial snapshot

CNY mn	2018	2017	2016	2015
Revenue	46,092	43,989	40,362	46,907
EBITDA	11,933	12,986	14,956	18,808
EBITDA margin	26%	30%	37%	40%
Total debt	84,888	81,490	72,772	59,933
Net debt	66,608	52,553	56,728	44,260
Credit Metrics				
Total debt/EBITDA	7.1x	6.3x	4.9x	3.2x
Net debt/EBITDA	5.6x	4.0x	3.8x	2.4x
EBITDA/interest	1.9x	2.1x	2.9x	3.8x
Debt/capital	33.0%	32.7%	30.6%	26.8%

Source: S&P

NDRC thermal coal price – Guangdong province



Source: NDRC, Bloomberg

Business highlights

- **Strategic importance.** GDHJ is Guangdong province's platform for holding key assets. Its ownership of the key power genco in the province and other core assets, such as large central SOEs like CSG and CGN, reflects its position as the province's most important capital operation platform. GDHJ also has a mandate to support major infrastructure development as well as participate in equity offerings by SOEs to maintain stable shareholdings. Guangdong has ranked 1st among all provinces in China in terms of GDP in the past 30 years (average GDP growth in the past three years is 7.3%), playing a significant role in nation's economic development and Greater Bay Area Strategy.
- **Scale.** At end-2018, GDHJ's total assets of CNY27.88bn ranked it as one of Guangdong's largest SOEs. Close to half of its assets were contributed by Guangdong Energy, a power generation utility with an installed capacity of 30GW, which accounts for 24% of Guangdong's installed capacity at end 2017.
- **Asset concentration.** Guangdong Energy, together with the investments in CSG and CGN, accounted for 78% of GDHJ's consolidated assets at end-2017, which reflects its focus on the utility industry. Geographic concentration is also high as Guangdong Energy derives most of its revenue from Guangdong province. That said, these are partly mitigated by the more diversified businesses of CSG and CGN, and the province's relatively strong financial profile.
- **Liquidity:** A large share of GDHJ's assets are equity stakes that it does not control directly. In addition, many stakes are in unlisted companies. This could affect the timeliness of cash flows and GDHJ's ability to sell assets, if needed, as well as the accuracy of valuations of the unlisted assets.
- **Guangdong Energy's fuel mix comprises coal (75%), gas (14%), hydropower (7%) and renewables (4%).** Volatility in thermal coal prices has a significant impact on gross margins. Guangdong Energy's gross margin decreased from 27.5% in 2016 to 18% in 2018 due to rising coal prices since 2016.
- **Recent developments.** 1) On 20 July, GDHJ signed an agreement with China Southern Airlines Company (CSA) to invest CNY10bn for a 10.455% stake in CSA. GDHJ expects the transaction to close in 3Q19. Moody's says this equity investment might raise GDHJ's financial leverage and could potentially lead to a downgrade. 2) GDHJ will start to conduct fund management and venture capital investments in emerging industries, as mandated by the Guangdong government, which entails higher risk because the investments are mostly at an early stage of development. However, these investments will account for only a small portion in GDHJ's consolidated assets (single digit).

HBIS Group Co Ltd

Analyst
Yimin Weng

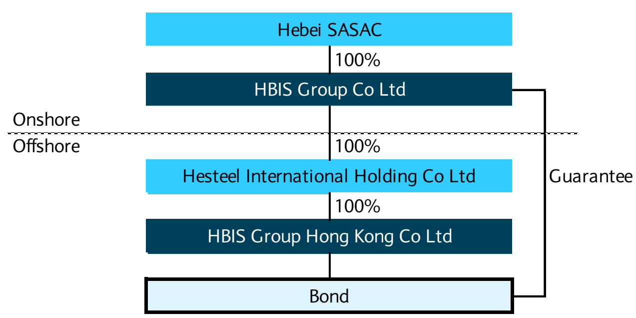
Company description: HBIS Group Co Ltd (HBIS, formerly Hesteel Group Co Ltd, NR/NR/BBB+ Stb) is wholly owned by the Hebei SASAC. It was established in 2008 through the merger of Tangshan Iron & Steel Group Co Ltd and Handan Iron & Steel Group Co Ltd, both of which were owned by the Hebei SASAC. HBIS is the largest SOE under the Hebei SASAC, accounting for more than 40% of its total assets, according to Fitch. HBIS is also the world's third-largest steelmaker by crude steel output, and China's second largest. 2018 revenue was CNY336.8bn, and total assets reached CNY437.5bn. HBIS ranked 239th on Global Fortune 500 list in 2018. HBIS's strategy is focused on maintaining current production capacity, meeting environmental standards and optimizing product mix, plant type and geographical distribution. HBIS has AAA onshore ratings from China Chengxin and Dagong. The issuer acts as the offshore trading arm of HBIS, primarily procuring iron ore and other mineral products and machinery.

TSSTEE bond (NR/NR/NR)

Bond	Amt (USD mn)	Bond structure	Issuer	Onshore guarantor	Maturity
TSSTEE 4.25 20	500	Onshore guarantee	HBIS Croup Hong Kong Co Ltd	HBIS Group Co Ltd	07-Apr-20

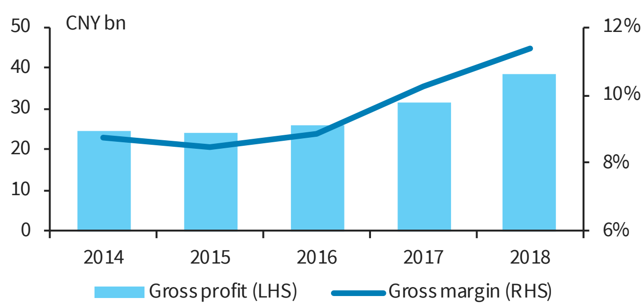
Note: Bond credit ratings – Moody's/S&P/Fitch. NR = not rated by the agency. Source: Company reports

Bond structure



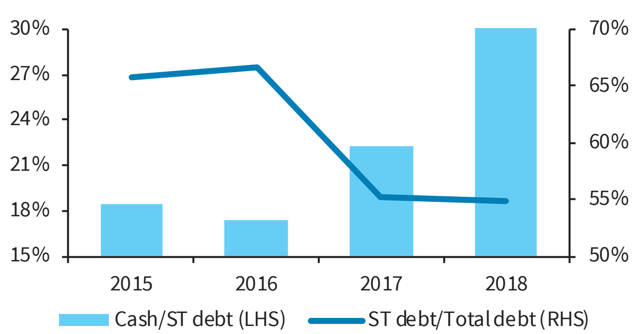
Source: Company reports, Barclays Research

Gross margin has expanded since 2015



Source: Company reports, Barclays Research

Liquidity and short-term debt



Source: Company offering circular, Barclays Research

Business highlights

- **Scale:** Crude steel output in 2018 was 46.8mn tons, ranking third globally behind ArcelorMittal and China Baowu, and sales were 42.97mn tons. HBIS supplies a diversified range of products. In terms of vertical integration, iron ore imports accounted for 68.83% of its iron ore needs in 2018, reflecting the company's dependence, and vulnerability, on fluctuations in raw materials prices. The company sources most of its coking coal domestically, and has long-term contract agreements with suppliers.
- **Strategic importance to Hebei:** HBIS had 118,656 employees as at end-2018. According to the Fitch, HBIS is the largest SOE under Hebei SASAC, accounting for more than 40% of Hebei SASAC's total assets.
- **Steel industry remains in transition:** Steel prices have more than doubled in the past two years, following efforts by the Chinese government to reduce domestic overcapacity and helped by the synchronized global expansion. As a result, profitability at large steelmakers has rebounded, and HBIS's gross margin rose to 11.4% in 2018 (2017: 10.6%; 2016: 8.5%; 2015: 7.6%). However, the industry remains under pressure from China's the antipollution campaign.
- **Antipollution campaign drives capex needs:** The longer-term plan for the steel industry is to phase out heavily polluting plants, upgrade to more eco-friendly plants and move production capacity outside of urban areas or overseas. Plant upgrading and the relocation of production capacity is likely to require increased capex at steelmakers. In September 2017, HBIS agreed to acquire a plant in Slovakia from US Steel for USD1.4bn, expanding its overseas presence to cover five continents.
- **Financial profile:** Reported EBITDA/interest cover was 2.3x in 2018 (2017: 2.0x; 2016: 2.2x; 2015: 1.8x). EBITDA growth was partially offset by higher interest expense. Similar to other Chinese steelmakers, HBIS relies on short-term funding (and hence bank relationships), with short-term debt accounting for slightly more than half of total debt, although this is down from 64% in 2016. Unutilized banking facilities amounted to CNY98.4bn (out of a total of CNY301bn) at end-2018.

Jiaxing City Investment and Development Group Co Ltd

Analyst
Yimin Weng

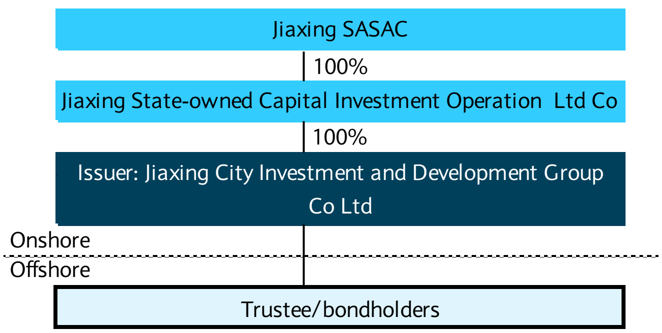
Company description: Jiaxing City Investment and Development Group Co Ltd (JXCI, Baa3/NR/BBB- Stb) is the second largest construction and investment platform by total assets among the four LGFVs based in Jiaxing, a prefecture-level city in Zhejiang province. The company is indirectly owned by Jiaxing SASAC through Jiaxing State-owned Capital Investment Operation Ltd Co (previously known as Jiaxing Cultural City Group Co). The company's primary business are: 1) natural gas supply (production, transmission and distribution of natural gas, pipelines construction and operation); 2) property development (commercial properties and affordable housing); 3) tourism (operation of tourist attractions, hotel construction and operation, and tourism property leasing and management); 4) engineering settlement (landscaping and construction of government projects); primary land development (demolition of buildings, relocation and resettlement of residents, land clearance and construction of networks); 5) construction of municipal infrastructure projects; and 6) others (sale and transportation of commodities and other activities). JXCI is rated AA+ by Lianhe and A+ by China Credit onshore.

JXCCMZ bond (Baa3/NR/BBB-)

Bond	Amt outstanding (USD mn)	Bond structure	Issuer	Maturity
JXCCMZ 4.4 21	300	Direct issue	Jiaxing City Investment and Development Group Co Ltd	03-Jan-21

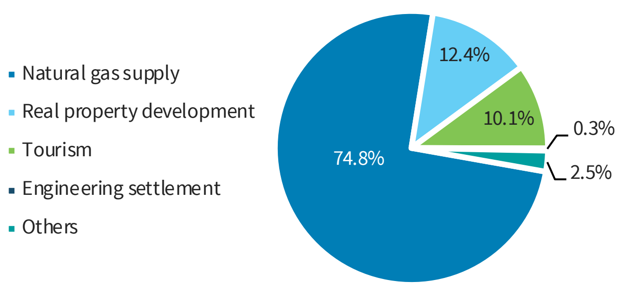
Note: Bond credit ratings – Moody's/S&P/Fitch. NR = not rated by the agency. Source: Company reports

Bond Structure



Source: Wind

Revenue breakdown by business segment 2018



Source: S&P

Financial snapshot

CNY mn	2018	2017	2016	2015
Revenue	2,941	2,410	1,840	2,020
EBITDA	255	505	200	223
EBITDA margin	8.7%	21.0%	10.9%	11.0%
Total Debt	3,921	2,406	6,144	12,119
Net Debt	2,549	126	4,400	10,582
Total Assets	27,471	25,386	23,022	24,859
Total Equity	13,219	13,279	12,283	7,989
Credit Metrics				
Total Debt/EBITDA	15.4 x	4.8 x	30.7 x	54.4 x
Net Debt/EBITDA	10.0 x	0.2 x	22.0 x	47.5 x
EBITDA/ Interest	1.2 x	2.4 x	1.0 x	1.5 x
Total Debt/Capital	22.9%	15.3%	33.3%	60.3%

Source: Company reports, S&P

Business highlights

- **Jiaxing's strategic importance to Zhejiang province:** Jiaxing City is positioned on the Yangtze River Delta and on the Beijing-Hangzhou Grand Canal. Jiaxing was designated in 2017 as a pilot city to take charge of the execution of provincial strategic initiatives in the first Zhejiang-Shanghai Integrated Demonstration Zone, which was set up under the Zhejiang provincial government. Jiaxing city generated CNY487bn of GDP in 2018, growth of 7.6% y/y, ranking it 45th out of 333 municipalities, and 6th in Zhejiang province.
- **Government support underpinned by key strategic role in Jiaxing city:** Moody's estimates that JXCI is involved in 70-80% of economic activity within the city. Government support is strong; around 50% (CNY5.9bn) of the company's debt was classified as Class 1 government debt. CNY4.8bn of the debt had been swapped by the end of 2017, which accounted for most of the company's spending on city infrastructure projects. In addition, JXCI received c.CNY950mn in government grants and subsidies on average each year during 2013-17. The Jiaxing government largely derives its cashflow from fiscal revenue and land sales.
- **Shantytown redevelopment.** JXCI is mandated as the sole platform to execute the city's shantytown redevelopment program, which is expected to last 20-25 years with total investment of c.CNY20.6bn, accounting for c.78% of the city's entire program. According to Moody's, JXCI operates on a government procurement model basis, where JXCI is contracted by another local SOE that acts as a financing platform for the program. JCD's contractual payments are approved and linked to the government's annual budget.
- **Inventory** of CNY19.28bn at end-2018, which accounted for 70% of its total assets. Most of the inventory is in entrusted construction projects.
- **Liquidity.** As at end-2018, JXCI had cash of CNY1.4bn compared with short-term debt of CNY719mn, and outstanding total debt of CNY3.9bn. At end-March 2018, the company had total credit facilities of c.CNY2.2bn, of which c.CNY1.3bn granted by commercial banks had not been utilised.
- **Leverage improved in 2017 on repayment of debt,** but is likely to rise due to large investment needs for shantytown development. Debt/EBITDA fell to 4.8x in 2017 from 24.6x in 2015 after a significant decline in total debt following receipt of a CNY3.8bn government procurement service fee in 2017. However, Moody's thinks the company's weak operating cash flow generation and sizable capex plans for shantytown development in the near term pose financial risks. That said, this might be partially alleviated by the high likelihood of government support in times of need.

Nanjing Yangzi State-owned Assets Investment Group

Analyst
Yimin Weng

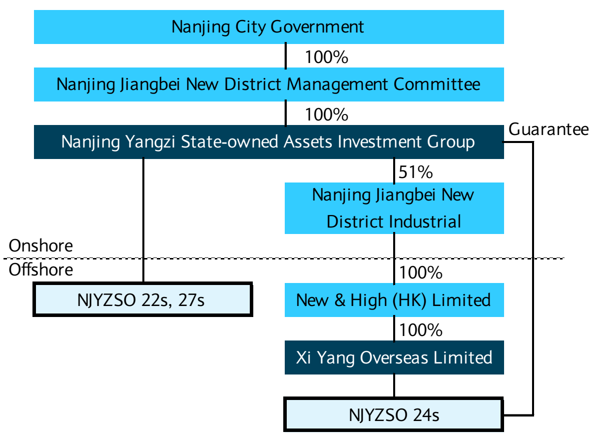
Company description: Nanjing Yangzi State-owned Assets Investment Group Co Ltd. (Yangzi, NR/BBB+ Stb/A- Stb), 100% owned by Jiangbei New District Management Committee under Nanjing City Government, is mandated as the sole platform to undertake infrastructure development and utility services in the Nanjing Jiangbei New District. It was the largest investment and financing platform in Nanjing by assets at end-2018. Yangzi is primarily engaged in: 1) Municipal infrastructure development; 2) Primary land development; 3) Public services for industrial parks; 4) Social housing development (including shantytowns) and city construction; and 5) Fund investment and others. Yangzi has an AAA onshore rating from Chengxin.

NJYZSO bonds (NR/BBB+/A-)

Bond	Amt outstanding (USD mn)	Bond structure	Issuer	Onshore guarantor	Maturity
NJYZSO 3.625 22	300	Direct issue	Nanjing Yangzi State-owned Investment Group Co Ltd	N/A	05-Dec-22
NJYZSO 4.5 27	200				05-Dec-27
NJYZSO 4.3 24	500	Onshore guarantee	Xi Yang Overseas Limited	Nanjing Yangzi State-owned Investment Group Co Ltd	05-Jun-24

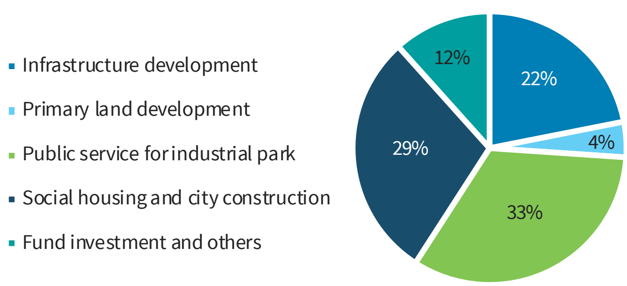
Note: Bond credit ratings – Moody's/S&P/Fitch. NR = not rated by the agency. 24s bond is only rated by Fitch. Source: Company reports

Bond structure



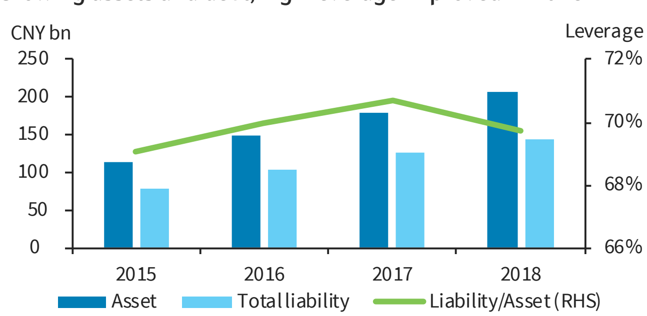
Source: Company reports, Barclays Research

Revenue breakdown (2018)



Source: Company reports

Growing assets and debt; high leverage improved in 2018



Source: S&P

Business highlights

- **Nanjing city and Jiangbei New District (JND).** Nanjing city, the capital of Jiangsu province, is classified as a sub-provincial city, and ranks among the top Chinese cities by GDP per capita. The Jiangbei New District (JND) is one of 19 state level new districts in China, and the only state-level new district in Jiangsu, which was set up by the State Council in June 2015 as part of the Yangtze River Economic Belt Development Plan released in September 2014. Fitch views JND's budgetary performance and tax revenue growth as solid in recent years. JND, accounting for 11.5% of Nanjing's GDP in 2018, is focused on high-tech and innovation sectors, and is directly administered by the New District Committee (a sub-department of the Nanjing city government), which is headed by the Nanjing governor.
- **Strategic importance to regional development.** Yangzi is the sole entity authorised by the Nanjing city government to conduct primary land development in JND. It is also the only entity commissioned by the city government to invest, construct and develop social housing and other projects, including relocation housing, subsidised housing and shanty area redevelopment.
- **Record of government support and access to funding.** Yangzi has received various government support such as subsidies, cash injections and buybacks of infrastructure projects. Investment in shanty area redevelopment is included in the Nanjing city budget. Yangzi has access to multiple domestic funding channels, such as onshore bond markets, policy bank and commercial bank lending. For example, Yangzi has received special loans from CDB at low interest rates for long tenors for shantytown renovation. In addition, a financial cooperation agreement with CDB was signed in mid-March 2018 to provide CNY80bn of integrated financial services in support of key infrastructure projects.
- **Rapid growth with sizable capex needs.** Yangzi has been growing rapidly in the past few years and was the largest LGFV in Nanjing in terms of the total assets. It reported total assets of CNY206bn at end-2018, more than double from CNY89.6bn at end-2014, aided by the injection of equity stakes and consolidation of various SOEs in the district. In addition, Yangzi has started to expand into infrastructure financing with a focus on the transportation sector such as metro lines and tunnels. But such growth means sizeable capex needs, particularly for social housing and other construction projects. Its asset/liability was 69.7% as end-2018. Yangzi remains reliant on the government for subsidies and cash injections to help fund its capex needs, operating expenses and interest payments.
- **Financial profile:** Cash of CNY37.15bn, versus short-term debt of c.CNY17.7bn at end-2018. Moody's views its liquidity profile as being stronger than other LGFVs.

Qingdao City Construction Investment

Analyst
Yimin Weng

Company description: Qingdao City Construction Investment Limited (QCCI, NR/BBB- Stb/BBB Neg) is an investment and financing platform of the Qingdao Municipal Government, supporting the latter's urban planning and construction activities. Wholly-owned by Qingdao SASAC, QCCI assists the government's urbanization plans and plays an active role in local city development. The company has a diversified business portfolio including infrastructure development, primary land development, affordable and commodity housing development, wastewater treatment and financial services.

HKIQCL bonds

Bond	Amt outstanding	Rating	Bond structure	Issuer	Guarantor	Keepwell provider	Maturity	EIPU	Liquidity support deed
HKIQCL 4.75 20	500	NR/BB+/BBB	Keepwell	Hong Kong International (Qingdao) Company Limited (NR/BB+ Stb/BBB)	NA	Qingdao City Construction Investment (Group) Limited	12-Feb-20	Yes	No
HKIQCL 5.95 25	300	NR/BB+/BBB	Keepwell				12-Feb-25		
HKIQCL 4.25 22	500	NR/NR/BBB	Keepwell				04-Dec-22		
HKIQCL 3.75 20	300	NR/NR/BBB	Keepwell				04-Dec-20		
HKIQCL 5.30 19	174	NR/NR/NR	Keepwell				21-Oct-19		

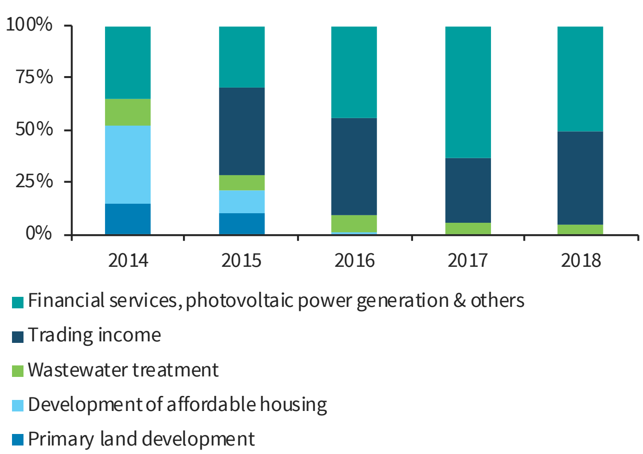
Note: Bond credit ratings – Moody's/S&P/Fitch. NR = not rated by the agency. Source: Company reports

2015 – 2018 Financial snapshot

CNY mn	2018	2017	2016	2015
Revenue	11,672	7,131	5,541	5,183
EBITDA	3,579	1,796	1,496	1,107
EBITDA margin	31%	25%	27%	21%
Total debt	104,268	77,457	55,865	35,415
Net debt	85,978	48,336	35,693	21,309
Credit Metrics				
Gross debt/EBITDA	29.1x	43.1x	37.3x	32.0x
Net debt/EBITDA	24.0x	26.9x	23.9x	19.2x
EBITDA/interest	1.1x	0.9x	0.8x	0.8x
Liabilities/Assets	66.29%	64.06%	59.30%	65.28%

Source: Company reports; S&P

2014-2018 trend – growing contribution from recurring sources but in more competitive sectors



Source: Company reports

Business highlights

- **Qingdao generated 15.7% of Shandong province's nominal GDP in 2018.** As a major sea port, naval base and industrial centre, Qingdao has strategic importance to China's *Belt and Road initiative*. The city's location means it is an important connector of major cities in Asia and Europe, and the starting point of four of the five seaways that connect China with Southeast Asia, Oceania and North Africa. In addition, Qingdao is one of five centrally planned cities in China.
- **Support from Qingdao municipal government. As the largest LGFV in Qingdao,** QCCI acts as the primary vehicle to consolidate the local government's business activities. This has led the company to receive various government supports in the form of assets, capital injections and support for onshore bond issuance. However, its strong government links raise potential risks of over-dependence on state funds.
- **Shift in business structure.** The company's focus has been shifting to more commercial sectors in recent years. Of the CNY11.7bn revenue in 2018, more than 50% was generated by QCCI's commercial activities. The company's focus on public-sector business has diminished, as it did not recognise any earnings from primary land or infrastructure development 2016-18. Expansion by QCCI in industries such as commercial housing, solar energy and healthcare is in line with government strategy.
- **Rising leverage.** QCCI's total debt/equity ratio has climbed steeply over the past three years, reaching 153.3% by the end of 2018. As a result, its EBITDA/interest coverage ratio has been below 1x over the past five years.

Shanghai International Port Group

Analyst
Chang Kai

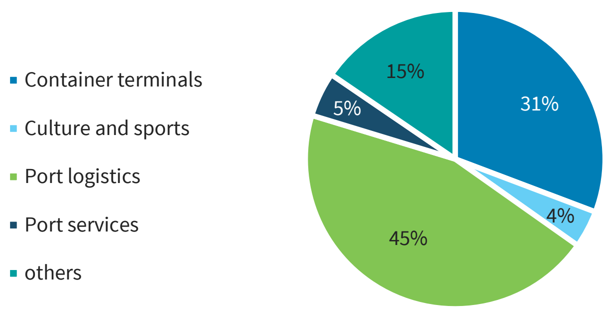
Company description: Shanghai International Port Group (SIPG, A1/A+/NR) is the operator of the Shanghai Port, which is the largest container port in the world. The largest shareholder in SIPG is the Shanghai SASAC (44.4% stake), followed by China Merchants Port Holdings (26.8%) and China COSCO Shipping Corp (15%). The port of Shanghai serves more than 300 shipping routes to almost all of the world's major ports. SIPG's core businesses are split into four main segments: container terminals, non-container terminals, port logistics, and port services. SIPG's other businesses include real estate, and financial services (through a 4.1% stake in Postal Savings Bank of China and 7.36% interest in Bank of Shanghai).

SHPORT bonds

Bond	Amt outstanding	Rating	Bond structure	Issuer	Guarantor
SHPORT 2.875 24	400	A1/A+/NR	Onshore Guarantee	Shanghai Port Group (BVI) Development Co., Limited	Shanghai International Port Group Co Ltd
SHPORT 3.375 29	300				

Note: SHPORT $ bonds are rated Aa3/AA-/A+. Source: Company report

2018 revenue breakdown by segment before inter-segment elimination



Source: Company reports

Financial Snapshot

CNY mn	2018	2017	2016
Revenue	37,134	36,467	30,415
EBITDA	14,203	16,259	10,786
EBITDA margin	38%	45%	35%
Total debt	51,109	48,133	41,363
Cash and Equivalents	29,257	20,268	12,239
Credit Metrics			
Gross debt/EBITDA	3.6x	3.0x	3.8x
EBITDA/interest	11.7x	16.0x	15.0x
Liabilities/Assets	33.62%	33.58%	29.66%

Source: Company reports

Business highlights

- **Operates one of the busiest ports in the world.** The port of Shanghai is the second biggest port in terms of total cargo throughput (ranking behind Ningbo-Zhoushan), and the largest container port in China and globally. It accounted for 18% of China container cargo throughput in 2018. Reflecting this as well as growing international trade flows, SIPG registered a 4.2% CAGR in total container throughput in past three years, reaching 42mn TEUs in 2018.
- **Government support.** Government plans to establish an international shipping centre in Shanghai as well as to launch initiatives such as the Belt and Road Initiatives are likely to benefit SIPG. The company plays a key role in facilitating international trade in Yangtze River Delta and is also one of the largest SOEs in Shanghai. It has received both financing support, including equity injections and subsidies, and operational support from the Shanghai government.
- **Global economic, financial and political risks.** The US-China trade war has weighed on the port business. Shipments to the US account for c.12% of SPIG's total container volumes, according to S&P. The impact of trade tensions and tariff actions could negatively influence international trade flows and, hence, SIPG's business. However, the impact could be mitigated partially by stable throughout growth in non-US market with the development of Shanghai (Pilot) Free Trade Zone.
- **High spending on acquisitions and investment.** The company's FFO/debt ratio declined from 26.8% in 2017 to 18.6% 2018, reflecting acquisition and investment activity. Capex is likely to remain elevated with the planned Yangshan Phase IV acquisition and potential overseas expansion, especially linked to the one-Belt-one-Road Initiative. The acquisition of Yangshan Phase IV, the largest automated terminal in the world, is expected to improve SIPG's operating efficiency and revenue growth.
- **Declining margin.** In November 2017, NDRC announced a tariff cut for non-transshipment containers with an overseas origin or destination. NDRC also announced a reduction in auxiliary service charges at Chinese port in March 2019. SIPG's gross margin declined to 31% in 2018 from 35% in 2015 largely due to tariff deductions, according to Moody's.

Shenzhen International/Shenzhen Expressway

Analyst
Yimin Weng

Company description: Shenzhen International Holdings (SZIH, Baa2 Stb/BBB Stb/BBB Stb) and its 51.56%-owned subsidiary Shenzhen Expressway Co Ltd (SZEC, Baa2 Pos/BBB Stb/BBB Stb) are involved in toll road investment and operations, and logistics business (eg, logistics parks, services and ports). The toll road business contributed 73% of total revenues and 63% of the profit in 2018. Shenzhen International is 44.91% owned by Shenzhen Investment Holding Co, an investment platform wholly owned by the Shenzhen SASAC. SZIH directly or indirectly controls 17 expressways, with approximately 174km in Shenzhen region, 268km in other regions in Guangdong Province and 187km in other provinces in China. Its logistics parks provide warehouse leasing and related services in Shenzhen, Nanjing and Yantai. SZIH's port business comprises five bulk cargo terminals each 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. Both SZIH and SZEC are listed on the Hong Kong stock exchange, and SZEC is also listed in China A share market.

SZIHL & SZEXPR bonds (Baa2/NR/BBB)

Bond	Amt (USD mn)	Bond structure	Issuer	Maturity
SZEXPR 2.875 21	300	Direct issue	Shenzhen Expressway	18-Jul-21
SZIHL 3.95 PERP	300	Direct issue	Shenzhen International Holdings Ltd	Perp c'29-Nov-22

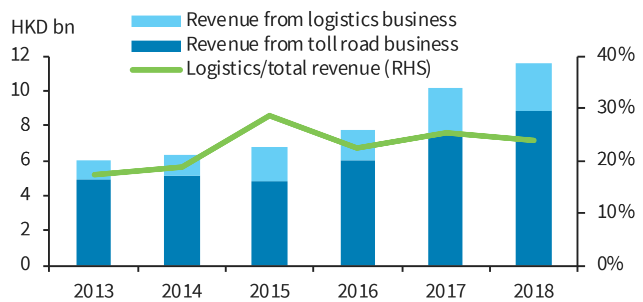
Note: Bond credit ratings – Moody's/S&P/Fitch. NR = not rated by the agency. The perpetual bond is only rated by Moody's. Source: Company reports

Financial snapshot

HKD mn	2018	2017	2016	2015
Revenue	11,581	10,139	7,787	6,738
Gross Profit	4,575	3,513	3,130	2,865
Gross Profit Margin	40%	35%	40%	43%
EBITDA	6,109	4,977	4,301	3,616
EBITDA Margin	53%	49%	55%	54%
Total Debt	26,612	21,335	12,384	13,039
Net Debt	11,473	14,505	1,635	-3,427
Credit Metrics				
Total Debt/EBITDA	4.4x	4.3x	2.9x	3.6x
Net Debt/EBITDA	1.9x	2.9x	0.4x	-0.9x
EBITDA/Interest	4.4x	3.9x	4.6x	5.0x
Debt/capital	37%	36%	30%	31%

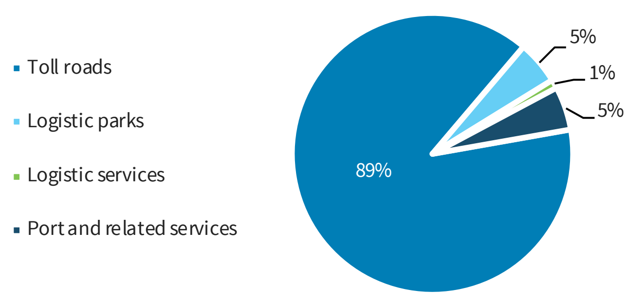
Source: Company reports, S&P

Increasing revenue from both toll road business and logistics business



Source: Company reports, S&P

Operating profit by segment (1H18)



Source: Moody's

Business highlights

- **Strategically important; dominant in Shenzhen's toll road sector:** With a market share of over 70%, SZIH's accounts for the majority of Shenzhen's toll roads. Shenzhen is China's third-largest city in in terms of GDP (2018). SZIH is also the only infrastructure investment platform controlled by the city and its operations are monitored by Shenzhen SASAC. The company has moved into other regions in China to increase its geographic diversification. It has major projects in Guangdong, Hubei and Hunan, and minority ownership of six toll roads in Guangdong and Jiangsu province.
- **Steady recurring income:** Shenzhen's toll roads are heavily used by daily commuters in Shenzhen and between neighbouring cities, and generate steady revenue for the company. Over the past decade, average daily traffic on the expressways in Shenzhen has experienced double-digit percentage growth annually.
- **Changing regulations:** The regulatory regime lacks a transparent tariff-setting mechanism and protections for concessionaires against events. In addition, Guangdong province cancelled or reduced tolls on several roads as a part of its transportation reform. However, Moody's expects the regulatory environment to be stable over the next two years, in view of the government's recent supportive stance toward the toll-road sector.
- **Moderate financial profile,** according to Moody's: Reported 2018 EBITDA increased 22% y/y. However, SZIH's growing debt offset the improving operating performance in the past two years, with total debt/EBITDA rising to 4.4x in 2018 from 2.9x in 2016. On the other hand, the company reported cash of HKD13bn versus short-term debt of HKD2.1bn in 2018. The company continues to seek acquisitions, driven by its expansion into the environmental protection business and its plan to replenish its toll road portfolio. Moody's estimates SZIH's total capital spending will be HKD5.5-6.5bn in both 2019 and 2020.
- **Toll roads' cash flow funds expansion:** In recent years, SZIH has used cash flow from its toll road business to expand its logistics network, which exposes the company to greater revenue volatility given the cyclicality of that business and its dependence on the economy. The company also faces higher business risk from its increasing exposure to the property business and the environmental protection business. In March 2019, SZEC acquired a 51% stake in Nanjing Wind Power Technology Co, its first step into China's renewable industry. The deal was viewed as credit negative by Moody's, given the sector's high business and execution risk, and SZIH and SZEC's shifting business focus away from toll-road sector.

Shenzhen Investment Holdings

Analyst
Yimin Weng

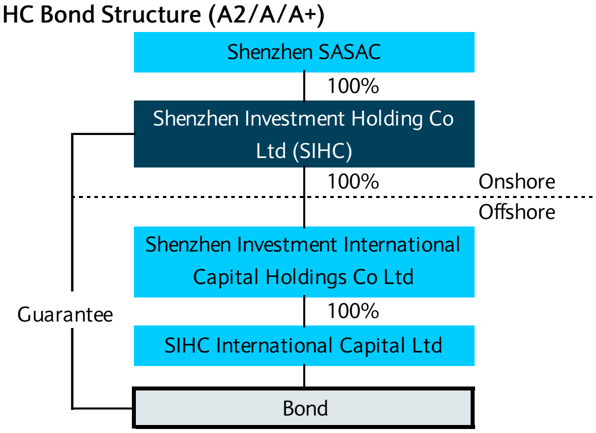
Company description: Shenzhen Investment Holdings (SIHC A2 Stb/A Stb/A+ Stb) is an SOE wholly owned by the Shenzhen Government. As the largest SOE in Shenzhen in terms of assets, revenue and profit contribution, SIHC operates and invests in a several areas, including: i) tech-finance (24.2% rev. '18) (securities, insurance, fund management, guarantee and other services); ii) science and technology park (38.3% rev. '18) (real estate development, construction, property management and leasing, and services); and iii) industrial investment (37.5% rev. '18) (logistic infrastructure, manufacturing, and trade and services). SIHC manages 38 subsidiaries, among which eight are listed companies. As at end-2017, the company's investment portfolio was valued at CNY197bn.

SZIHOG bonds

Bond	Amt (USD mn)	Rating	Bond structure	Issuer	Guarantor	Maturity
SZIHOG 3.95% $'21s	400	A2/A/A+	Onshore Guarantee	SIHC International Capital Ltd	Shenzhen Investment Holding Co Ltd (SIHC)	26-Sep-21
SZIHOG 4.35% $'23s	300					26-Sep-23

Source: Company reports

SIHC Bond Structure (A2/A/A+)



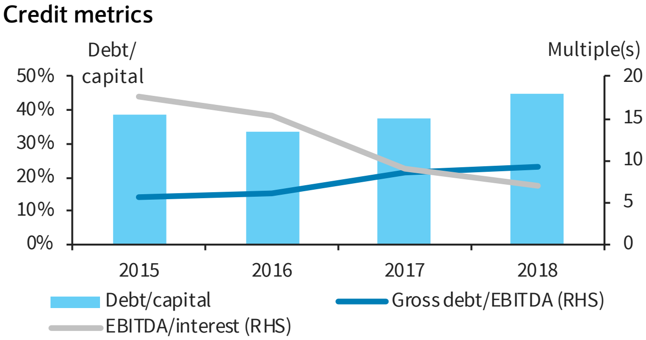
Source: Company reports

Financial Snapshot

CNY mn	2018	2017	2016	2015
Revenue	71,755	47,381	43,872	50,023
EBITDA	20,321	15,401	14,678	18,998
EBITDA margin	28%	33%	33%	38%
Total debt	190,120	130,785	88,827	105,708
Net debt	33,437	20,449	-29,587	-55,801
Credit Metrics				
Gross debt/EBITDA	9.4x	8.5x	6.1x	5.6x
Net debt/EBITDA	1.6x	1.3x	-2.0x	-2.9x
EBITDA/interest	7.0x	9.1x	15.4x	17.7x
Debt/capital	45%	37%	34%	39%

Source: S&P

Credit metrics



Source: S&P, Barclays Research

Business highlights

- **Importance to government.** SIHC is the lead SOE in Shenzhen, in terms of assets (CNY556.1bn) and revenue. It is the primary platform that operates the state-owned assets of the Shenzhen government, which provides it with easier access for fund raising. In addition, Shenzhen, which is one of China's four tier 1 cities, is considered a financial and innovation centre and is set to play a key role in the development of the Greater Bay Area. Factoring in expected government support, S&P lifted the company's credit rating by 3-notches from bbb to A (Stable Outlook).
- **Large investments, high asset concentration.** SIHC's high credit profile is supported by high liquidity and a persistently low loan-to-value ratio. According to S&P, SIHC's high level of liquidity is supported by the 70% of listed assets among the company's total assets, albeit it also notes that the credit profile is limited by a lack of asset diversification. Its portfolio has a high concentration in the financials service sector, with its top three investments (Ping An Group, Guosen Securities and Guo Tai Jun An) accounting for about 55% of the total portfolio value.
- **Recurring income from rental business and increasing property sales revenue from industrial park unit.** 2018 revenue increased by 52% over 2017, mainly due to a 60% jump in its science and technology park business. This unit is SIHC's largest revenue contributor, accounting for 39% of total revenue in 2018. Moody's also expects new industrial park projects to generate steady rental income in the next 2-3 years. The group had 22 completed park projects, 14 under construction, and 24 proposed projects as at end-1H 18.
- **Large capex and investments planned, and change in holding structure.** Gross profit increased by 9% in 2018, however, far less than the growth in revenue. Annual planned investment is CNY8-10bn during 2018-2020. This will be accompanied by changes in the group organisation, with SIHC planning to increase its number of listed units by a further five companies, and to reduce the number of its intermediate holding companies through mergers.

Shougang Group Co Ltd

Analyst
Yimin Weng

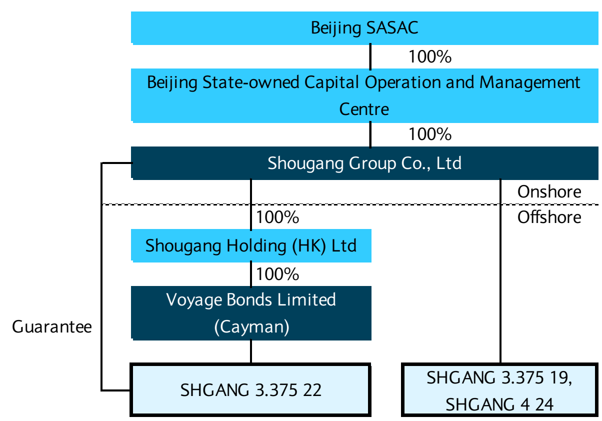
Company description: Shougang Group Co Ltd (Shougang, NR/NR/A- Stb), wholly owned by the Beijing SASAC, operates in various businesses including iron and steel production, mining, city infrastructure development, real estate development and financial services. The group is estimated by the Iron and Steel Association of China to be the second-largest iron and steel enterprise in China by total assets (CNY501.7bn at end-2018), and ranks among the top 10 largest iron and steel companies globally by crude steel production volume (World Steel Association). The group dates back to 1919. It also is a pioneer in the Beijing-Tianjin-Hebei Collaborative Development Initiative, a key strategy of the central government, and plays key roles in promoting the reform of China's iron and steel industry, developing city infrastructure, and providing public services. In addition, it is the largest shareholder (20.28%) of Hua Xia Bank. Shougang has an AAA onshore rating from Dagong, China Chengxin and Lianhe.

SHGANG bonds (NR/NR/A-)

Bond	Amt (USD mn)	Bond structure	Issuer	Onshore guarantor	Maturity
SHGANG 3.375 22	400	Onshore guarantee	Voyage Bonds Ltd	Shougang Group Co Ltd	28-Sep-22
SHGANG 4 24	500	Direct issue	Shougang Group Co Ltd	N/A	23-May-24
SHGANG 3.375 19	400				09-Dec-19

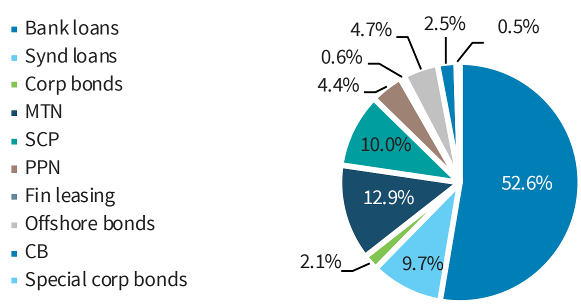
Note: Bond credit ratings – Moody's/S&P/Fitch. NR = not rated by the agency. Source: Company reports

Bond structure



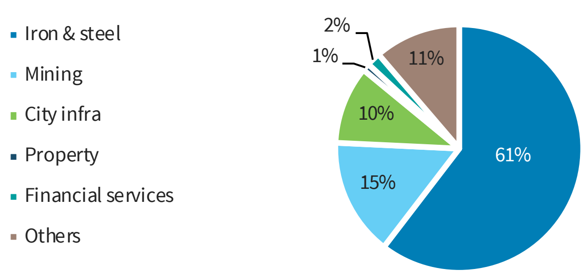
Source: Company reports, Barclays Research

Debt breakdown by type (end-2018)



Source: Company offering circular, Barclays Research

Revenue breakdown (2018)



Source: Company offering circular, Barclays Research

Business highlights

- **Importance to Beijing:** Following its transformation into a developer of city infrastructure and provider public services, Shougang considers itself a key SOE in Beijing. It is engaged in the construction of city infrastructure, including pipeline systems, desalination facilities and utility tunnels, in 17 provinces or municipalities in China, as well as in Africa and Southeast Asia.
- **Key projects:** Shougang is the sole developer of the New Shougang High-end Industry Comprehensive Services Park in in Beijing, and leads the development of Caofeidian Development Demonstrative District in Hebei province. Both are important in the development plans for the Beijing-Tianjin-Hebei region. The Caofeidian project is part of the reform for traditional heavy industries and a pilot project for the development of smart and environmentally friendly cities. It is supported by a CNY20bn fund funded equally by Shougang and the Beijing Municipal Bureau of Finance. In June 2018, the group is chosen as an official partner for urban services for the Beijing 2022 Winter Olympic Games and Winter Paralympic Games.
- **Core business in iron and steel sector:** Shougang ranked ninth globally by 2018 crude steel output tonnage, according to the World Steel Association (sixth among Chinese steelmakers). It produces a range of steel products, with a focus on steel plates, pipes, strips and wires, used in construction projects including the subway, railway and airport terminal construction in Beijing. The group also owns mining rights to five iron ore mines in China, in Australia and Peru, which in aggregate had proven iron reserves of approximately 3.4bn tons.
- **Property:** Shougang develops properties in Beijing-Tianjin-Hebei and Chongqing-Guizhou-Chengdu region. At end-June 2018, it had 32 real estate projects, of which 15 had been completed, 11 were under construction, and 6 were held for future development. The group has land bank of 10mn sqm (all in Beijing) as of June 2019.
- **Financial profile:** At end-2018, Shougang's reported total liability/asset ratio was 72.7% (2016-17: 73.0%-72.8%), and EBITDA/interest was 1.8x (2016-17: 1.6x). At end-2018, Shougang had CNY33.2bn of cash and CNY347.6bn of unused credit facilities (out of total of CNY529.7bn), compared with short-term debt of CNY133bn.

Tianjin Binhai New Area Construction & Investment Group

Analyst
Yimin Weng

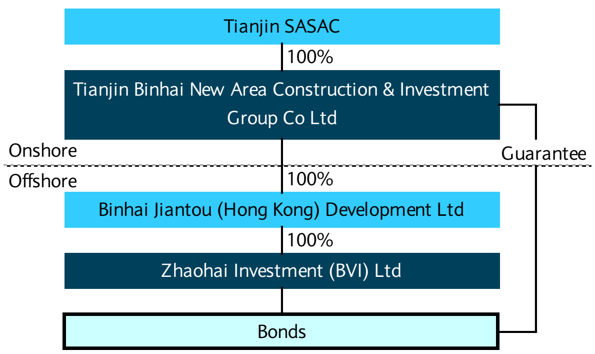
Company description: Tianjin Binhai New Area Construction & Investment Group (TBNCI, Baa2 Stb/BBB Neg/BBB+ Neg), wholly owned by the Tianjin SASAC and directly supervised by the Tianjin Binhai New Area government (a district-level government in Tianjin), is the sole investment and financing platform of the New Area government. It was incorporated in 2006 by the Tianjin government to undertake investments in major infrastructure projects in Binhai New Area. TBNCI is involved in: 1) transportation infrastructure construction – such as construction and operation of roads, bridges, expressways and rail transportation in the New Area; 2) civil projects – primarily senior citizen care centres, schools and nursing homes; 3) environmental protection and clean energy – waste disposal, power generation and sewage treatment; 4) regional development and facilities construction – such as primary and secondary land development and real estate; and 5) other businesses – materials trading, asset operation and management, and financial services. TBNCI is rated AAA and AA+ onshore by Lianhe and China Credit respectively.

BINHCO bond (Baa2/BBB/BBB+)

Bond	Amt outstanding (USD mn)	Bond structure	Issuer	Onshore guarantor	Maturity
BINHCO 4 20	500	Onshore guarantee	Zhaohai Investment BVI Ltd	Tianjin Binhai New Area Construction & Investment Group	23-Jul-20

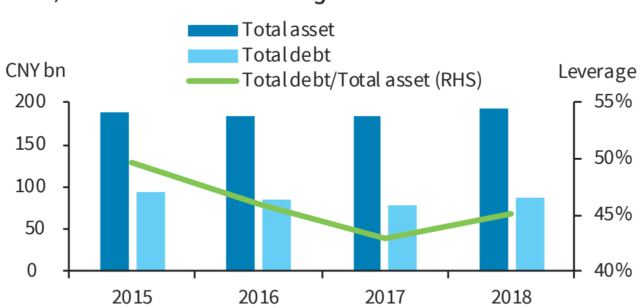
Note: Bond credit ratings – Moody's/S&P/Fitch. Source: Company reports

Bond structure



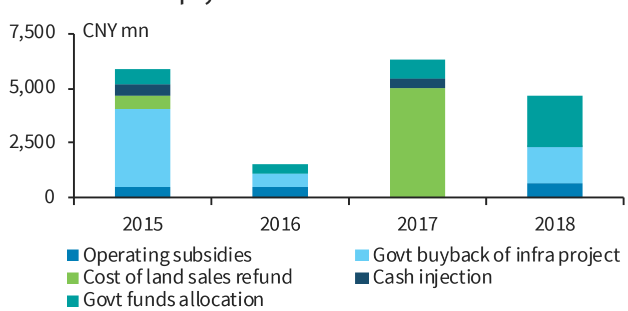
Source: Company reports

Asset, debt and elevated leverage



Source: Company reports, S&P

Government cash payments



Source: Company reports, Moody's

Business highlights

- **Strategic importance due to its role as the sole platform in Binhai New Area.** TBNCI is classified as one of the seven functional LGFVs under the direct control of Tianjin SASAC. The entity is involved in more than 70% of the urban road construction in the district as well as other infrastructure projects including expressways, rail transit, and social welfare project construction. TBNCI will also become the only operator of the metro network in the area following its completion (scheduled for 2020). In addition, Tianjin Binhai operates the largest waste disposal and sewage treatment operation in the New Area. Binhai New Area contributed the most to Tianjin city's GDP (around one-third) and the government's general budgetary revenue (around one-fourth) in 2018. It ranked second among the 19 national level new areas in China in terms of GDP in 2018.
- **Track record of government support,** in various formats such as operating subsidies, cash injections, government buyback of infrastructure projects, and debt swaps. During 2016-18, c.CNY18bn of Tianjin Binhai's debt was swapped into municipal bonds under the government's debt-swap program, according to Moody's. The agency assigns a five notch rating uplift to reflect its expectation of high level of government support.
- **Near term credit drivers include refinancing risk of Tianjin SOEs and negative rating outlook on Binhai New Area from S&P and Fitch.** There has been a series of negative headlines about Tianjin in recent years – Binhai New Area announced a significant downward revision to its 2016 GDP growth rate; Tianjin recorded the lowest GDP growth among all provinces/municipalities in 2017 and 2018. In July 2019, TBNCI postponed a dollar bond issue after releasing initial price guidance, which could imply subdued investor risk appetite for bonds issued by LGFVs in Tianjin.
- **Significant leverage due to high capex and long payback periods for infrastructure projects.** Although debt fell in 2016 and 2017 after the debt swap programme, TBNCI's profitability weakened, driving leverage higher. As at end-2018, Tianjin Binhai had receivables of CNY32bn and CNY34bn of construction in progress, for which the Binhai government is the main counterparty.
- **Liquidity and access to domestic capital market.** The company reported cash of CNY11.25bn and short-term debt of CNY22.7bn as end-2018. That said, TBNCI has good access to funding channels such as the onshore bond market and bank lending. TBNCI has total approved credit facilities of CNY106bn from policy banks and commercial banks at end-2018, of which CNY65.3bn was unused.

Tianjin Rail Transit Group Co Ltd

Analyst
Yimin Weng

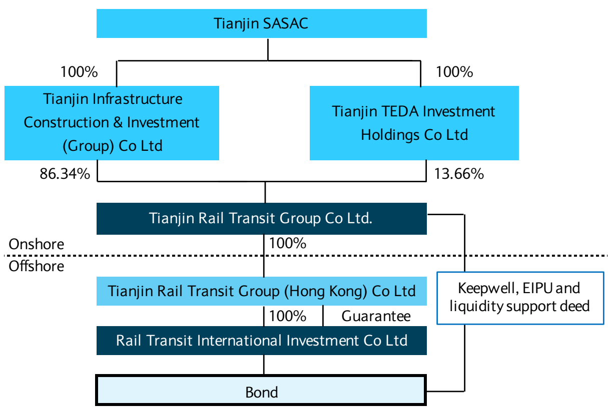
Company description: Tianjin Rail Transit Group Co Ltd (TRT, A3 Stb/A- Neg/A- Neg) is a large SOE directly supervised by Tianjin SASAC and primarily engaged in metro and rail construction, investment and operation in Tianjin municipality. Founded in 1992 and restructured in 2014, TRT is 86.34% owned by Tianjin Infrastructure Construction Group and 13.66% by Tianjin TEDA Investment Holdings, both of which are wholly owned by the Tianjin SASAC. TRT is also involved in engineering construction, property development, commercial leasing and advertising, and other complementary operations along its metro lines. As at March 2018, the company operated five inter-connecting metro lines with a total network length of c.195km, accounting for c.17% market share of the public transport sector in Tianjin by passenger volume. The company plans to expand its metro network to 385km by 2020, which would represent a c.40% market share in Tianjin. TRT is rated AAA onshore by Lianhe.

TRTHK bond (Baa1/NR/A–)

Bond	Amt outstanding (USD mn)	Bond structure	Issuer	Offshore guarantor	Keepwell provider	Maturity
TRTHK 2.875 21	300	Keepwell	Rail Transit International Investment Co Ltd	Tianjin Rail Transit Group Hong Kong Co Ltd	Tianjin Rail Transit Group Co Ltd	13-May-21

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

Bond structure



Source: Prospectus

Financial snapshot

CNY mn	2018	2017	2016
Revenue	1981	2,110	2,249
Gross Profit	-763	-403	-482
EBITDA	1537.1	1,628	716
EBITDA Margin	77.6%	77.2%	31.8%
Total Debt	118,924	109,709	101,377
Net Debt	107,230	99,472	91,346
Total equity	130,286	126,491	119,632
Total Assets	275,673	263,755	249,606
Government Subsidy	1,944	1,733	1,679
Credit Metrics			
Total Debt/EBITDA	77 x	67 x	142 x
Net Debt/EBITDA	70 x	61 x	128 x
EBITDA/Interest expense	1.3 x	3.5 x	2.4 x
Total Debt/Total Capital	47.7%	46.4%	45.9%
Total Debt/Total Asset	43.1%	41.6%	40.6%

Note: EBITDA includes government subsidies (CNY1679mn, 1733mn, 1944mn for 2016-2018). Source: Company reports, S&P, Barclays Research

Business highlights

- **Strategic importance.** TRT's key functional SOE position as the sole entity to execute the government's rail and metro policy underpins its highly strategic role in Tianjin's public transport sector. TRT's metro and rail projects are approved by the central government in line with the Beijing-Tianjin-Hebei integration strategy.
- **Strong support from Tianjin and the central government.** Moody's and S&P assign five- and six-notch uplifts, respectively, to TRT's ratings to reflect the high likelihood of support from the Tianjin municipal as well as central government. TRT receives support from Tianjin and the central government in the form of funds for construction and interest expenses, and subsidies to cover operating losses, which are paid from the city's fiscal budgets directly. TRT received an average subsidy of CNY1.785bn every year from 2016 to 2018, as well as additional metro and railway construction grants from the Tianjin government. TRT mainly relies on government grants to service its debt and fund its construction projects. Moody's expects TRT to receive a government grant of CNY18bn every year.
- **Risk of potential weakening in government support.** Capital grants for new metro lines approved in or after 2015 were cut to 40% of total investment cost compared with 50% for projects approved in earlier years. There is a potential for further declines given the central government guidelines to limit capital ratios to 20% for SOEs. Tianjin province has been hit by negative headlines in recent years, including a sharp downward revision of its 2016 GDP growth, and it posted the lowest GDP growth rate among all provinces and municipalities in 2017 and 2018. Recently, S&P and Fitch put several Tianjin SOEs on negative outlook given the agencies' expectations of a structural growth slowdown in Tianjin and the city government's elevated debt burden.
- **Profitability limited from non-metro segments.** TRT has been expanding its property business to improve profitability. Although development of the company's land bank sited along its metro lines could generate good returns, this exposes TRT to China's cyclical property market.
- **Leverage and capex.** TRT is highly leveraged due to its negative operating cash flow and sizable capex needs to meet the government's development plan. Annual capex for metro development is estimated at c.CNY38-45bn over the next three years, with an expected funding gap of CNY15-25bn per year, according to Moody's. Loans from policy banks and state-owned banks are TRT's other major financing channels.

Xiamen Xiangyu Group Corporation

Analyst
Yimin Weng

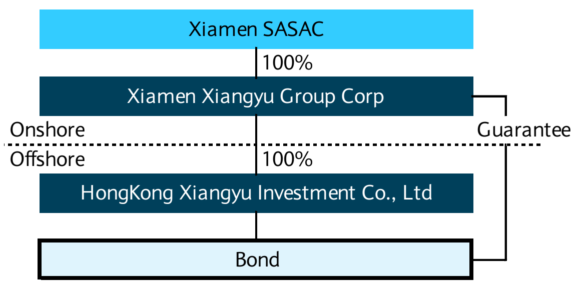
Company description: Xiamen Xiangyu Group Corporation (Xiangyu Group, NR/NR/BBB Stb), established in 1995 as part of the Xiangyu FreeTrade Zone, is a state-owned enterprise wholly-owned by the Xiamen SASAC. It is positioned as a one-stop sourcing and logistics platform, providing operation services in the West Strait Economic Area. Its primary businesses include: 1) integrated logistics, trading and supply chain service; 2) urban and property development, and 3) industrial finance. Xiangyu Group was ranked 338th in the Fortune Global 500 in 2019 (37 higher than 2018). Its listed subsidiary Xiamen Xiangyu Co Ltd was also named by Fortune as one of the China's Top 500 Enterprises (ranked 40th) in 2019. It is ranked first among China's Top 500 in the transportation and logistics industry. Xiangyu Group was the first state-owned enterprise set up as a pilot project for the asset-operation integration business model in the Xiamen FTZ. Xiangyu Group is rated AAA onshore by China Chengxin, Lianhe and Pengyuan.

XIANGY bond (NR/NR/BBB)

Bond	Amt outstanding (USD mn)	Bond structure	Issuer	Onshore guarantor	Maturity
XIANGY 4.5 23	500	Onshore guarantee	Hongkong Xiangyu Investment Co Limited	Xiamen Xiangyu Group Corp	30-Jan-23

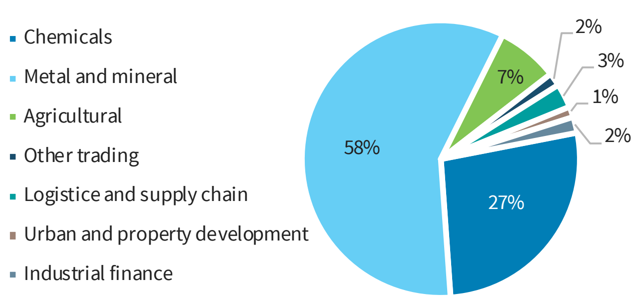
Note: Bond credit ratings – Moody's/S&P/Fitch. NR = not rated by the agency. Source: Company reports

Bond structure



Source: Prospectus

Revenue breakdown by segment as end 2018



Source: Company prospectus

Financial snapshot

CNY mn	2018	2017	2016	2015
Revenue	241,461	214,089	123,938	65,611
EBITDA	3,876	3,460	3,139	1,389
EBITDA Margin	1.6%	1.6%	2.5%	2.1%
Total Debt	47,107	39,648	27,915	20,158
Net Debt	30,723	28,492	21,761	16,346
Credit Metrics				
Total Debt/EBITDA	12.2x	11.5x	8.9x	14.5x
Net Debt/EBITDA	7.9x	8.2x	6.9x	11.8x
EBITDA/Interest	2.3x	2.5x	3.5x	1.4x
Debt/capital	56.8%	58.5%	55.2%	56.1%

Source: S&P

Business highlights

- **Strong government support underpinned by robust local economy.** Xiangyu Group has close connections to Xiamen municipality, given its 100% state ownership. The company has received financial support from Xiamen SASAC and the government via capital injections, subsidies and other support. The company also benefits from the strong local economic development in Xiamen – one of five centrally planned cities in China. Xiamen reported GDP growth rates of 8%, 7.6% and 7.7% during 2016-18. In addition, as the major trading hub with Taiwan, Xiamen was identified to be developed into an international integrated transportation hub in the 13th Five-year Plan.
- **Robust revenue growth, supported by long-term relationship with business partners, as well as pioneering initiatives in food supply-chain platform.** Commodity procurement and the trading business are the largest revenue contributors, accounting for 97% of total revenue in 2018. Xiangyu Group has also been focusing on food security since 2013 and has expanded its role into an integrated agricultural supply chain provider, which is in line with government's strategy to promote food safety in China.
- **Steady standalone financial metrics and diverse financing channels.** Total debt/EBITDA ranged from 9x-15x and EBITDA/interest coverage from 1.4x-3.5x between 2015 and 2018. In the same period, the company maintained a stable debt/capital ratio, at 55.0-58.5%. Xiangyu Group has access to various funding channels, including equity capital markets, bank loans and onshore bond market. At end-March 2019, Xiangyu Group had bank credit facilities of CNY135bn, of which 58.8% were unused.
- **Business uncertainty subject to global economic developments.** Trading and logistics services are highly exposed to fluctuations in the global economy. Uncertainties caused by this are partially mitigated by Xiangyu Group's diversification of its suppliers and customer base. For example, its top five suppliers and customers account for 16% and 13% of its total business, respectively.

Yiwu State Owned Capital Operation Co Ltd

Analyst
Yimin Weng

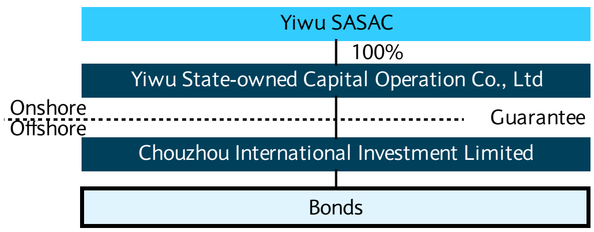
Company description: Yiwu State-owned Capital Operation Co., Ltd.'s (YWSOAO, Baa3 Stb/NR/BBB Stb) is the sole platform in Yiwu, operating about 90% of the state-owned assets in the city, which is in Zhejiang province. YWSOAO is directly 100%-owned and supervised by Yiwu SASAC. The company's business covers four sectors: (1) Commodity markets operation; (2) Public utilities, including transportation, water-related business and infrastructure construction; (3) Commercial property development, and (4) Other businesses, such as logistics and warehousing, hotel operation, and exhibitions, and advertising. The company developed and operates the Yiwu Small Commodity Market, the world's largest small commodity wholesale market. At end-2018, YWSOAO had total assets of CNY 154.5bn. YWSOAO is rated AA+ onshore by China Chengxin.

YWSOAO bonds (Baa3/NR/BBB)

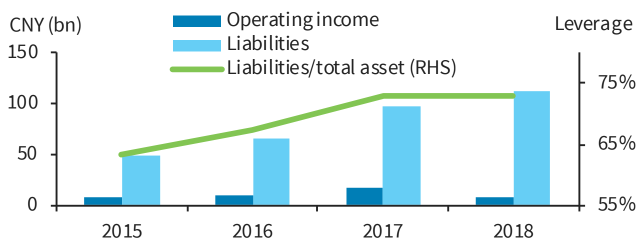
Bond	Amt outstanding (USD mn)	Bond structure	Issuer	Guarantor	Maturity
YWSOAO 4 20	500	Onshore guarantee	Chouzhou International Investment Limited	Yiwu State-owned Capital Operation Co Ltd	05-Dec-20
YWSOAO 4.5 22	600				30-May-22

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

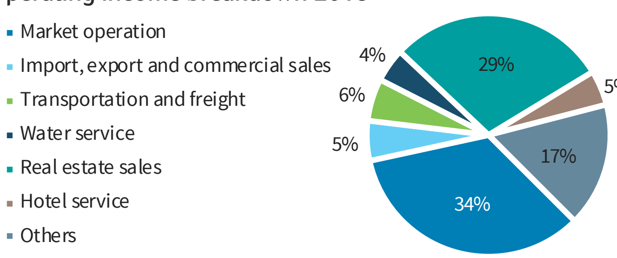
Bond structure



Leverage ratio high in the past four years



Operating income breakdown 2018



Financial snapshot

CNYmn	2018	2017	2016	2015
Cash and Equivalents	10,370	11,574	8,930	7,296
Total assets	154,506	132,498	98,393	78,699
Total debt	84,762	73,443	40,005	25,903
Net debt	72,964	59,522	29,668	17,122
Revenue	7,888	16,654	10,869	8,568
EBITDA	3,350	3,914	2,826	2,177
Credit ratio				
EBITDA margin	42%	24%	26%	25%
EBITDA/interest	2.3x	3.6x	4.0x	3.2x
Cash/ST debt	0.36	0.39	0.54	0.78
Total debt/EBITDA	25.3x	18.8x	14.2x	11.9x
Net debt/EBITDA	21.8x	15.2x	10.5x	7.9x
Total liabilities/total asset	73%	73%	67%	63%

Source: Company reports, S&P

Business highlight

- **Track record of support from Yiwu city and Zhejiang provincial governments due to YWSOAO's strategic importance,** which stems from its role as the sole operator and investing and financing platform for the city's state-owned assets. YWSOAO implements strategies and guidance received directly from the Yiwu Municipal Government, and provides key public utilities services in the city. From 2015 to 2018, the company received government cash payments every year ranging from CNY2.7-11.1bn.
- **Well positioned for the OBOR initiative and rapid local economic development of Yiwu.** According to a list released by CCID Consulting Group, a research institution directly under the Ministry of Industry and Information Technology, Yiwu ranked 11th in the top 100 most economically competitive county-level cities in China in 2019, with 2018 GDP of CNY124.8bn and a CAGR of 5.9% from 2013-18.
- **Stable operating income provided by globally recognised small commodity trading centres with high occupancy rates.** Yiwu's commodity trading centres are owned and managed by YWSOAO, Market operation is the company's core business, generating CNY2.5bn operating income in 2018, with an occupancy rate of 90-100%, and has continuously been the largest contributor to operating income, accounting for 34% of total revenue.
- **Diversified business profile and stable financing channels.** YWSOAO's business profile covers a broad range of sectors, including the operation of commodity trading centres, urban infrastructure construction, property development, shantytown renovation projects development, warehousing and logistics, water services, and public transportation. These businesses have different industry cycles, which reduces the portfolio risk. In addition, the company has access to multiple financing channels and strong financing capabilities. It also has close relationships with a number of policy banks and financial institutions.
- **Negative net operating cash flow and high debt leverage due to continued large capital expenses.** The company has reported negative net operating cash flow in the past three years due to its investments in infrastructure construction and shantytown renovation projects. The company's leverage ratio increased from 63% in 2015 to 73% in 2018. Moody's expects the company to continue debt-funded investment expansion in 2019. However, strong support from the government as well as its good access to the domestic funding market could partly mitigate its financial risks.

Yunnan Provincial Energy Investment

Analyst
Yimin Weng

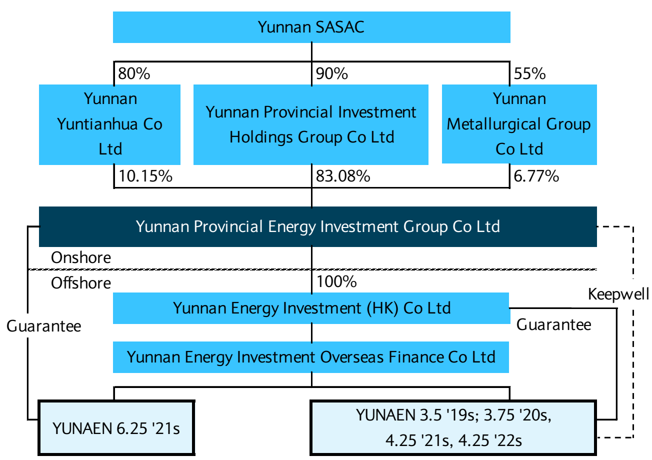
Company description: Yunnan Provincial Energy Investment Group Co., Ltd. (YEIG, NR/NR/BBB) is the sole strategic platform in Yunnan focused on investment and development of the energy sector in the province. YEIG engages in power generation and sales, natural gas operations, coal production and sales, and resources trading. The company has also diversified into financial services, salt and chemical production, and has expanded overseas in recent years. YEIG has established five provincial-level platform companies in power construction investment, power sales and distribution, natural gas resource development, energy research, and salt production and distribution. The Yunnan SASAC is the ultimate controlling shareholder (81.78% effective interest) and effectively manages and controls YEIG's key strategies, investments, appointments and financial management.

YUNAEN bonds (NR/NR/BBB)

Bond	Amt outstanding (USD mn)	Bond Structure	Issuer	Guarantor	Keepwell provider	Maturity
YUNAEN 6.25 21	600	Onshore guarantee	Yunnan Energy Investment Overseas Finance Company Ltd	Yunnan Provincial Energy Investment Group Co Ltd	-	29-Nov-21
YUNAEN 3.5 19	310	Keepwell		Yunnan Energy Investment HK Co Ltd (offshore)	Yunnan Provincial Energy Investment Group Co Ltd	13-Dec-19
YUNAEN 3.75 20	300	Keepwell				14-Nov-20
YUNAEN 4.25 21	130	Keepwell				13-Dec-21
YUNAEN 4.25 22	300	Keepwell				14-Nov-22

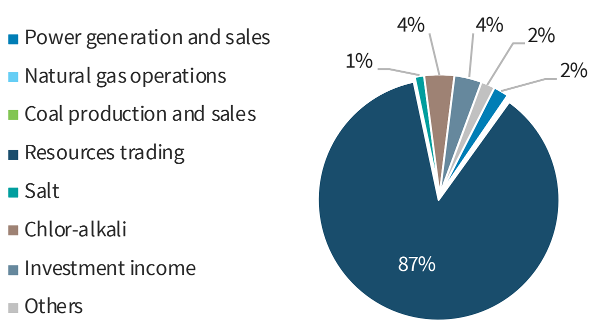
Note: Bond credit ratings – Moody's/S&P/Fitch. NR = not rated by the agency. Source: Company reports

Bond structure



Source: Company reports

Revenue breakdown, as Sep 2018



Source: Company reports

Business highlights

- **Enlarged strategic role undertaken by YEIG.** In 2016, the Yunnan government officially approved the establishment of provincial-level natural gas, power distribution and sales, and salt platform companies under YEIG. The company has also been mandated as the state-owned enterprise to develop the province's natural gas market and power distribution grid. The natural gas and power distribution businesses are still at the very early stages of planning and development. YEIG is also undertaking hydropower projects in Myanmar (Ngaw Cha Hka River) and Laos (Xelanong).
- **Yunnan province is among the most leveraged in China.** Newsflow at the beginning of 2018 regarding a non-repayment on a trust product by a Yunnan SOE (later repaid) affected sentiment towards Yunnan SOEs.
- **Debt-funded growth and negative FCF generation,** according to Fitch. Capex remained high in 2018, amounting to CNY5.5bn (2017: CNY4.2bn).
- **Scale:** Standalone total installed generation capacity is less than 7GW, of which more than 80% comes from coal-fired plants. The trading business generates more than 80% of total revenue, but ~10% of profit.
- **Market pricing electricity reforms weigh on power prices.** According to Fitch, Yunnan has been leading reforms in the electricity sector, which, as a result of abundant power supply, has resulted in power prices in Yunnan being lower than in the rest of China. However, preferential grid access for hydropower helps mitigate pricing impact, while the West-to-East Electricity Transmission Project has eased oversupply issues. As a result, power prices in the province stabilised in 2018.
- **Minority stakes in JVs owning large-scale hydropower projects with big gencos.** As at end-June 2018, YEIG held stakes in 17 power generating companies, including the Huaneng Lancang River Hydropower Co., Ltd., China Yangtze Power Co., and Yunnan Huadian Jinsha River Hydropower Development Co., Ltd. Total installed capacity of these projects was 121GW. The valuation of eight of these stakes on the balance sheet was CNY26.25bn, more than 20% of total assets as of end-2018.

Zhongyuan Yuzi Investment Holding Group Co Ltd

Analyst
Yimin Weng

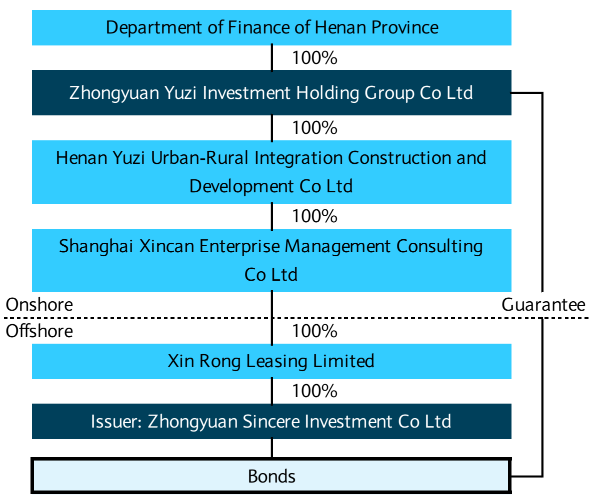
Company description: Zhongyuan Yuzi Investment Holding Group Co Ltd (Yuzi, A3 Stb/NR/A- Stb) is the largest LGFV in Henan province by total assets (CNY267bn), and is mandated as the sole provincial-financing and investment platform for affordable housing projects and urbanisation construction projects in the province. Incorporated in May 2011 by the Henan Province Department of Finance, Yuzi's core activities include: 1) interest income business: loans/entrusted loans to SOEs, which are primarily LGFVs engaged in affordable housing project construction in Henan; 2) Project financing and management: co-investment in construction projects (capped at 5% of capital from Yuzi, at least 20% from the local government, and remaining from bank loans with Yuzi as the borrower); and 3) Private placement of debt securities: issuing PP debt to raise funds for affordable housing projects. Yuzi has a AAA onshore rating from Shanghai Brilliance Credit Rating.

HNYUZI bonds (A3/NR/A-)

Bond	Amt outstanding (USD mn)	Bond structure	Issuer	Guarantor	Maturity
HNYUZI 3.75 21	300	Onshore guarantee	Zhongyuan Sincere Investment Co Ltd	Zhongyuan Yuzi Investment Holdings Group Co Ltd	19-Jan-21
HNYUZI 4.25 24	500				28-Jun-24

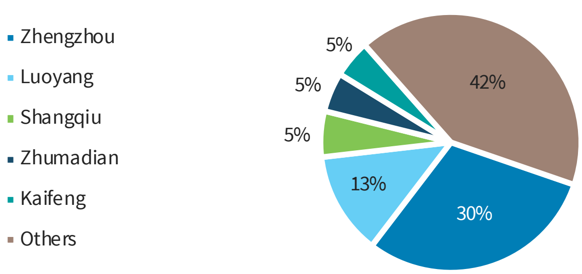
Note: Bond credit ratings – Moody's/S&P/Fitch. NR = not rated by the agency. 21s bond is only rated by Fitch. Source: Company reports

Bond structure

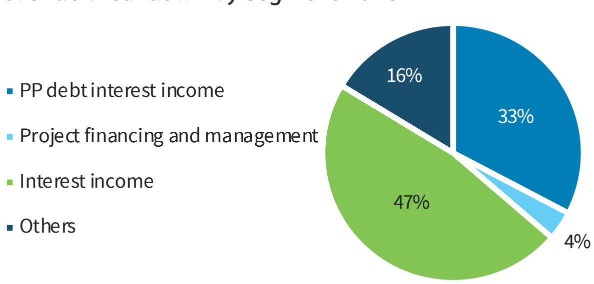


Source: Company reports, Barclays Research

Projects financed by city (as of end-2018)



Revenue breakdown by segment 2018



Source: Company bond prospectus

Business highlights

- **Funding platform for affordable housing projects.** Henan's large population (third largest province by 2018 population) and moderate per capita GDP (17th among 31 provinces/municipalities) underlines Yuzi's strategic importance as the only provincial level LGFV tasked to fund this sector. Since its inception until end 2018, Yuzi has funded 765 property projects worth CNY400bn, representing 44% of total affordable housing units in the province, according to Moody's.
- **Key industry cluster projects that Yuzi has been involved in funding include the living area of the Foxconn industrial park in Zhengzhou,** and more recently the One-hundred City Construction Project (the proceeds of its 2021 and 2024 bonds were for investment in this project).
- **Supportive government policies for social housing and Yuzi.** President Xi's top three priorities for 2018-20 include poverty relief, for which the affordable housing program is one of the key initiatives with strong support from the central government. Yuzi's exclusive right as the only financing platform for affordable housing related projects across Henan province is provided in official circulars by the provincial government. In the Henan provincial government's circular 109, which references MoF's circular 64, it stipulates that all provincial cities and counties are required to allocate (as a priority) at least 10% of net income from land transfers and all value-added income of housing provident funds, less loan reserves provisioning and management fees, to finance the construction of social housing. Yuzi has also been allocated all special project funds and subsidies arranged by Central and Provincial Department of Finance for low-rent housing, public housing and tenement redevelopment projects.
- **Reliance on Henan government support:** Moody's estimates that Henan provincial government had provided Yuzi with capital injections and fiscal subsidies totalling CNY11bn as at end-2017. Fitch expects the Henan government to maintain a satisfactory fiscal performance as it is backed by predictable fiscal transfers. These strengths are mitigated by Henan's moderate level of contingent liabilities.
- **Liquidity:** Yuzi had cash of CNY15.23bn and short term debt of CNY12.488bn at end-2018. It has a bank credit limit of CNY378.4bn, of which unused facilities amount to CNY168.1bn. Of these facilities, CNY212.8bn and CNY29.8bn were granted by China Development Bank and Agricultural Development Bank of China, respectively.

Non-SOEs company profiles

Alibaba Group Holding Ltd

Analyst
Eugene Tham

Company description: Alibaba (A1/A+/A+ Stb) ranked as the largest retail commerce company globally by gross merchandise volume (GMV) in FYE March 2019, according to Analysys. The company's main marketplaces are Taobao, Tmall and Juhuasuan, which generated a combined GMV of CNY5.7trn and had 654mn active annual consumers in FYE March 2019. Alibaba has established an online ecosystem that spans purchases (Taobao, Tmall), payments (Alipay), logistics (Cainiao Networks), and consumer services (Ele.me, Koubei). Alibaba's "New Retail" initiative, introduced in the past two years, also attempts to converge online and offline retail using technology – the fast-delivery grocery retail chain Freshippo is an example of this strategy. Listed on the New York Stock Exchange in September 2014, the company has a dual-class shareholding structure and had a market capitalisation of USD434bn (as of 11 July 2019).

BABA bonds (A1/A+/A+)

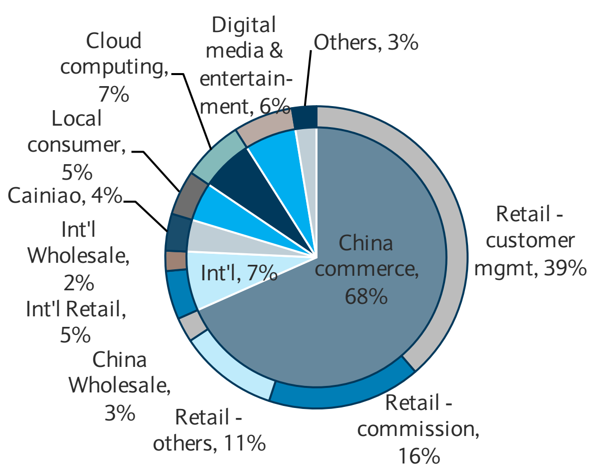
Bonds	Amt (mn)	Issuer
BABA 2.5% $ '19s	2,250	Alibaba Group Holding Ltd
BABA 3.125% $ '21s	1,500	
BABA 2.8% $ '23s	700	
BABA 3.6% $ '24s	2250	
BABA 3.4% $ '27s	2250	
BABA 4.5% $ '34s	700	
BABA 4% $ '37s	1000	
BABA 4.2% $ '47s	1750	
BABA 4.4% $ '57s	1000	

Financial snapshot

CNY mn	FY19	FY18	FY 17
Revenue	376,844	250,266	158,273
Gross Profit	169,915	143,222	98,790
Gross Profit Margin	45.1%	57.2%	62.4%
EBITDA	121,943	105,792	74,456
EBITDA Margin	32.4%	42.3%	47.0%
Total Debt	158,544	142,828	94,435
Net Debt/ (Cash)	(34,694)	(62,567)	(52,312)
Credit Metrics			
Total Debt/EBITDA	1.3 x	1.3 x	1.3 x
Net Debt/EBITDA	-0.3 x	-0.6 x	-0.7 x
EBITDA/ Interest	18.3 x	24.6 x	25.6 x
Total Debt/Capital	20.5%	24.5%	22.6%

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

Revenue breakdown by business unit (FYE March 2019)

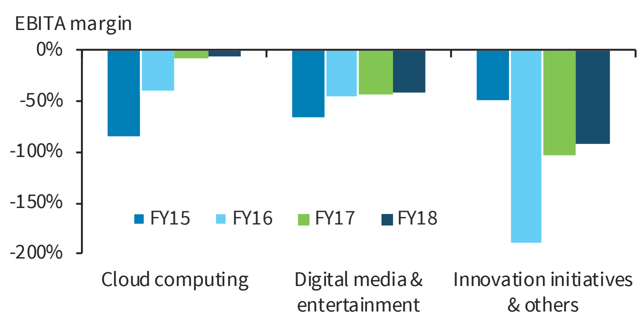


Source: Company reports, Barclays Research

Business highlights

- **Established brand name and dominant market position:** Alibaba operates Taobao Marketplace, China's largest mobile commerce site, and Tmall, the world's largest third-party online and mobile commerce platform in terms of its GMV in FYE March 2019, according to market researcher Analysys. Alibaba has grown its cloud business significantly in the past two years, becoming the largest IaaS and IUS provider in Asia-Pacific (19.6% market share) and the third-largest in the world (4.9% market share) in 2018, according to Gartner.
- **Economic slowdown and macro headwinds are negative:** China's real GDP growth slowed to 6.6% in 2018 from 6.9% in 2017, and Barclays chief China economist Jian Chang expects growth to slow to 6.0% in 2019 and 5.5% in 2020. Potential worsening of the slowdown could increase the drag on merchant demand and consumer spending.
- **Trade tensions could weigh on sentiment toward TMT:** Escalation of U.S.-China trade tensions could affect US investor sentiment toward China's TMT sector, including Alibaba, and drive spreads wider.
- **Strong financial profile:** Alibaba generates solid cash flow and has a robust balance sheet, which underpin its high single-A ratings. Alibaba's debt/EBITDA ranged from 1.1x to 1.3x during FY15-19, and it has maintained a net cash position of CNY50-80bn during the same period. Alibaba's planned listing on the Hong Kong Stock Exchange is expected to help raise capital that could fund its growth plans.
- **Appetite for growth; margins under pressure:** Alibaba's has an aggressive appetite for growth and M&A, but its EBITDA margin has declined as it pursues growth in offline retail and lower-margin other initiatives. Strong operating cash flow and a large net cash position provide solid buffers for investments.

Shrinking losses in cloud computing, but losses continue in the other non-core segments



Source: Company reports

Baidu Inc

Analyst
Eugene Tham

Company description: Baidu (A3 Pos/NR/A Stb) is a leading internet search engine in China. Baidu delivers online keyword-based marketing services (Baidu Core) to approximately 856,000 active online marketing customers (+10.5% y/y) as at end-December 2018, with average revenue per customer of CNY95,800 (+8% y/y). Baidu also provides online entertainment services through its iQIYI platform, which attracted average monthly mobile users (MAUs) of 455mn. Mobile revenues accounted for 79% of total revenue in 2018 (2017: 73%). Baidu primarily provides online marketing services to its marketing customers, which generally comprise text links, images, multimedia files and interactive forms. Baidu also delivers various other services to end-users, including Baidu Wallet, Maps, Cloud Drive, and targeted news feeds. Baidu was listed on the NYSE in 2005 and had a market capitalisation of c.USD40bn as of 11 July 2019. In addition, its 69.6%-owned subsidiary, iQIYI, completed an IPO on the NYSE in March 2018 and had a market capitalisation of c.USD14bn as of 11 July 2019.

BIDU bonds (A3/NR/A)

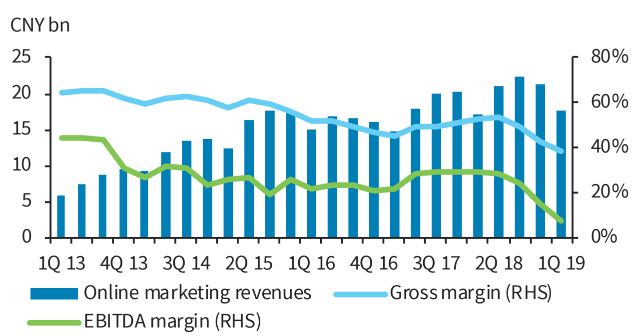
Bonds	Amt (mn)	Issuer
BIDU 3% $ '20s	750	Baidu Inc.
BIDU 2.875% $ '22s	900	
BIDU 3.5% $ '22s	750	
BIDU 3.875% $ '23s	1,000	
BIDU 4.375% $'24s	850	
BIDU 4.125% $ '25s	500	
BIDU 3.625% $ '27s	600	
BIDU 4.375% $'28s	500	
BIDU 4.875% $'28s	400	

Financial snapshot

CNY mn	2018	2017	2016
Revenue	108,357	84,809	70,549
Gross Profit	50,533	41,747	35,270
Gross Profit Margin	46.6%	49.2%	50.0%
EBITDA	36,393	30,683	20,137
EBITDA Margin	22.4%	27.5%	22.4%
Total Debt	67,437	88,914	56,652
Net Debt/ (Cash)	(71,827)	(11,551)	(25,442)
Credit Metrics			
Total Debt/EBITDA	1.8 x	2.7 x	2.6 x
Net Debt/EBITDA	-1.9 x	-0.4 x	-1.2 x
EBITDA/ Interest	9.2 x	9.0 x	7.6 x
Total Debt/Capital	27.7%	40.5%	36.7%
Operating statistics	**2018**	**2017**	**2016**
Active online marketing customers	856,000	775,000	982,000
Average revenue per customer (CNY)	95,800	88,700	65,300

Source: Company report, Barclays Research

Margin pressure amid slowing economy, ad oversupply

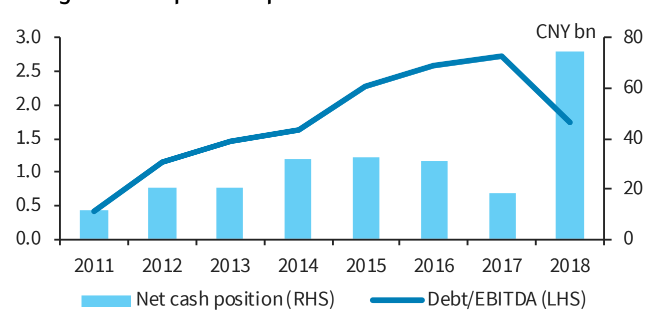


Source: Company reports

Business highlights

- **Dominant search engine in China: The** Baidu search engine is a well-established brand. It has maintained a market share of over 80% in domestic search engine market in terms of combined PC and mobile traffic, according to Analysys, a market research firm.
- **More challenging market environment:** Toward the end of 2018 and in the first half of 2019, macro headwinds and oversupply have led to pressure in the online ad market, which resulted in weaker revenues in 4Q18 and 1Q19.
- **Balance sheet and cash flow support credit profile:** Baidu's medium- to long-term growth drivers, such as video ads, O2O services, and AI-driven businesses (eg, search, healthcare, autonomous vehicles), require sizable and spending, in our view. In 1Q19, debt/EBITDA rose close to Moody's 2.0x downgrade trigger. If weakness in the advertising market persists, this could pose risks to a possible Moody's rating upgrade (currently a Positive Outlook on Baidu's rating).
- **Margin pressure and profits reset lower:** Given the current shift in the market, with user traffic and ad budgets shifting from search to feed ads, Baidu's operating performance has come under pressure. Baidu has also been looking to increase its content and service offerings in feed, in order to capture market share in this segment.
- **Contingent liabilities of financial service business reduced** following sale of majority stake in financial services group Du Xiaoman, which provides short-term loans and investment services. However, Baidu likely remains exposed to contingent liabilities and potential reputational risks.
- **Regulatory risks:** Government scrutiny of ad and search content remains tight, adding to Baidu's costs and potentially disrupting revenue.

Leverage close to Moody's downgrade rating trigger, but strong net cash position provides buffer



Source: Company reports, Barclays Research

China Mengniu Dairy Co. Ltd.

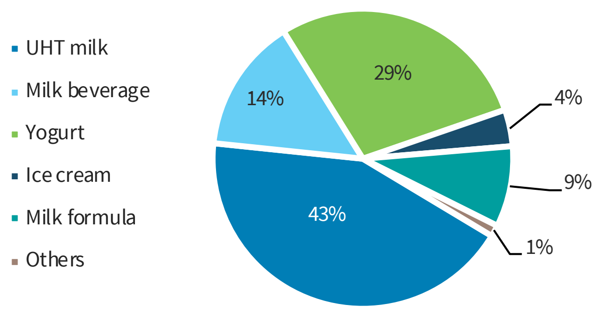
Analyst
Kai Chang

Company description: China Mengniu Dairy (Mengniu) is a leading producer of dairy products in China. Its product range includes liquid milk products (including UHT milk, milk beverages and yoghurt), ice cream, milk formula and other products such as cheese. The revenue contribution of these products was 86.1%, 4.0%, 8.7% and 1.2%, respectively, in 2018. UHT milk is the largest single item within the liquid milk segment, accounting for 50% of liquid milk revenue, or 43% of total revenue. Almost all revenues are derived from China. Main shareholders include COFCO Corp (16.26%), Danone (9.87%) and Arla Foods (5.31%). Incorporated in the Cayman Islands, Mengniu was listed on the Hong Kong Stock Exchange in 2007, and had a market capitalisation of USD16bn as at 29 July 2019.

CHMEDA bonds (Baa1/BBB+)

Bonds	Amt (mn)	Issuer
CHMEDA 4.25% $'23s	500	China Mengniu Dairy Co. Ltd. (Offshore)
CHMEDA 3.00% $'24s	500	

2018 revenue breakdown



Source: Company reports, Barclays Research

- **Financial profile:** Credit metrics have remained relatively stable despite undertaking acquisitions. In 2017, Mengniu raised its stake in China Modern Dairy to 60.8% (from 26.9%) with a HKD2.8bn investment, which weighed on net debt/EBITDA, but gross debt and gross debt/EBITDA have remained broadly stable (see Financial snapshot below).
- **Strategic ownership:** COFCO, Danone and Arla Foods have strengthened Mengniu in different ways. COFCO has provided support in quality management and control, M&A, and the development of logistics capabilities and sales channels. Danone has provided support for R&D and operational and production capabilities, and is also a JV partner, owning 20% of Inner Mongolia Mengniu Danone Dairy Co. Ltd which is focused on chilled yoghurt product. Mengniu is also the exclusive distributor of Arla's room temperature liquid milk in China, following a strategic cooperation agreement in 2012.

Financial snapshot

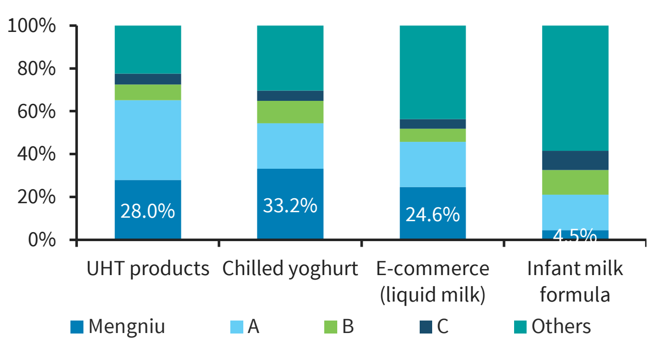
CNY mn	2018	2017	2016
Revenue	68,977	60,156	53,779
Gross profit	25,784	21,183	17,635
Gross profit margin	37.4%	35.2%	32.8%
EBITDA	5,874	5,518	3,328
EBITDA Margin	8.5%	9.2%	6.2%
Total debt	15,266	14,463	9,116
Net debt	7,968	8,504	3,046
Credit Metrics			
Total debt/EBITDA	2.6x	2.6x	2.7x
Net debt/EBITDA	1.3x	1.5x	0.9x
EBITDA/interest	9.3x	11.6x	9.2x
Gross debt/capital	33.4%	34.8%	26.3%

Source: Company reports, Barclays Research

Business highlights

- **Market position.** China Mengniu ranked among the top 10 dairy producers in 2017 and 2018, according to a Global Dairy Top 20 report by Rabobank. It has also been a leader in the liquid milk market in the past 8-9 years, according to AC Nielsen. With the liquid milk segment, Mengniu's market shares in UHT products and chilled yoghurt were 28% and 33.2%, respectively. Mengniu's domestic position is further reinforced by its role as COFCO's sole dairy platform, hence sharing the latter's national mission of food safety, according to Moody's.
- **Vertical integration.** Mengniu has developed stronger market positions along the dairy products value chain. Upstream: Mengniu secures stable supply through the acquisition of Modern Dairy (60.77% interest), long-term procurement arrangements, and strategic investments in global raw milk suppliers. This helps reduce exposure to milk price volatility. Midstream: Cooperation with strategic investors such as Danone and Arla Foods have helped the company expand its product portfolio. Downstream: Nationwide network of 6,000 dealers and over 3mn retail outlets in China, as well as online presence across major e-commerce platforms and contracted online sales channels.
- **Intense competition offset by shift in product mix and marketing efforts.** Competition is increasing in UHT milk, the largest contributor to Mengniu's revenue, which has driven EBITDA margin compression. In response, Mengniu has focused on growing its yoghurt and milk formula businesses. Revenue contribution for these two segments grew from 23.5% and 6.6% respectively in 2015, to 28.6% and 8.7% respectively in 2018. According to Moody's and S&P, investments by Mengniu in its distribution networks, including its expansion to online channels, as well as R&D to innovate new and unique flavours to satisfy customer demands, have helped the company maintain market share.
- **Strict regulations.** The Chinese government has maintained tight regulatory oversight of infant milk formulation. At end-December 2018, China amended its Food Safety Law which required more stringent quality control and food safety standards. Changes in the regulatory requirements may cause uncertainties and additional costs for implementation.

Mengniu 2018 market shares by product segment



Source: Company reports, AC Nielsen

ENN Energy Holdings Ltd

Analyst
Eugene Tham

Company description: ENN Energy Holdings Ltd (Baa2/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 refuelling in China. ENN Energy operated 187 city-gas projects across 17 provinces, municipalities and autonomous regions in China, as of end-2018. The customer base for piped natural gas consisted of 121,105 commercial/industrial units (+31.8% y/y) and c.18.5mn residential customers (+14.2% y/y). 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 sterilisation cabinets. ENN Energy supplies wholesale gas mainly to refuelling 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 the largest shareholder in ENN Energy with a 32.9% stake at end-2018.

XINAOG bonds (Baa2/BBB+/BBB)

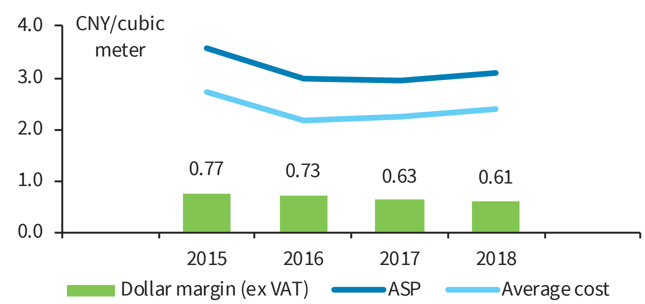
Bonds	Amt (mn)	Issuer
XINAOG 6% $'21s	365.5	ENN Energy Holdings Ltd
XINAOG 3.25% $'22s	600	

Financial snapshot

CNY mn	2018	2017	2016
Revenue	60,698	48,269	34,103
Gross Profit	9,510	8,339	7,350
Gross Profit Margin	15.7%	17.3%	21.6%
EBITDA	7,333	6,445	5,657
EBITDA Margin	12.1%	13.4%	16.6%
Total Debt	20,797	18,479	17,154
Net Debt	12,874	10,507	9,991
Credit Metrics			
Total Debt/EBITDA	2.8 x	2.8 x	3.0 x
Net Debt/EBITDA	1.7 x	1.6 x	1.8 x
EBITDA/Interest	10.5 x	10.9 x	8.0 x
Total Debt/Capital	44.9%	47.8%	49.0%

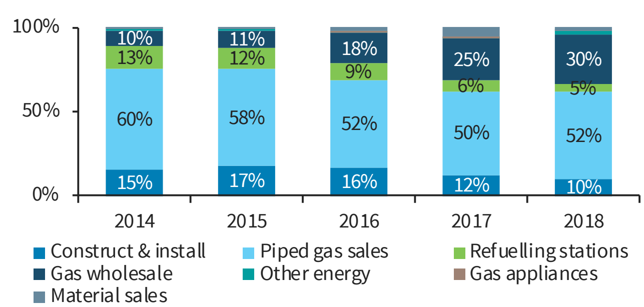
Source: Company reports

Incomplete pass through reflected in lower dollar margin



Source: Company reports, Barclays Research

Revenue mix by business segment

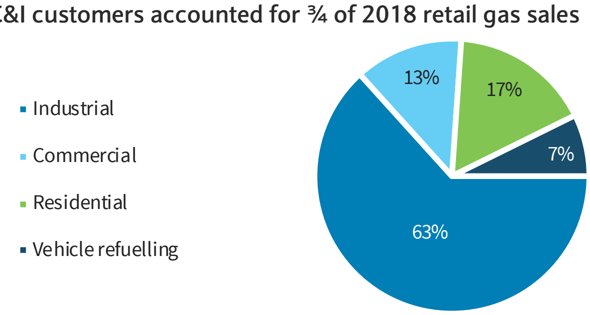


Source: Company reports, Barclays Research

Business highlights

- **Long-term concession agreements** for piped gas operations with local governments provide steady and visible cash flows for ENN Energy to operate its piped gas business.
- **Lower margin due to change in revenue mix.** Gross margin fell 1.6pp y/y to 15.7% in FY18, primarily due to higher revenue contribution from wholesale gas business (29.8% of FY18 revenue vs. 24.6% of FY17 revenue) with lower gross profit margin (1.3%), and lower contribution from higher-margin (but one-off) construction and installation revenue.
- **Long term growth outlook is supported by favourable regulatory policy.** China remains focused on increasing the clean energy contribution to the energy mix in order to combat pollution. As such, the government has encouraged natural gas consumption through policies such as coal-to-gas conversion. To drive adoption, the government has sought to cap returns on city-gas distributors. Nevertheless, policies have been designed more to boost consumption than to tax pipeline operators. In addition, the government has implemented measures to improve the supply of natural gas, which has been a bottleneck to increasing gas consumption. This includes encouraging private players to build natural gas storage and transportation infrastructure.
- **Exposure to commercial and industrial (C&I) customers allows more timely pass-through of increases to upstream gas costs.** ENN sells 76% of retail gas to the C&I segment. For the residential segment (17%), a time lag of as long as 6-12 months could take place between price adjustments, due to concerns on inflation and public-hearing processes.
- **Credit metrics were stable** y/y in 2018, and have improved since 2016. This is despite high revenue growth of 26% in 2018 and 42% in 2017, and margin erosion amid the growing share of the low-margin gas wholesale business as well as lower dollar margin (albeit stabilising) due to partial pass-through higher input costs.
- **Liquidity profile is viewed as challenging by Moody's,** given short-term borrowings of CNY11.6bn, capex of CNY9.0bn, and expectation of dividend payments of CNY1.8bn. This compares to cash holdings of CNY7.9bn at end-2018, estimated operating cash flow of CNY7-8bn, and CNY12.1bn of committed unutilised banking facilities.

C&I customers accounted for ¾ of 2018 retail gas sales



Source: Company reports

Geely Automobile Holdings

Analyst
Eugene Tham

Company description: Geely Auto (Geely, Baa3 Stb/BBB- Stb/NR) develops, manufactures, and sells passenger vehicles in China (98.7% of 2018 sales) and overseas. Founder Li Shu Fu and his family, through Zhejiang Geely Holding Group Co. Ltd (Zhejiang Geely), owned 43.5% of the company's shares as at end-2018. Geely is incorporated in the British Virgin Islands and listed on the Hong Kong Stock Exchange in 2005 (market capitalisation of HKD 109.9bn. The company has a leading market position among China's passenger vehicles. It sells 17 models developed under two main brands "Geely" (mass market) and "Lynk & Co" (premium), and has nine manufacturing plants in mainland China. It has been ranked one of the "China's Top 500 companies" for eight consecutive years.

Geely bond

Bond	Amt (USD mn)	Rating	Issuer
Geely 3.625% $ '23s	300	NR/BBB -/NR	Geely Automobile Holdings Limited (offshore)

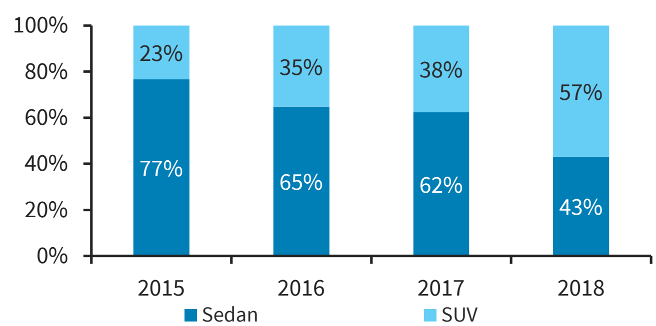
Source: Company reports, Bloomberg

Financial snapshot

CNY mn	2018	2017	2016
Revenue	106,595	92,761	53,722
EBITDA	15,612	12,913	6,391
EBITDA margin	15%	14%	12%
Total debt	3423	1296	2243
Cash and equivalents	15,737	13,415	15,045
Credit Metrics			
Gross debt/EBITDA	0.2x	0.1x	0.4x
EBITDA/interest	137.0x	79.6x	55.3x
Total debt/capital	7.0%	3.6%	8.3%

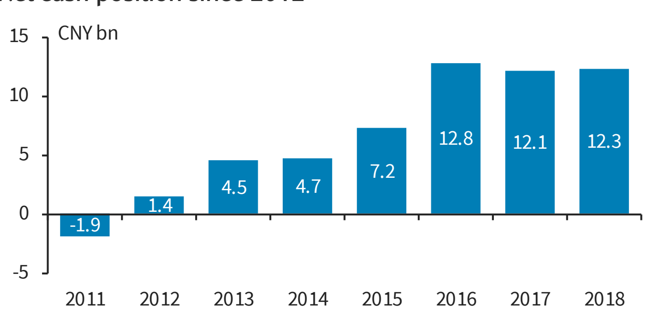
Source: Company reports

Product mix shifted in line with demand



Source: Company reports

Net cash position since 2012



Source: Company reports

Business highlights

- **Challenging operating environment** with relatively low switching costs for consumers. Automakers have to continuously innovate and refresh product models, and keep up with shifting consumer trends, to maintain their market shares.
- **Credit profile:** Leverage is low, with gross debt/EBITDA at 0.2x in 2018 and has been in a net cash position since 2012. Interest coverage has also improved steadily (EBITDA/interest at 137x in 2018 versus 55.3x in 2016). Credit metrics comparable with single A or higher-rated global peers in the automobile manufacturing industry, under Moody's methodology.
- **Parent support:** The company receives funding and asset injections from parent Zhejiang Geely to finance the development of new models and to acquire passenger vehicle manufacturing licenses. At the same time, weaker leverage metrics at parent Zhejiang Geely act as a drag on Geely Auto's credit ratings – S&P lists this as a potential downgrade trigger.
- **Strategy to enter high-end segment:** Lynk & Co, a JV between units of Geely Auto, Zhejiang Geely, and Volvo Car (China) Investment, is marketed as a high-end product. Lynk & Co's sales rose 7% y/y in 1H19, outpacing luxury peers and helping to mitigate a 15% y/y decline in sales of Geely's lower-end models, according to S&P. The JV helps mitigate execution risk, allowing Geely and wholly owned Volvo Cars to collaborate in technology partnership.
- **Long-term growth trajectory in China's automobile market:** Geely increased its market share to 6.2% in 2018 from 2.4% in 2015, a period when its sales rose 194.2% (CAGR of 43%), compared with the industry-wide increase of 12.1%. In recent years, the company has adjusted its product mix to meet changes in demand, shifting away from sedans towards SUVs.
- **Regulatory risks and opportunities.** China has plans to increase the number of new energy and electric vehicles on the road to 5mn by 2020. The early implementation of the National Emission VI standard is likely part of the government's plan to accelerate a reduction in carbon emissions. The latter drove weakness in China's car sales in 1H19, and could cut margins due to heavy discounting of older vehicle models and likely increased dealer subsidies to sell down inventories.
- **Increased costs and investments could cap improvement in credit profile:** More stringent regulatory requirements on fuel efficiency, emission standards and product warranties have placed additional cost pressure on domestic automakers. Geely has also been investing in electric vehicle development – new energy and electrified vehicles (NEEV) accounted for 4.5% of 2018 unit sales (+165% y/y). It recently signed separate agreements with LG Chem and Contemporary Amperex Technology Co. Ltd (CATL) to increase control of battery supply. These all tie in to Geely's new energy vehicle (NEV) strategy - "Blue Geely Initiative" – launched in 2015, which aims to increase sales of NEEVs to 90% of total sales volume by 2020.

GLP Pte Ltd/GLP China Holdings Ltd.

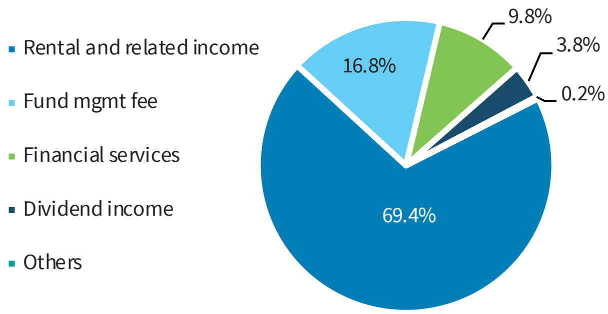
Analyst
Eugene Tham

Company description: GLP Pte Ltd (formerly Global Logistic Properties) is a globally diversified owner and operator of modern logistics facilities. Its property portfolio of 73mn sqm at end-2018 spans 4 continents, covering the United States (2nd largest owner by GFA), Europe (7th largest), China (No. 1), Japan (No. 1), India (No. 1), and Brazil (No. 1). Established in 2002, first in the Chinese and Japanese markets, GLP Pte Ltd has grown to become one of the largest global fund managers, with USD64bn in AUM across real estate and private equity funds at end-2018. GLP Pte Ltd indirectly owns 66.21% in GLP China Holdings Ltd, its main subsidiary in China. The remaining interest in GLP China is owned by shareholders that include shareholders of the parent GLP Pte Ltd. GLP's main revenue streams include rental and related income, fund management fee, financial services, and dividend income from investments.

GLPSP/GLPCHI bonds

Bonds	Amt (mn)	Issuer
GLPSP 3.875% $'25s (Baa3/BBB-/BBB)	1,000	GLP Pte Ltd (offshore)
GLPCHI 4.974% $'24s (NR/BBB-/NR)	500	GLP China Holdings Ltd (onshore)

GLP Pte Ltd revenue breakdown (9M ending Dec-2018)



Note: *GLP Pte Ltd changed its financial year-end to December from March.
Source: Company reports

- **Financing flexibility:** GLP sells down stakes in acquired assets, which helps recycle capital to be used for further expansion. The company has built long-term partnerships with global financial investors which have helped support GLP's expansion. Additionally, GLP has banking relationships that provide syndicated loans, and has issued bonds in the JPY, USD and panda markets, which complements domestic bank loans in supporting working capital, capex and acquisition needs. Secured debt was 11% of gross assets at end-March 2018, according to Moody's.
- **Financial profile:** Following the buyout of GLP Pte Ltd by a Chinese consortium (which includes Hopu, Hillhouse, BOCGI, Vanke, and an investment vehicle of GLP's CEO), and other acquisitions made by GLP in the year, net debt/EBITDA rose to 15.0x at LTM March 2018, from 9.0x a year before, according to Moody's. GLP has since lowered net debt/EBITDA to 13.8x at end-2018, but this remain much higher than levels commensurate with Moody's Baa3 rating (9.0x). The agreed USD18.7bn sale of US assets held under its funds to Blackstone (in early June 2019) would bring in net proceeds that could further lower leverage moderately.

Business highlights

- **Exposure to e-commerce growth and global digitalization trend supported by worldwide footprint and leading market position.** GLP Pte Ltd has a large and globally diversified logistics property portfolio, which significantly reduces concentration risk. The logistics facilities business is a key partner to, and beneficiary of, increasing adoption of e-commerce and the use of innovation to better manage supply chain logistics. GLP, as a market leader in most geographies in which it operates, is well-positioned to capitalize on these trends. Greater economies of scale and network effects, as well as a one-stop hub service, anchors its market position.
- **Growth appetite offset by commitment to IG ratings.** GLP has generally maintained an appetite for growth, and made sizeable acquisitions across the globe in the past few years. While this has driven a sustained deterioration in credit metrics since FYE March 2013, GLP has, on the other hand, also signaled its commitment to investment grade ratings. Its strategy of capital recycling through syndication of acquired assets to investment partners works hand-in-hand with its growth strategy.
- **Established track record supported by seasoned management, with varied backgrounds in finance, industry, and logistics (such as former ProLogis personnel).** CEO Ming Z. Mei is the co-founder of GLP, and had set up ProLogis first China office in 2003. GLP also established an institutionalized investment process, where an investment committee evaluates projects based on a consistent set of global investment criteria.
- **GLP China a core subsidiary of GLP.** The China unit contributes more than half of the parent GLP Pte Ltd's revenue and EBITDA, which leads S&P to rate GLP China in line with GLP Pte Ltd's rating. S&P expects GLP China to grow more quickly in 2019 (81% y/y), supported by both rising rental income and asset sales into its funds. More than 90% of revenue had been derived from warehouse rental and related income in the past 3 years.
- **More scope for growth and capital recycling at GLP China unit.** Effective interest in the property portfolio in China is larger than that for other regions (see Portfolio Statistics below). This suggests that there is greater scope for GLP China to raise funding by further selling down its China assets. Notably, AUM for the China portfolio is also lower, suggesting scope for more growth in portfolio management fees as well.

GLP Pte Ltd Operating stats

Last 9mths Dec-2018	AUM (USD mn)	Area (GFA/ GLA, mn sqm)	Effective interest of area GFA/ GLA, mn sqm)	Lease ratios	Rental rates	WALE (yrs)	Total valuation (USD mn)	Effective interest valuation (USD mn)
China	17,100	37.24	15.91	91.0%	CNY 1.12-1.15 per sqm per day	2.1	24,195	10,320
US*	16,300	17.47	2.38	94.7%	USD4.2-4.5 per sqm per mth	4.1	16,984	2,173
Europe	7,300	3.73	1.04	97.2%	EUR4.3-4.5 per sqm per mth	7.6	3,193	707
Japan	18,600	6.74	2.57	99.4%	JPY 1124-1156 per sqm per mth	4.7	12,314	3,996
Brazil	2,900	4.97	2.55	93.9%	BRL 20.7-21.8 per sqm per mth	5.8	2,589	1,129
India	2,000	2.49	0.05	87.2%	INR261.3 per sqm per mth	-	1,133	22
Total	**64,200**	**72.64**	**24.5**				**60,408**	**18,347**

Note: * Figures as of end-18, does not factor in agreement to sell US assets to Blackstone. Source: Company reports

Huawei Investment & Holding Co Ltd.

Analyst
Eugene Tham

Company description: Huawei is a leading global provider of information and communication technology and smart devices. According to Gartner, the company ranked first in operational technology among communications service providers and second among global vendors of enterprise network equipment. It was also a top three smartphone maker in 2018 with 13% of the global market share (No.2 Apple had a 13.4% share), according to Gartner. Its revenue is diversified across business segments (41% carrier, 48% consumer, 10% enterprise, and 1% others) and regions (52% China, 28% EMEA, 11% Asia-Pac ex-China, 7% Americas, 2% other). Huawei was founded in 1987 and remains a private company. Huawei Union (representing 96,768 employee shareholders at end-2018) owns 98.99%, and founder Ren Zhengfei owns the rest.

HUAWEI bonds (NR)

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

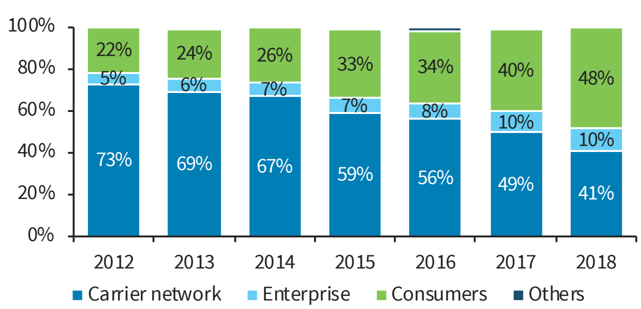
Financial snapshot

CNY mn	2018	2017	2016
Revenue	721,202	603,621	521,574
Gross Profit	278,171	238,142	210,129
Gross Profit Margin	38.6%	39.5%	40.3%
EBITDA	86,457	67,676	56,637
EBITDA Margin	12.0%	11.2%	10.9%
Total Debt	76,414	46,220	51,008
Net Debt/ (Cash)	(132,574)	(131,166)	(82,589)
Credit Metrics			
Total Debt/EBITDA	0.9 x	0.7 x	0.9 x
Net Debt/EBITDA	-1.5 x	-1.9 x	-1.4 x
EBITDA/Interest	19.7 x	15.4x	15.4x
Debt/Capital	24.7%	20.8%	26.7%

Source: Company reports, Barclays Research

- **Strong financial position and cash flow:** Huawei's financial metrics are similar to A-rated peers, such as Hon Hai, a Taiwanese contract electronics manufacturer, and Chinese internet companies Alibaba and Tencent. Huawei had a net cash position of CNY133bn at end-2018, helped by strong cash flow. We expect cash flow to face some short-lived pressure and weigh on 2Q19 credit metrics, but due the effect is unlikely to be material.
- **High dividend payout, unlisted status negatives:** Dividends paid during 2015-18 were 61-83% of prior-year net income, reducing retained cash flow. Huawei's unlisted status also reduces transparency on corporate governance, although the company discloses its financials annually and holds regular meetings with investors. Huawei held its first ever semi-annual results press conference on 30 July, reflecting its push to increase transparency to the market.

Revenue breakdown by business segment

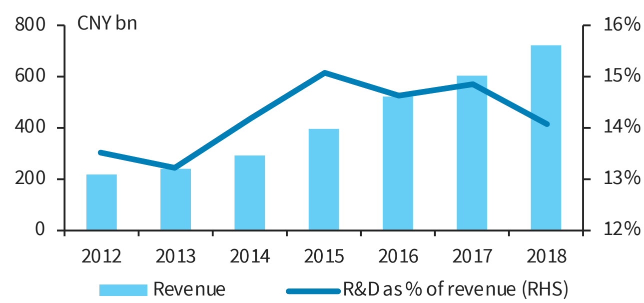


Source: Company reports, Barclays Research

Business highlights

- **US-China tensions the biggest headwind:** Despite a gradual resumption in sales of some US products to Huawei, the company has not been removed from the US Commerce Department's Entity List. Given this, the ongoing case against Huawei's CFO, and the US-China rivalry in 5G technology, Huawei is likely to remain vulnerable to US-China trade tensions. The recent period when US companies suspended sales to Huawei, revealed Huawei's potential weakness in mobile operating software, RF/FPGA chips, and smartphone chip architecture.
- **Increasing focus on ensuring self-sufficiency likely to pressure EBITDA margins:** In the near term, given uncertainty over the sustainability of a truce between the US and China, Huawei is likely to maintain elevated inventories of components to support production for several quarters. In the long term, we expect Huawei to accelerate R&D spending to fill holes in its supply chain and reduce reliance on overseas suppliers.
- **Leading position in 5G, but global telcos wary:** Huawei, Ericsson and Nokia are leaders in the 5G telecom equipment market. Huawei's emphasis on R&D has been critical to its growth – the company typically spends 13-15% of revenue on R&D. The company held 87,805 patents as of 2018. These included 2,570 5G patent families to the European Telecommunications Standards Institute. Huawei ranked first in terms of 5G Standard Essential Patents, according to IPlytics GmbH. However, as telcos start to deploy 5G networks globally in the next few years, the company's ability to win overseas contracts could be affected by wariness towards the security of Huawei-provided infrastructure.
- **Smartphone sales a bright spot despite worsening sentiment:** Huawei has successfully executed on its expansion into the consumer hardware sector, having increased its global smartphone market share (by shipment volume) from 6.3% in 4Q14 to 19% in 1Q19, according to IDC. The suspension of US product sales to Huawei between mid-May and end-June hinted at the broad impact that a renewed escalation could have particularly on overseas handset sales (potential reduction of 50% or more). However, we expect Huawei to raise its domestic market share (34% in 1Q19, according to Counterpoint Research)

Consistent high spending on R&D sharpens competitive edge



Source: Company reports, Barclays Research

JD.com, Inc

Analyst
Eugene Tham

Company description: JD.com (JD, Baa2/BBB-/NR Both Pos) is an online direct sales company and retail infrastructure service provider in China. Gross merchandise volume was CNY1.68trn (+30% y/y) and net revenues were CNY462bn (+28% y/y) in 2018. The company reported 310.5mn active annual customers as of March 31, 2019. JD had over 210,000 third-party sellers on its online marketplace, and it sourced products from over 19,000 suppliers in its online direct sales business as at end-2018, none of which account for more than 10% of JD's total sales (by value). Online direct sales accounted for 90% of its total revenue in 2018. Listed on the NYSE in 2014, the company had a market capitalisation of c.USD44.4bn as of 11 July 2019.

JD bonds (Baa2/BBB-/NR)

Bonds	Amt (mn)	Issuer
JD 3.125% $'21s	500	JD.com, Inc
JD 3.875% $'26s	500	

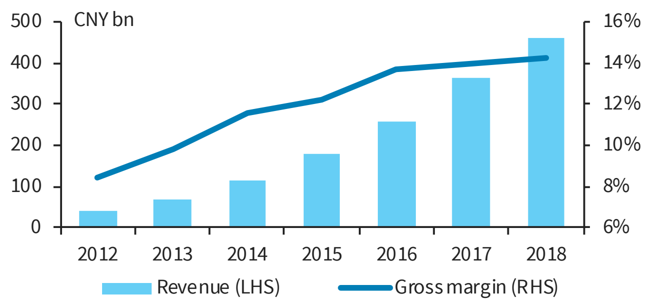
Financial snapshot

CNY mn	2018	2017	2016
Revenue	462,020	362,332	258,290
Gross Profit	65,954	50,815	35,355
Gross Profit Margin	14.3%	14.0%	13.7%
EBITDA	6,601	6,137	4,230
EBITDA Margin	1.4%	1.7%	1.6%
Total Debt	34,667	14,163	13,398
Net Debt/ (Cash)	(1,631)	(20,113)	(8,717)
Credit Metrics			
Total Debt/EBITDA	4.3x	1.9 x	2.6x
Net Debt/EBITDA	-0.2x	-2.7x	-1,7x
EBITDA/ Interest	3.4x	3.3x	3.3x
Total Debt/Capital	36.3%	21.3%	24.5%
Operating statistics	**2018**	**2017**	**2016**
Annual active customer accounts (mn)	305	293	227
Gross merchandise volume (GMV, bn)	1,677	1,295	939

Source: Company report, Barclays Research

- **Margin expansion from economies of scale, shift in product mix.** Gross margins have maintained steady improvement, which the company has attributed to the benefits of larger economies of scale. In addition, JD.com has moved away from electronics products and increased sales of FMCG products which have higher margins.
- **EBITDA margin expansion constrained by expansion focus:** EBITDA margins have not increased in a similar way as gross margins in 2017-18, as the company expanded investments in fulfilment and technology & content, and spent more on marketing and distribution.

Gross margin improves as scale grows

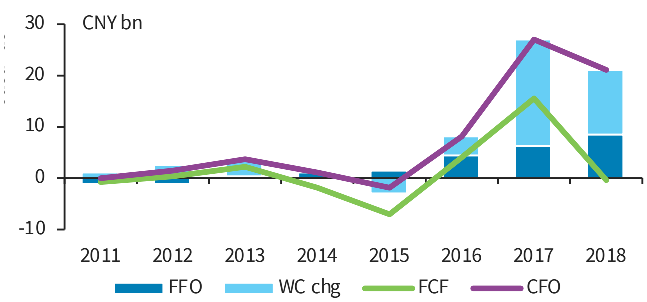


Source: Company reports, Barclays Research

Business highlights

- **Fulfilment infrastructure differentiates JD.com:** JD owns the largest fulfilment infrastructure among China's e-commerce companies, providing extensive nationwide coverage. This allows the company to control and improve the deliveries to consumers. By comparison, Alibaba works with delivery companies and coordinates the fulfilment process through Cainiao, a central logistics platform.
- **Intensely competitive online retail sector,** given low barriers to entry. JD.com faces competition from the market leader Alibaba, offline retail companies, such as Suning and Gome, and new entrants, such as Pinduoduo and Xiaohongshu.
- **Elevated investments and acquisitions:** JD.com has made cumulative investments of close to CNY40bn since 2012. Its investments have spanned the e-commerce, real estate, and logistics sectors, and in recent years the company has broadened outside of China to Southeast Asia.
- **Partnerships help JD.com access more users.** JD.com has a strategic partnership with shareholder Tencent, which owns about 18% of JD. The partnership allowed JD.com access to potential customers on Tencent's social media platforms, which has helped fuel growth in the past five years. In June 2018, Google invested USD550mn in JD as part of a broader partnership, which includes e-commerce offerings outside of China.
- **Positive working capital supports cash flow generation:** Working capital was +CNY20.8bn in 2017 and +CNY12.4bn in 2018, which contributed to a significant increase in cash from operations in 2017-18 (CNY26.9bn and CNY20.9bn, respectively) over prior years (2016: CNY8.2bn). This helps fund the company's gross investment (capex and acquisitions) outlay, which increased significantly in 2017 (CNY17.7bn) and 2018 (CNY38.6bn).
- **Divestments raise capital to fund further growth.** Following sales of stakes in JD Finance in 2017 and JD Logistics in 2018, JD.com has said it has agreed to sell a CNY10.9bn portfolio of modern warehouses to Logistics Properties Core Fund, which it set up in partnership with Singapore's GIC.
- **Founder's US arrest and subsequent release in the US spotlight key man risk:** Liu said on the 3Q18 earnings call that a leadership team will take charge of JD.com's core business, adding that he will focus on new businesses.

Positive working capital contributes cash flow for expansion



Source: Company reports, Barclays Research

Lenovo Group Ltd

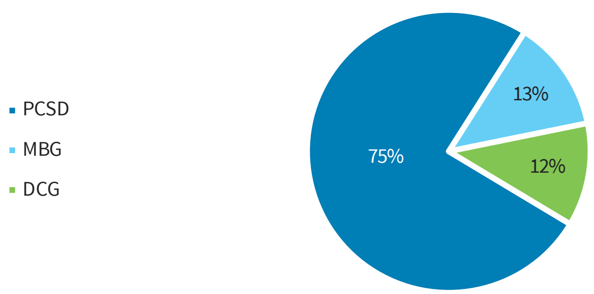
Analyst
Eugene Tham

Company description: Lenovo Group Ltd (NR) is a leading global maker of personal computers (PCs). It also manufactures mobile phones and builds data centres. The company structures its business into two broad segments: i) Intelligent Devices Group (IDG), which is further divided into the PC and Smart Device (PCSD) segment and the Mobile Business Group (MBG) segment; and ii) Data Center Group (DCG). The company has its main offices in North Carolina (the US), Beijing and Singapore. It has also established production and/or R&D facilities in China, Hungary, India, Brazil, Japan, and the United States. The company has a global geographical footprint, selling products in more than 160 countries. The Americas accounted for 32% of FYE March 2019 revenue, followed by EMEA (25%), China (24%), and the rest of Asia-Pacific (19%). Lenovo is incorporated in Hong Kong, and has been listed on the Hong Kong Stock Exchange since 1994, with a market capitalisation of USD9.8bn as at 29 July 2019.

LENOVO bonds (NR)

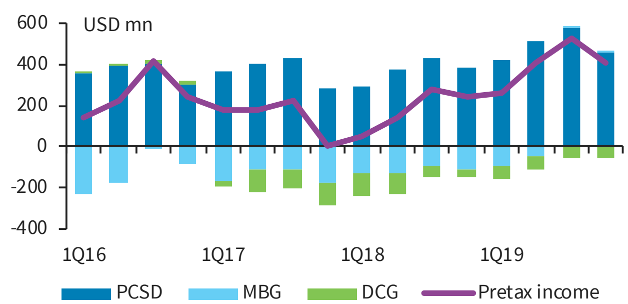
Bonds	Amt (mn)	Issuer
LENOVO 3.875% $'22s	500	Lenovo Group Ltd
LENOVO 4.75% $'23s	750	
LENOVO 3.375% $'24s	675	
LENOVO 5.375% $ perp	1,000	Lenovo Perpetual Securities Ltd

FY19 revenue breakdown by business segment



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

Rising pre-tax income helped by strong PCSD performance, shrinking losses in MBG and DCG



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

Financial snapshot

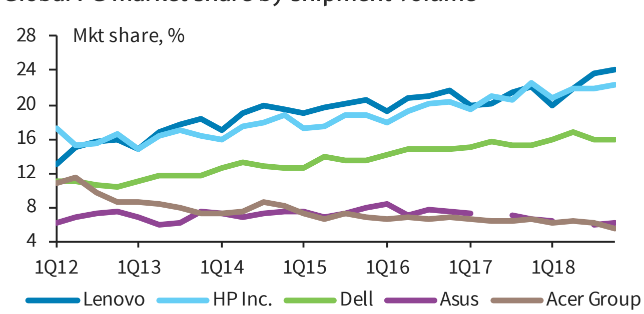
USD mn	FY19	FY18	FY17
Revenue	51,038	45,350	43,035
Gross profit	7,371	6,272	6,106
Gross profit margin	14.4%	13.8%	14.2%
EBITDA	2,196	1,375	1,186
EBITDA Margin	4.3%	3.0%	2.8%
Total debt	6,069	4,970	4,898
Net debt	3,336	3,038	1,946
Credit Metrics			
Total debt/EBITDA	2.7x	3.5x	4.0x
Net debt/EBITDA	1.5x	2.1x	1.6x
EBITDA/interest	8.4x	6.1x	5.1x
Gross debt/capital	62.8%	55.1%	57.1%

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

Business highlights

- **Leading player in the global PC market, helped by acquisitions.** Its market share was 25.0% in 2Q19, and been maintained above 20% in the past 6-7 quarters. Steady gains in market share in recent years have been helped by acquisitions of smaller competitors, such as NEC and Fujitsu. More recently, Lenovo capitalized on a shortage of some PC components to further extend its lead over smaller players.
- **PC segment has provided consistent cashflow as Lenovo pursues a turnaround in its mobile and data centre businesses.** Lenovo has offset the losses in the latter two business segments with steady earnings and cashflow from the PC unit. Its focus on more premium and gaming laptops has also helped to raise margins. Losses in the mobile and data centre segments have both shrunk, with the mobile business breaking even in 4Q FYE-March 2019 on a pre-tax profit basis.
- **Improved financial profile.** Gross debt/EBITDA fell to 2.7x in FY19, from 3.5x and 4.0x in FY18 and FY17m respectively. Similarly, EBITDA/interest improved to 8.4x, from 6.1x and 5.1x in the same periods. The improvements have been driven mainly by earnings growth (EBITDA +60% y/y), while gross debt also increased but at a slower pace (+25% y/y). Gross debt/capital rose to 62.8%, from 55.1% a year ago.
- **Secular decline in PC sales temper strong medium-term performance.** Despite strong and stable cashflow from the PC business, the industry is facing growth challenges as demand declines. Global PC shipments have fallen by a CAGR of 5% annually between 2012 and 2018.
- **Rebuilding the mobile business:** Lenovo, which sells smartphones under the Motorola brand, is not a top-5 player in the global mobile phone market. The company's mobile business focuses on the low- to mid-tier user base, where it seeks to increase market share. Lenovo had to overhaul its strategy in the Chinese smartphone market due to poor results in 2017.
- **Vulnerability to escalation in trade tensions:** Lenovo is exposed to further escalation in US-China trade tensions. US President Trump's threat to slap tariffs on remaining Chinese goods that are yet to be taxed would cover PCs/laptops, thus affecting Lenovo. Sales to the US are 15-20% of total sales, we estimate, and a substantial portion of its production is still done in China.

Global PC market share by shipment volume



Source: Gartner

Sands China Ltd.

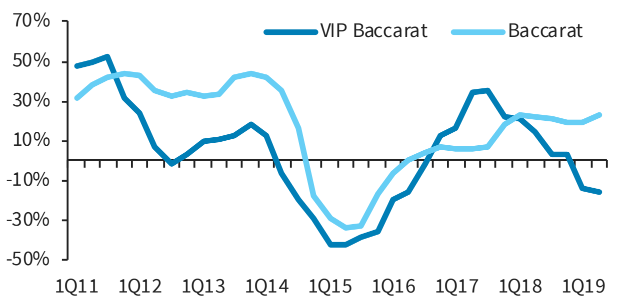
Analyst
Eugene Tham

Company description: Sands China Ltd (Baa2 Stb/BBB- Stb/BBB- Pos) is a developer, owner and operator of large-scale integrated resorts in Macau. On Cotai, it operates 30mn sq ft of interconnected facilities, including The Venetian Macao, Sands Cotai Central, The Parisian Macao, The Plaza Macao and Sands Macao. It also owns Cotai Expo, one of the largest convention and exhibition centres in Asia, the Cotai Arena (Macao's largest entertainment venue), and 12,500 luxury suites and hotel rooms. At end-2018, Sands China was 70.02% owned by Las Vegas Sands (LVS), which was in turn 56% owned by founder Sheldon G. Adelson and his family. LVS began investing in Macau in 2002, when it was awarded a Macau gaming sub-concession (one of six concessions/sub-concessions, held under Venetian Macau Ltd) to operate casino games and other games of chance. The company's first property, Sands Macao, opened in May 2004. Sands China was listed on the Hong Kong Stock Exchange in 2009 and had a market capitalisation of HKD318bn (c.USD40.7bn) as at 26 July 2019.

SANLTD bonds (Baa2/BBB-/BBB-)

Bonds	Amt (mn)	Issuer
SANLTD 4.6% $'23s	1,800	Sands China Ltd (Offshore)
SANLTD 5.125% $'25	1,800	
SANLTD 5.40% $'28s	1,900	

Mass gaming has been performing better than VIP



Gross revenue. Source: Gaming Inspection and Coordination Bureau Macao

- **Stable credit metrics:** At the LVS consolidated entity, gross debt/EBITDA has been in a range of 2.0x to 2.6x from 2014 to 2018 level; according to Moody's, Sands China's gross debt/ EBITDA ranged from 1.6x to 2.2x during 2015-18. Management has spoken about being flexible when accommodating capex needs for growth, return on capital, and improving the financial profile. Credit rating triggers for Sands China at Moody's and S&P are based on Las Vegas Sands' credit metrics.
- **Concession renewal looms in June 2022.** In the previous renewal negotiations, casino operators were required to invest in non-gaming properties, pushed by the government to help establish Macau as a world-class tourist destination. If Sands China fails to renew the concession, a put option associated with the loss of the concession could be exercised by bondholders.

Financial snapshot (Sands China)

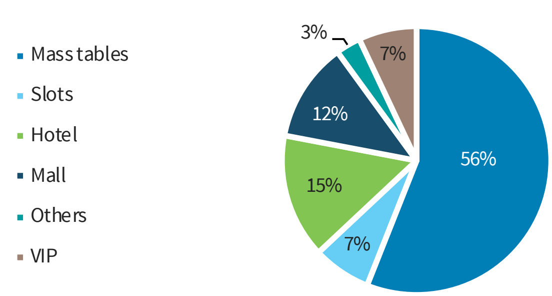
USD mn	2018	2017	2016
Revenue	8,665	7,586	6,653
Gross profit	5,235	4,661	4,126
Gross profit margin	60.4%	61.4%	62.0%
EBITDA	2,809	2,449	1,963
EBITDA Margin	32.4%	32.3%	29.5%
Total debt	5,562	4,412	4,374
Net debt	2, 886	3,173	3,090
Credit Metrics			
Total debt/EBITDA	2.0x	1.8x	2.2x
Net debt/EBITDA	1.0x	1.3x	1.6x
EBITDA/interest	12.3x	15.8x	16.4x
Gross debt/capital	55.8%	49.3%	46.6%

Source: Company reports, Barclays Research

Business highlights

- **Leading market position:** Sands China had a 34% share based on LTM 1Q19 adjusted property EBITDA. This led Galaxy (23%), Wynn Macau (17%), Melco Resorts (13%), MGM China (7%) and SJM (5%), according to the company's estimates.
- **More exposed to mass gaming than VIP.** The mass gaming market is growing steadily. In LTM 2Q19, Sands China derived 56% of its segment profit from mass tables and 7% from slots; only 7% came from the VIP business.
- **Non-gaming diversification.** As part of the Macau government's requirement for the casino operators to develop non-gaming entertainment facilities in order to extend their gaming concessions, Sands China has built significant non-gaming assets, including the Cotai Expo, which the company said accounted for 80% of Macau's conventions/exhibitions space. Sands China's non-gaming business (hotel, mall, other) accounted for 30% of LTM 2Q19 segment profit.
- **Stable cash flow from mature assets.** Properties that began operating before 2012 accounted for c.82% of Sands China's 2018 revenue, and all of the company's properties have been operating since 2016. Sands China has also increased the connectivity between its Cotai Strip properties, and is expanding and rebranding its properties to upgrade its hotel offerings and increase gaming capacity.
- **EBITDA does not cover capex plans and dividends.** EBITDA in 2018 was USD2.8bn (2017: USD2.4bn). If EBITDA is basically steady during 2019-20, it would not cover capital expenditures (guided to be under USD1.4bn in both 2019 and 2020, versus USD468mn in 2017 and USD508mn in 2018) and dividends (average USD2.07bn during 2015-18).
- **Dividend upstreaming a potential risk as parent LVS seeks growth opportunities.** New project investment is required at the Marina Bay Sands integrated resort in Singapore. In addition, LVS may bid for an Osaka gaming license, although timing is uncertain.
- **Bonds are registered with the SEC,** which helps to increase US investor participation.

Sands China LTM 2Q19 segment profit breakdown



Source: Company reports, Barclays Research

S.F. Holding Co Ltd

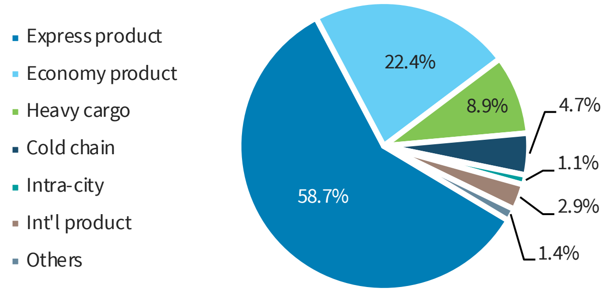
Analyst
Kai Chang

Company description: S.F. Holding (A3 Stb/A- Neg/A- Neg) is a leading provider of express deliveries and integrated logistics services in China. At end-2018, the company was 61.15% owned by Shenzhen Mingde Holding Development, which, in turn, is 99.9% owned by Wang Wei. Other key shareholders include Ningbo Shunda Fengrun Investment Management Partnership (8.3%, S.F. Holding's employee stock ownership fund), as well as strategic investors, some of which have been involved since 2013, including Shenzhen Zhaoguang Investment (6.03%, an investment platform of China Merchant Group), Suzhou Industrial Park Oriza Shunfeng Equity Investment Partnership (5.65%, a fund under Suzhou Industrial Park's investment platform), and Jiaqiang Shunfeng (Shenzhen) Equity Investment Partnership (5.49%, which counts China Cinda Asset Management and Bank of China Investment Asset Management as shareholders). Founded in 1993 in Shunde (Guangdong), S.F. Holding obtained a listing on the Shenzhen stock exchange through a reverse takeover of Ma'anshan Dingtai in 2017. It had a market capitalisation of CNY155bn (c.CNY22.5bn) as of 24 July 2019.

SFHOLC bonds (A3/A-/A-)

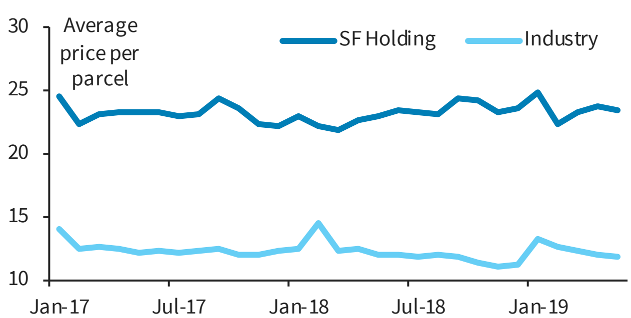
Bonds	Amt (mn)	Issuer	Guarantor
SFHOLC 4.125% $'23s	500	SF Holding Investment Limited	S.F. Holding Co. Ltd. (Onshore)

Revenue breakdown by product in 2018



Source: Company reports

S.F. Holding pricing is double that of the industry average



Source: Company reports, State Post Bureau

Financial snapshot

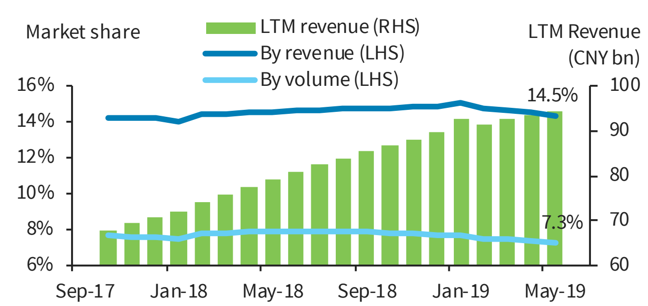
CNY mn	2018	2017	2016
Revenue	90,943	71,273	57,483
Gross profit	16,301	14,368	11,318
Gross profit margin	17.9%	20.2%	19.7%
Adjusted EBITDA	10,086	9,637	7,276
EBITDA Margin	11.1%	13.5%	12.7%
Total debt	25,085	16,458	16,300
Net debt	8,984	-896	9,707
Credit Metrics			
Total debt/EBITDA	2.5x	1.7x	2.2x
Net debt/EBITDA	0.9x	n.m.	1.3x
EBITDA/interest	4.0x	5.1x	5.0x
Gross debt/capital	40.5%	33.3%	44.2%

Source: Company reports, Barclays Research

Business highlights

- **Self-owned business model:** S.F. Holding has full control over its logistics services, including all aspects of the airfreight network (ownership of aircrafts and air-transport routes covering 43 Chinese cities and 11 international cities), ground network (ownership of warehouses; covers 99% of metropolitan areas in China) and information network.
- **Leading market position in Chinese express deliveries,** based on market share by revenue (14.4% as of LTM May 2019), customer satisfaction (ranked No.1 for the past 10 years), and delivery timeliness (ranked No.1 for the past 6 years). S.F. Holding operates in the premium delivery segment (mainly B2B and B2C, particularly e-commerce), which helps to support a higher-than industry average price per parcel.
- **Expansion into heavy cargo, cold chain, international deliveries:** The company's acquisition of DHL China is expected to improve S.F. Holding's B2B supply-chain capabilities over the long term. S.F. Holding has also been expanding services internationally through JVs with peers such as UPS.
- **Financial profile weakened; plans to borrow to fund expansion:** The company financed the CNY5.5bn acquisition of DHL China (closed in October 2018) primarily with debt, and cash on hand. Partly driven by the acquisition, gross debt/EBITDA rose to 2.5x as a result of the sharp rise in debt. According to Bloomberg, S.F. Holding has mandated banks for an HKD5bn 5y loan to refinance the acquisition bridge facility. S.F. Holding's board has also approved plans by subsidiaries S.F. Taisen and S.F. Holding Investment Ltd to raise a total of CNY16bn via onshore and offshore borrowings. S.F. Holding's application to issue CNY6.5bn in domestic convertible bonds is being reviewed by the CSRC.
- **Growth appetite weighs on credit profile:** S&P and Fitch have a Negative Outlook on S.F. Holding's A- rating, as a result of the additional debt the company has assumed to expand. Fitch believes S.F. Holding will require material non-debt financing over the next one to two years to maintain its current rating, and S&P sees limited headroom for the company's rating.

Stable express delivery revenue and market share



Source: Company reports, State Post Bureau, Barclays Research

Sunny Optical Technology (Group) Company Limited

Analyst
Eugene Tham

Company description: Sunny Optical Technology (Group) Company Limited (Baa2/NR/NR Stb) is an integrated optical components and products manufacturer. Sunny has three main business segments: 1) Optoelectronic products (76% of 2018 revenue) - handset, security surveillance and other optoelectronic camera modules, among others; 2) Optical components (23%) - lenses for consumer electronics, automotive security and security surveillance, and 3) Optical instruments (1%) - includes microscopes, analytical instruments and related products for experiments, industrial testing and research. The company is 35.5% indirectly-owned by the Sunny Group Employee Offshore Trust, was listed on the Hong Kong Stock Exchange (2382 HK) in 2007, and was included in the benchmark Hang Seng Index in November 2017.

SUNOTG bond (Baa2/NR/NR)

Bonds	Amt (mn)	Issuer
SUNOTG 3.75% $'23s	600	Sunny Optical Technology (Group) Company Limited

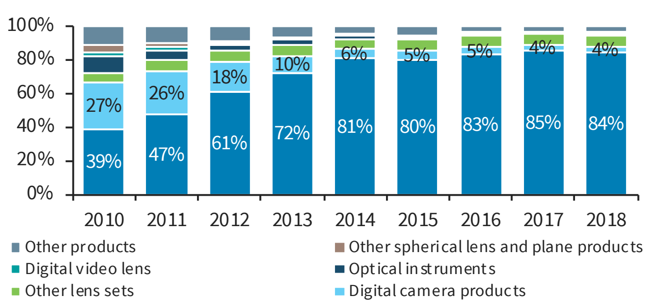
Financial snapshot

CNY mn	2018	2017	2016
Revenue	25,932	22,366	14,612
Gross Profit	4,913	4,803	2,680
Gross Profit Margin	18.9%	21.5%	18.3%
EBITDA	3,722	3,575	1,817
EBITDA Margin	14.4%	16.0%	12.4%
Total Debt	5,644	1,467	1,026
Net Debt/ (Cash)	(1,605)	(1,872)	(1,728)
Credit Metrics			
Total Debt/EBITDA	1.5 x	0.4 x	0.6 x
Net Debt/EBITDA	-0.4 x	-0.5 x	-1.0 x
EBITDA/ Interest	18.4 x	73.3 x	112.3 x
Total Debt/Capital	37.8%	16.3%	17.3%

Source: Company report, Barclays Research

- **Cash conversion and cash flow.** Sunny Optical has generated positive free cashflow in seven of the past ten years. The company can be vulnerable to large working capital changes, but has managed down its cash conversion cycle to below 30 days, mainly as a result of increased trade payables offsetting the increase in receivables in recent years.
- **Liquidity profile.** As of 31 December 2018, the company carried CNY2.3bn bank balance and cash, as well as CNY4.4bn in unlisted financial products in mainland China and CNY328mn of fund investments in USD. In comparison, total debt was CNY5.6bn, of which ST debt was CNY1.5bn. The company had c.CNY5.2bn and USD260mn bank facilities granted by both Chinese and international commercial banks.

Revenue split by main products

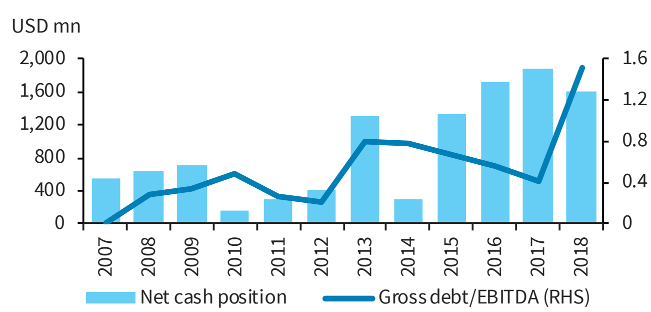


Source: Company reports

Business highlights

- **Leading global market position with operating track record of 34 years.** Sunny Optical maintained its ranking as the largest global vehicle lens-sets producer in 2018, and ranked second for handset lens-sets by shipments, according to the company.
- **Sunny maintains a stable financial profile through cycles,** balancing capital spending and growth needs with funding from equity and debt. It has maintained a net cash position and gross debt/EBITDA below 1.0x in the last 11 years from 2007-2017. Leverage rose to 1.5x in 2018 due to the issuance of USD600m notes for capacity expansion. Moody's expects the company's debt/EBITDA to improve moderately in the next 12-18 months.
- **R&D expenditure accounted for c.4.9% of its total revenue.** The company had 958 granted patents, including 251 inventions, 661 utility model and 46 exterior design, as well as 1,853 pending applied patents at end-2018. 15 regional R&D centres have been established in China, North America, Japan, South Korea, Singapore, and Taiwan.
- **Short product cycle indicates uncertain demand visibility.** Rapid technological evolution is a key driver of demand for Sunny Optical's products. Product life cycles tend to be short; usually six to twelve months for mobile phone camera modules, and three years or more for vehicle lens sets. The company has been proactive in anticipating technological shifts and adjusted its product mix, which has helped maintain strong revenue and profit growth, partially alleviating the uncertainty.
- **Concentration risk.** In 2018, 84% of revenue was derived from handset-related products and the same proportion was generated from the Chinese domestic market. Of total revenue, 53% was derived from the top three customers and 21.8% from the largest customer, all of which are Chinese smartphone makers. In 2018, 53.7% of purchases were from its top five suppliers and 25% from the largest supplier.
- **Vulnerability to escalation in US-China trade tensions:** Sunny's USD bond has sold off amid bouts of escalation in trade tensions, particularly when measures were taken by the US administration against Huawei, as the latter is Sunny's largest customer.

Credit metrics



Source: Company reports, Barclays Research

Tencent Holdings

Analyst
Eugene Tham

Company description: Tencent Holdings (A1/A+/A+ Stb) is a leading integrated internet services company in China. Online games generated 33% of 2018 revenue, followed by social network services (24%), online advertising (16%), fintech and business services (25%), and others (2%). Tencent ranked No.1 globally in online games revenue in 2018, with a c.14% market share (source: Newzoo); in China, it had 52.1% market share (source: iResearch). The company operates the largest instant messaging communities in China, with c.1.1bn monthly active users (MAUs) on its Weixin (China)/Wechat (overseas) mobile platforms, and c.823mn MAUs on its QQ platform, at end-March 2019. According to iResearch, its social community users on Weixin and Wechat accounted for 75.41% of monthly time spent on mobile social networking services in December 2018. Listed in 2004 on the Hong Kong Stock Exchange, the company had a market capitalisation of c.HKD3.4trn as of 11 July 2019.

TENCNT bonds (A1/A+/A+)

Bonds	Amt (mn)	Issuer
TENCNT 2.875% $ '20s	1100	
TENCNT 2.985% $ '23s	1,000	
TENCNT $ '23s Floater	500	
TENCNT 3.28% $ '24s	1,250	
TENCNT $ '24s Floater	750	
TENCNT 3.8% $ '25s	900	Tencent Holdings Ltd
TENCNT 3.575% $' 26s	500	
TENCNT 3.595% $ '28s	2,500	
TENCNT 3.975% $ '29s	3,000	
TENCNT 4.7% $ '35s	100	
TENCNT 3.925% $ '38s	1,000	
TENCNT 4.525% $ '49s	500	

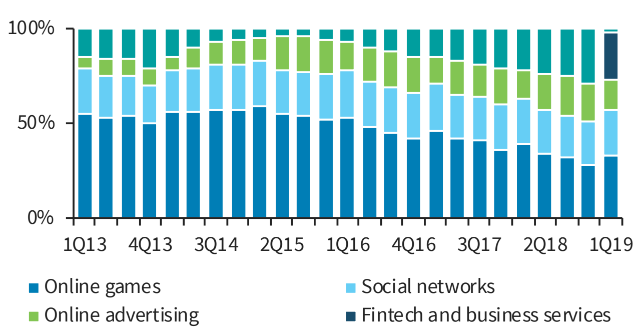
Financial snapshot

CNY mn	2018	2017	2016
Revenue	312,694	237,760	151,938
Gross Profit	142,120	116,925	84,499
Gross Profit Margin	45.5%	49.2%	55.6%
EBITDA	118,482	95,970	66,958
EBITDA Margin	37.9%	40.4%	44.1%
Total Debt	189,731	134,498	111,181
Net Debt/ (Cash)	28,999	(7,923)	(11,041)
Credit Metrics			
Total Debt/EBITDA	1.6 x	1.4 x	1.7 x
Net Debt/EBITDA	0.2 x	-0.1 x	-0.2 x
EBITDA/ Interest	21.9 x	27.5 x	26.5 x
Total Debt/Capital	34.8%	32.7%	37.4%
MAUs* on different platforms (mn users)	**2018**	**2017**	**2016**
QQ	807	783	869
Weixin/Wechat	1,098	989	889

*Monthly active users at end of period.

Source: Company reports, Barclays Research

Revenue breakdown by segment

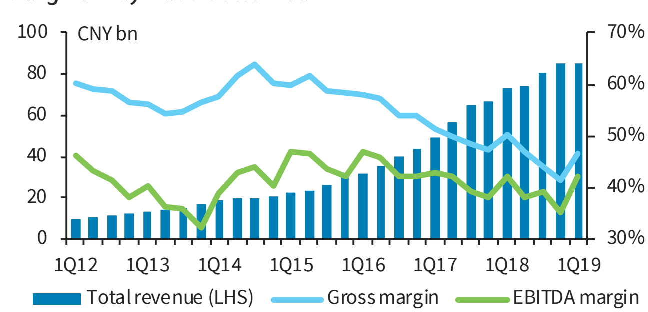


Note: Others segment includes payment-related services and cloud services as of 4Q17. Source: Company reports

Business highlights

- **Leading market position in domestic social networks:** The size of Tencent's social communities provides a large and sticky user base that Tencent and its affiliated companies can tap. This provides significant monetisation opportunities and gives Tencent substantial leverage when in negotiations with potential business partners.
- **Gaming segment to recover:** China's online games regulator began approving licenses to monetize games in December 2018 after a nine-month suspension. Given the sizeable backlog of game applications, the release of new game titles is likely to spill over to 2020. Despite broadly unchanged gaming revenue y/y in 1Q19, the gradual release of new game titles and approvals to monetize games are likely to support growth in online games revenue in 2H19.
- **Increasing focus on enterprise customer business:** Tencent overhauled its corporate structure in late 2018, aiming to expand services to corporate customers to reinvigorate growth. Newly formed cloud and smart industries segments aim to build on the growth of its cloud business by focusing on artificial intelligence, cloud services and security.
- **Tie-ups with established companies:** Tencent has partnered with: 1) BMW in autonomous driving; 2) GAC Group in developing internet-connected cars and AI technology for mobility; 3i) Chinese banks to develop cloud-based platforms; 4) Huawei in online streaming technologies; and 5) Nokia, China Unicom, and ZTE in 5G. In our view, these partnerships could help lower risk and improve the chances of success.
- **Modest net debt offset by liquidity and strong cash flow:** Tencent reporting a net debt position for the first time 1Q18, as a result of the gradual decline in its cash and an increase in debt. However, it retains a significant cash position (CNY169.8bn in cash and ST deposits) and has recorded annual free cash flow of around CNY55bn on average in the past three years.
- **IPOs drive more transparent valuation of its portfolio** and increase Tencent's flexibility in managing its investments in other companies, possibly making divestments easier if it needs additional liquidity.
- **Regulatory risks:** Government scrutiny of social media content remains tight, which adds to Tencent's costs.

Margins may have bottomed



Source: Company reports

Want Want China Holdings Limited

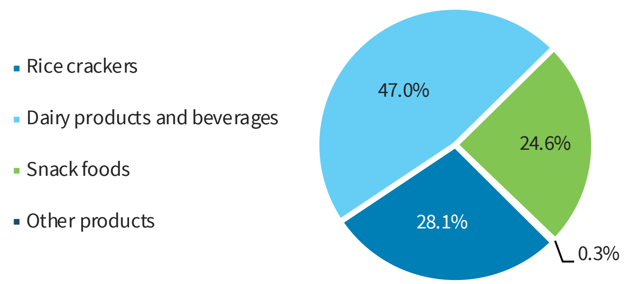
Analyst
Eugene Tham

Company description: Want Want China Holdings Limited (Want Want, A3 Stb/NR/NR) is a leading company in the food and beverage industry in China with over 20 years of operating history. Established in Taiwan in 1962 as I Lan Foods Industrial Co., Ltd, the company entered the China market in 1992 under the "Want Want" brand. Want Want provides a diversified product mix in four main categories: 1) Rice crackers; 2) Dairy products and beverages; 3) Snack foods; and 4) Other food products including wine. Most of the company's production facilities are located in China, as well as Taiwan, Japan, Hong Kong and Singapore, while products are also sold to the US, Canada, South-East Asia and Europe. Want Want is listed in Hong Kong with a market capitalisation of HKD77.6bn (c.USD9.9bn) as at 29 July 2019.

Want Want bonds

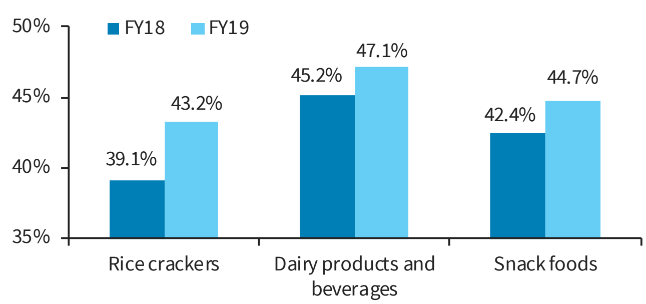
Bonds	Amt (mn)	Issuer	Guarantor
WANTSP 2.875% $'22s (A3/NR/NR)	500	Want Want China Finance Ltd	Want Want China Holdings Ltd

Revenue breakdown by product, (FYE March 2019)



Source: Company reports, Barclays Research

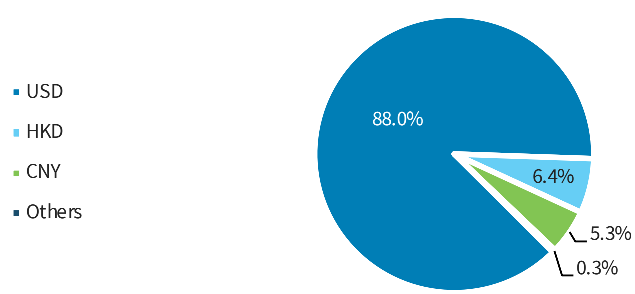
Gross margins rose across products



Source: Company reports, Barclays Research

- **Currency mismatch between revenues (predominantly CNY-denominated), and debt (94% USD or HKD-denominated).** Want Want, which says it does not hedge forex risks, procures raw materials and equipment in USD.

Debt breakdown by currency (FYE March 2019)

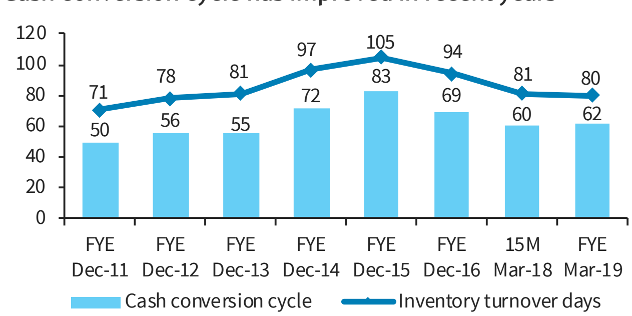


Source: Company report, Barclays Research

Business highlights

- **Dominant market shares in China's snack food and beverages markets.** The company's focus on R&D helps it to continuously improve and diversify product lines to keep up with changing consumer trends. According to Moody's, Euromonitor reported Want Want's shares in the Chinese savoury snacks market, the sweet biscuits, snack bars and fruit snacks market, and the dairy-only flavoured milk drinks market were 7.4%, 2.0%, and 19% in 2018, respectively.
- **Brand recognition.** The flagship "Want Want" brand and Hot-Kid logo are among the most recognised consumer brands in China. Its branding is built upon a reputation for food safety, and is also helped by convenient and easy-to-store packaging.
- **Channel diversification drives growth.** Want Want has adopted a product differentiation strategy. It has also increasingly tapped non-traditional channels such as e-commerce, and emphasized digital marketing strategies such as online promotions, to expand the younger customer base. In terms of revenue from core products, the company attributed growth on traditional channels at mid to high single-digit, while growth on modern channels achieved high single-digit rates.
- **Competitive operating landscape a challenge, mitigated by Want Want's operating track record.** The snack and beverage industry is a highly competitive industry subject to changing consumer preferences, perceptions, and spending habits, posing a challenge to maintaining market position (and hence profit margins). Want Want's long operating track record, and its proactive product innovation and marketing strategy, helps offset this risk. Gross margins expanded in FY19 as a result of strategic re-balancing of the product mix to focus on high-margin products, including new product launches. EBIT margins have also been stable at around 20-25%, due to both its flexible product strategy and stable distribution cost.
- **Financial profile:** Want Want focuses on growing the business organically, which reduces pressure on cashflow needs. According to Moody's, the company has generated positive free cash flow annually since 2007. At end-March 2019, the company's net cash position was CNY7.6bn, up from CNY6.9bn a year ago.

Cash conversion cycle has improved in recent years



Source: Company report, Barclays Research

Weibo Corp

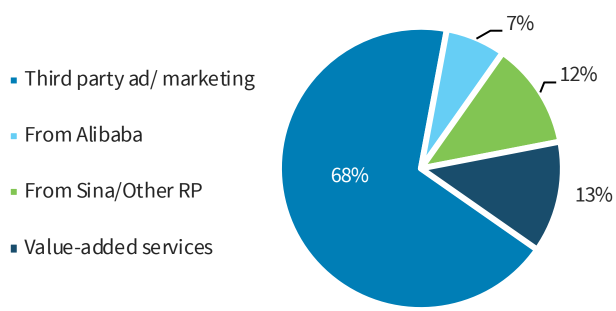
Analyst
Eugene Tham

Company description: Weibo is a social media platform in China with 465mn mobile active users (MAUs) and 203mn average daily active users (DAUs) as of end-March 2019. The Weibo platform was founded by SINA in 2009. Weibo Corporation was established in 2010 as the holding company for the Weibo platform. Both SINA and Weibo Corp are incorporated in the Cayman Islands. Weibo generates its revenues mostly from advertising and marketing services, as well as from value-added services, which include VIP membership fees, live streaming and game-related services. Weibo Corp was listed in April 2014 on Nasdaq, and had a market capitalisation of USD9.8bn at end-June 2019.

WEIBO bonds (Baa1/BBB)

Bonds	Amt (mn)	Issuer
WB 3.50% $'24s	800	Weibo Corp (offshore)

2018 revenue breakdown



Source: Company reports, Barclays Research

- **Financial profile:** Weibo's net cash position (USD942mn at end-2018) has remained substantial in the past few years, helped by low use of debt and consistent positive free cash flow. Gross debt/EBITDA was 1.3x in 2018 (2017: 1.9x), while annual free cash flow was USD220-USD520mn in 2016-18.
- **Relationship with SINA and Alibaba:** Weibo is the core business of its largest shareholder, SINA (45.2% economic interest, and 71.2% voting interest). Weibo accounts for 82% of the latter's revenue and almost all of its EBITDA in 2018. It also executes SINA's mobile strategy, while benefiting from an IP licensing agreement with SINA. Alibaba is the second largest shareholder with 30.2% economic interest (voting rights of 15.8%), and provides synergies for Weibo through its other e-commerce, payment solutions and data platforms.

Financial snapshot

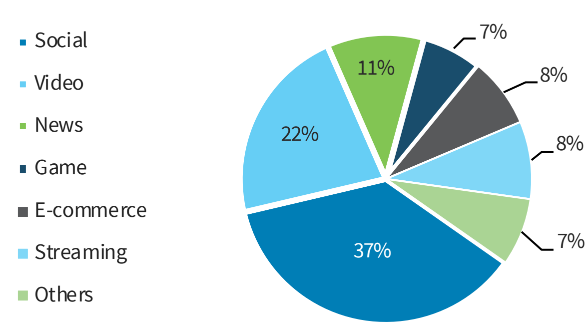
USD mn	2018	2017	2016
Revenue	1,719	1,150	656
Gross profit	1,441	919	485
Gross profit margin	83.8%	79.9%	73.9%
EBITDA	681	471	192
EBITDA Margin	39.6%	40.9%	29.3%
Total debt	912	909	28
Net debt	-914	-883	-368
Credit Metrics			
Total debt/EBITDA	1.3x	1.9x	0.1x
Net debt/EBITDA	n.m.	n.m.	n.m.
EBITDA/interest	n.m.	n.m.	n.m.
Gross debt/capital	34.3%	43.2%	3.5%

Source: Company reports, Barclays Research

Business highlights

- **Market position helped by focus on mobile.** Weibo accounted for 16.7% of China's social advertising revenue market share at end-2018, according to iResearch. In particular, Weibo focuses on the mobile platform, supplementing it with a Social Interest Graph (SIG) recommendation engine to push relevant content and ads to users. Mobile advertising revenues accounted for 83% of total ad and marketing revenues in 2018.
- **Near term outlook affected by weak domestic ad market and increasing competition.** The Chinese domestic online ad market remains plagued by inventory oversupply, as reflected in both Baidu's and Weibo's 1Q19 earnings and subsequent analyst briefing remarks. This has been driven by weaker business outlook weighing on merchant ad spend, and significant ad inventory due to the emergence of competitors such as Bytedance.
- **Medium-to-long term outlook driven by changing user habits.** User time spent has shifted in the past two years towards alternative formats such as short video, which have taken greater market share. Both S&P and Moody's expect Weibo's revenue growth to slow to the mid or low-teens in the next two years (2017 and 2018 growth was 75% and 48%, respectively).
- **Reliance on influencers.** User engagement and growth is tied particularly to influencers including celebrities, key opinion leaders, media outlets and other influential organizations. Their decisions on frequency of use on Weibo, or even potentially switching to other platforms could affect Weibo's ability to keep users on the platform.
- **Regulatory risk.** Internet companies operating social media platforms and/or e-commerce platforms, remain under regulatory scrutiny on content creation (for former) and counterfeit goods (for latter). This creates costs and liabilities for Weibo. Chinese internet companies also operate on the basis of variable interest entity (VIE) structures, contractual agreements which remain vulnerable to regulatory and legal risks.
- **Growth plans.** Weibo has shown signs of expansion outside of their traditional social media business, but in relevant verticals that provide synergies. Weibo acquired a live broadcasting business, Yizhibo, in October 2018, and marked its foray into the consumer financing sector with the CNY200mn purchase of 40% stake in Baoyin Consumer Finance.

2018 China mobile internet user time spent breakdown



Source: China Insights Consultancy

Weichai Power Co., Ltd.

Analyst
Kai Chang

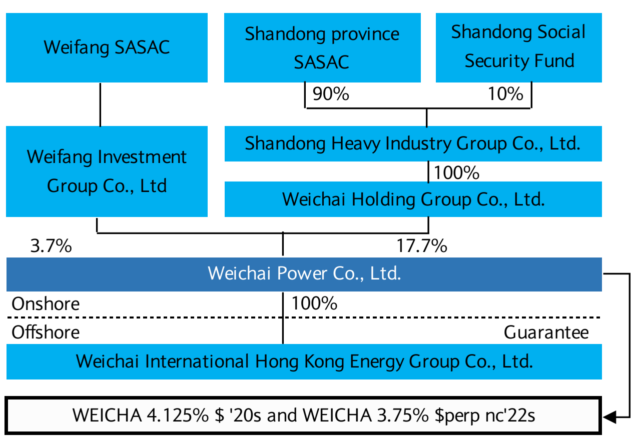
Company description: Weichai Power (NR/BBB/BBB+ Stb) is one of the largest manufacturers of automotive and equipment products in China. It is the largest supplier of heavy-duty truck engines and gearboxes used for heavy-duty trucks (HDT) with a market share of 31.6% and 75.7% in 2018 respectively. Weichai also manufactures and sells a range of HDTs to more than 90 countries around the world. Weichai has used strategic acquisitions to expand overseas. It owns a 45% stake in Kion Group, the second largest forklift manufacturer in the world, while Kion's subsidiary Dematic Solutions, is the third largest automated material handling system supplier globally. In 2018, overseas business generated 40.3% of the company's total revenue. The governments of Shandong province and Weifang city together indirectly own 21.4% of Weichai Power.

WEICHA bonds (NR/BBB/BBB+)

Bonds	Amt (mn)	Issuer	On shore guarantor
WEICHA 4.125% $'20s	400	Weichai International Hong Kong Energy Group Co Ltd	Weichai Power Co Ltd
WEICHA 3.75% $ perp nc'22s	775		

Note: The Weichai 3.75% perps are rated one notch lower than the issuer rating by both S&P and Fitch to reflect the coupon deferral feature.
Source: Bloomberg, Barclays Research

Bond structure



Source: Company reports, Barclays Research

Financial snapshot

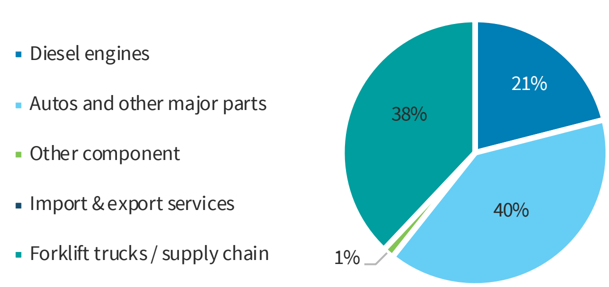
CNY mn	2018	2017	2016
Revenue	155,536	147,929	91,148
EBITDA	22,924	21,208	10,659
EBITDA margin	14.7%	14.3%	11.7%
Total debt	43,841	42,946	44,866
Net debt	6,018	16,697	23,270
Credit Metrics			
Gross debt/EBITDA	2.0x	2.1x	4.4x
Net debt/EBITDA	0.4x	0.9x	2.4x
EBITDA/interest	24.5x	27.0x	16.4x
Debt/capital	45.0%	47.2%	51.4%

Source: Company reports, Barclays Research

Business highlights

- **Leading market positions.** Weichai holds a leading market share in domestic HDT engine sales, and is the fourth largest company by sales of heavy-duty trucks (through 51%-owned Shaanxi Heavy Duty Automobile). Weichai also sells its engine products in more than 110 countries and regions. Through its stake in Kion, Weichai has leading market positions in both hardware forklift and advanced technology in supply chain management systems globally.
- **Exposure to industry cyclicity.** In 2018, sales of heavy-duty truck engines in China were flat over 2017 (363,000 units). S&P expects domestic demand for diesel engines to decline by 7-10% in 2019 after peaking in 2017. Lackluster demand could be mitigated by a need for engine replacements given the government's adoption of the stricter National VI Emission Standards. Sales of gearboxes grew 8.9% y/y in 2018, compared with 66.8% in 2017.
- **Advanced technology.** Weichai has developed engine models that meet the more stringent emission standards. The company also operates a state-level laboratory for research and development of powertrain systems, and undertakes acquisitions to access new technology.
- **M&A helped diversify business profile.** Weichai first invested in Kion in 2012. After subsequently raising its stake Kion was consolidated into Weichai's financial statements. Kion acquired Dematic Solutions in late-2016. Through these acquisitions, Weichai diversified its revenue base both geographically and by product segments. Diesel engines and autos/other major auto parts accounted for 61% of revenue in 2018, down from 95% in 2013. In 2018, Weichai also announced the purchase of a 20% stake in Ceres Power Holdings, a UK-based fuel cell technology and engineering company, and a 19.9% stake in Ballard, a Canada-based hydrogen fuel cells manufacturer.
- **Credit metrics: Debt/EBITDA of 2.0x in 2018.** Consolidated gross debt at end-2018 rose slightly to CNY43.8bn, from CNY42.9bn in 2017, while EBITDA rose 8.1% y/y to CNY22.9bn. Gross debt levels are offset by a cash position of CNY37.8bn, leaving CNY6bn net debt.

2018 revenue breakdown by business segment



Source: Company reports, Barclays Research

Zijin Mining Group Co. Ltd

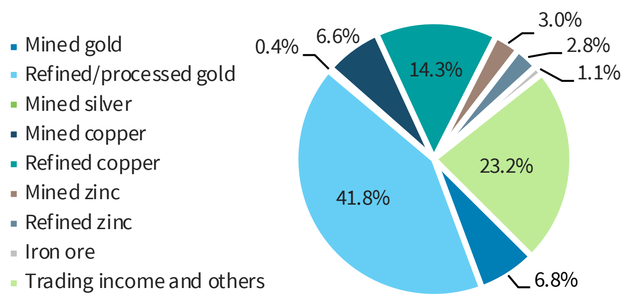
Analyst
Kai Chang

Company description: Zijin Mining (Baa3/BBB-/BBB-) is a Fujian-based diversified metals producer, which is mainly engaged in the mining and smelting of gold, copper, zinc and other metal mineral resources. Listed on the Hong Kong stock exchange since 2003 and then on the Shanghai stock exchange in 2008, the company is 25.88% owned by Minxi Xinghang State-owned Asset Investment Co., Ltd., a local SOE in Shanghang county, Fujian province by end-2017. Market capitalisation was c.USD11.2bn as at 29 July 2019. Zijin owns 233 mining rights and 195 exploration rights in 18 provinces in China and 11 other countries.

ZJMGCL bonds (Baa3/BBB-/NR)

Bonds	Amt (mn)	Issuer	Guarantor
ZJMGCL 5.282% $'21s	350	Zijin International Capital Co. Ltd	Zijin Mining Group Co. Ltd. (Onshore)

Revenue breakdown by product in 2018



Source: Company reports, Bloomberg

Production and reserve data for select metals

	Mine production			Reserves	
	2019T	2018	2017	2018	2018 % of PRC mine reserves
Gold (ton)	40	36.5	37.5	1,728	13%
Copper (k ton)	350	249	208	49,521	47%
Zinc (k ton)	380	278	270	8,366	5%
Silver (ton)	275			1,847	
Iron ore (k ton)	2500			198,000	

Source: Company reports

Financial snapshot

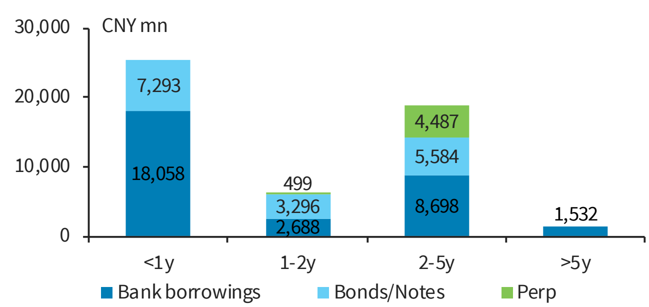
CNY mn	2018	2017	2016
Revenue	105,994	94,549	78,851
Gross profit	13,343	13,177	9,069
Gross profit margin	12.6%	13.9%	11.5%
EBITDA	12,066	12,409	8,788
EBITDA Margin	11.4%	13.1%	11.1%
Total debt	52,314	37,517	42,957
Net debt	42,044	31,581	37,934
Credit Metrics			
Total debt/EBITDA	4.3x	3.0x	4.9x
Net debt/EBITDA	3.5x	2.5x	4.3x
EBITDA/interest	7.3x	7.4x	5.3x
Gross debt/capital	52.4%	49.9%	58.0%

Source: Company reports, Barclays Research

Business highlights

- **Dominant market position in various metals markets in China.** Zijin is one of the largest and most diversified metal producers in China, ranking within the top 3 in gold, copper and zinc resources and production volumes among domestic peers in 2018.
- **Long-life reserves.** Zijin owns mine reserves with more than 30 years life under China's mineral measurement standards, which enables the company to maintain stable production.
- **Vertically integrated along the copper, gold and zinc value chains:** Zijin has exposure to mining, smelting, refining, trading and retail operations, which lowers its exposure to volatility or disruptions in different parts of the value chain.
- **Increasing contribution from overseas projects:** At end-2018, overseas mines accounted for 65% of gold reserves, 78% of copper reserves, and 29% of zinc reserves, respectively. By production, overseas output contributed 52% of gold, 24% of copper, and 36% of zinc output. With the ramp-up of Phase 2 of the hydrometallurgy plant of the Kolwezi copper and cobalt mine, construction of the 49.5%-owned Kamoa copper mine, and the acquisition of Nevsun Resources (which owns the Timok copper-gold mine in Serbia, and 60% interest in the Bisha copper-zinc mine in Eritrea), overseas assets will further increase.
- **Financial profile weakened by acquisitions:** Leverage metrics weakened as the company took on more debt to fund acquisitions in 2018. EBITDA margins average in the low-teens. Interest coverage ratios remained stable in 2017-18, with borrowing costs declining in the past few years (2018: 3.7%; 2014-2017: 4.1%-5.1%). Both Moody's and Fitch expect Zijin Mining's leverage to fall in 2019, particularly after the company's planned CNY8bn equity placement, which is earmarked for repayment of debt raised for the Nevsun acquisition. Zijin made CNY11.8bn of acquisitions in 2018 (> 10% of end-2018 total assets).
- **Execution and geopolitical risks:** Following the ramp-up of the Kamoa mine and the acquisition of Nevsun Resources, Zijin Mining's exposure to assets in Africa has increased, raising its vulnerability to potential geopolitical risk. Construction of the 49.5%-owned Kamoa mine, which contributed 8.7% of total assets and 42% of total copper reserves owned by Zijin, is still underway, and execution risks remain high.

Debt maturity profile as of end-2018



Source: Company reports, Barclays Research

Property company profiles

China Jinmao Holdings Group

Analyst
Wilson Ho

Company description: China Jinmao Holdings Group is a developer and operator of high-end residential property projects, commercial property activities as well as hotel businesses. Jinmao is majority owned by SASAC through China Sinochem Corporation (49.85%), which is one of only 21 SOEs with approval to engage in real estate activities and one of the six SOEs authorised to operate hotels as a principal business. Support from parent Sinochem Group, one of the world's top 500 enterprises, provides Jinmao with advantages in obtaining resources. Jinmao own 66.77% of Jinmao Hotel, which is listed on the Hong Kong Exchange main board (HKSE 06139). At end-2018, Jinmao had a total land bank of 64.2 mn sqm (including 21.3 mn sqm of primary development land bank) located among 40 cities.

CHJMAO USD bonds

Bonds	Amt (mn)	Issuer	Offshore guarantor
CHJMAO 6.75% $'21s (Baa3/BBB-/BBB-)	500	Franshion Development Ltd	China Jinmao Holdings Group Ltd
CHJMAO 6.75% $'21s (Baa3/BBB-/BBB-)	500		
CHJMAO 3.6% $'22s (Baa3/BBB-/BBB-)	500	Franshion Brilliant Ltd	
CHJMAO 6% $ Perp NC'21s (Ba2/NR/NR)	500		
CHJMAO 6.9% $ Perp (NR/NR/NR)	300		
CHJMAO 4.875% $ Perp NC'23s (NR/BB/NR)	300		
CHJMAO 5.2% $'21s (NR/BBB-/NR)	197		
CHJMAO 4% $'24s (NR/BBB-/NR)	250		
CHJMAO 5.75% $ Perp NC'22s (Ba2/NR/NR)	500		
CHJMAO 4% 4% $ Perp NC'23s (Baa3/NR/NR)	500		
CHJMAO 6.4% $'22s (NR/NR/BBB-)	200		
CHJMAO 4.25% $'29s (Baa3/NR/NR)	500		

Financial snapshot

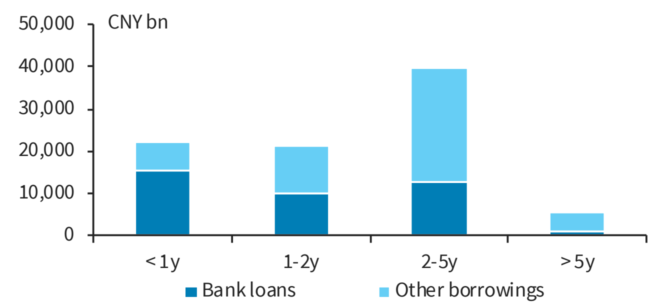
CNY mn	2018	2017	2016
Revenue	38,733	31,075	27,304
Gross Profit	14,538	10,041	10,205
Gross Profit Margin	37.5%	32.3%	37.4%
EBITDA	11,448	6,978	7,989
EBITDA Margin	29.6%	22.5%	29.3%
Total Debt	87,973	71,331	47,925
Net Debt	77,163	42,718	29,704
Credit Metrics			
Total Debt/EBITDA	7.7x	10.2x	6.0x
Net Debt/EBITDA	6.7x	6.1x	3.7x
EBITDA/Interest	2.1x	1.8x	3.3x
Total Debt/Capital	52.9%	51.8%	46.2%
Revenue breakdown			
City and property development	87.1%	86.5%	86.4%
Commercial leasing and retail operations	3.7%	4.4%	4.7%
Hotel operations	5.3%	6.7%	6.9%
Others	3.9%	2.5%	2.0%

Source: Company reports, Barclays Research

Business highlights

- **Land bank.** Helped by its SOE status and experience developing landmark commercial projects, Jinmao has a solid record of acquiring strategically important projects and land at low costs through collaborations with government-related entities. As of end-2018, Jinmao reported a total GFA of 64.2mn sqm, with a primary development land bank of 21.3mn sqm. Its land reserves in Tier 1 and 2 cities make up c.54% of its total land bank.
- **Contracted sales**. Strong sales growth partly mitigates execution risk from rapid expansion of property development and primary land development business. In 2018, contracted sales rose 43% to CNY128bn, with revenues from primary and secondary development of CNY68.5bn and CNY121.5bn respectively. In 1H19, Jinmao reported contracted sales of CNY78.5bn, a 9.3% y/y increase, on contracted sales GFA of 3.58 mn sqm.
- **SOE background.** Jinmao is a real estate developer under Sinochem Corp. Through its close ties with Sinochem, Jinmao benefits from favourable access to financing and other resources Jinmao has also established cooperation with local authorities and partners through the networks of Sinochem, which helps with access to enter new markets.
- **Leading city operator.** Positioning as city operator, Jinmao focuses on primary development projects. Jinmao can create new urban areas at relatively low cost, a process that generally takes about 10 years from urban planning to completion.
- **Credit profile.** Jinmao reported EBITDA/interest of 2.1x at end-2018, up from 1.8x in 2017, with total cash/short-term debt rising to 1.2x, from 1.0x a year ago. Cash/total assets has decreased from 21.9% in 2010 to 7.9% in 2018, reflecting aggressive land purchases and rising leverage in the past few years.

Debt maturity profile at end-2018



Source: Company reports, Barclays Research

China Overseas Land & Investment

Analyst
Wilson Ho

Company description: China Overseas Land & Investment (COLI, Baa1/BBB+/A- Stb) is one of the top 10 property developers in China by contracted sales (2018: HKD301.2bn, +29.8% y/y). The central SASAC effectively owns 28.8% of COLI through China State Construction Engineering Corp (CSCEC) which is a group ultimately owned by the SASAC. CSCEC holds 56.26% of China State Construction Engineering Corp Ltd (CSCECL), which, through 100%-owned China Overseas Holding Ltd, holds 51.23% of COLI. At end-2018, the Group's Series of Companies (excluding COGO) had a total land reserve of 70.10mn q m (attributable interest of 56.97mn sq m, y/y +5.9%); COGO has a total land reserve of 21.34mn sq m (attributable interest of 19.98mn sq m). COLI focuses on high-end markets in Tier 1 and 2 cities in China. Through 38.32%-owned associate COGO it also has a presence in lower-tier cities.

COLI USD bonds

Bonds	Amt (mn)	Issuer	Offshore guarantor
CHIOLI 4.75% $' 28s (Baa1/BBB+/A-)	750	China Overseas Finance Cayman VII Ltd	China Overseas Land & Investment Ltd
CHIOLI 4.25% $' 23s (Baa1/BBB+/A-)	750	China Overseas Finance Cayman VII Ltd	
CHIOLI 5.5% $' 20s (Baa1/BBB+/NR)	1,000	China Overseas Finance Cayman II Ltd	
CHIOLI 6.375% $' 43s (Baa1/BBB+/A-)	500	China Overseas Finance Cayman III Ltd	
CHIOLI 5.95% $' 24s (Baa1/BBB+/A-)	700	China Overseas Finance Cayman VI Ltd	
CHIOLI 3.95% $' 22s (Baa1/BBB+/NR)	700	China Overseas Finance Cayman V Ltd	
CHIOLI 5.375% $' 23s (Baa1/BBB+/A-)	500	China Overseas Finance Cayman III Ltd	
CHIOLI 5.35% $' 42s (Baa1/BBB+/NR)	300	China Overseas Finance Cayman V Ltd	
CHIOLI 6.45% $' 34s (Baa1/BBB+/A-)	500	China Overseas Finance Cayman VI Ltd	

Financial snapshot

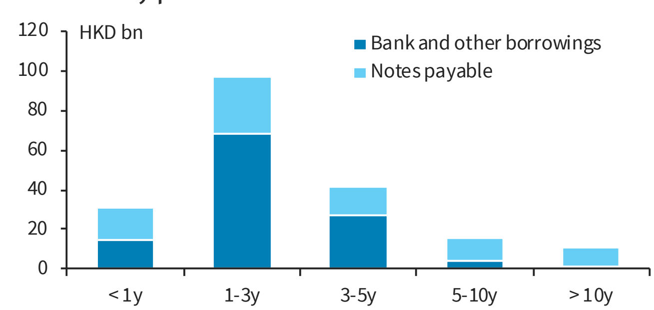
HKD mn	2018	2017	2016
Revenue	171,461	166,045	164,069
Gross Profit	64,803	54,700	45,643
Gross Profit Margin	37.8%	32.9%	27.8%
EBITDA	60,392	50,438	40,101
EBITDA Margin	35.2%	30.4%	24.4%
Total Debt	195,949	178,238	173,821
Net Debt	95,394	74,188	16,659
Credit Metrics			
Total Debt/EBITDA	3.2x	3.5x	4.3x
Net Debt/EBITDA	1.6x	1.5x	0.4x
EBITDA/Interest	6.6x	6.8x	4.6x
Total Debt/Capital	40.0%	39.5%	43.3%
Revenue by segment			
Property development	97.4%	97.6%	97.5%
Property investments	2.1%	1.5%	1.3%
Others	0.5%	0.9%	1.2%

Source: Company reports, Barclays Research

Business highlights

- **Geographically diversified.** One of China's 10 largest developers, COLI has well diversified land reserves, and owns properties in over 40 cities, including Hong Kong and Macau. At end-2018, COLI's (excluding COGO) land bank was split 18%, 56% and 21% in Tier 1, 2 and 3 cities, respectively
- **Land reserves.** In 2018, COLI acquired 63 land parcels in 28 cities in mainland China and Hong Kong, adding GFA of 17.64mn sq m to its land reserves The Group's total land bank was 70.10 mn sqm (+9.9%). Its land reserves in mainland China are split between the regions of Hua Bei (26.3%), Northern (21.4%), Western (20.6%), Hua Nan (21.1% and Hua Dong (11.2%).
- **Contracted sales.** In 2018, contracted property sales rose by 29.8% y/y to HKD301.2bn, beating its full-year target of HKD290bn, on a sales area of15.93mn sq m (+10.2%). The average selling price was HKD18,905/sq m. In 1H 2019, COLI achieved contracted sales of HKD194.2bn (+29% y/y), or 56% of its full-year contracted sales target (HKD350bn).
- **Fast revenue growth of commercial property development.** COLI has accelerated its commercial property development since 2017, with 2018 revenue from commercial properties totalling HKD4.06bn (+38.1%, and 2.4% of total revenue), while rental income from investment properties rose by 44% to HKD3.53bn. At end-2018, the Group was developing 4.09mn sq m of commercial properties and had plans for a further 5.47mn sq m. COLI plans to further grow this segment (comprising offices, shopping malls, hotels and apartments) with revenue targets of HKD5bn in 2020 and HKD 10bn in 2023.
- **Credit metrics and liquidity profile.** COLI's weighted average borrowing cost was 4.3% in 2018, one of the lowest in the sector. While only 15.8% of its total debt is to mature within the next year, COLI's cash on hand fell to HKD100.56bn at end-2018, from HKD157bn at end-2016. But its liquidity position remains strong, with cash to short-term debt at 3.25x at end-2018 compared with 3.42x a year ago.

Debt maturity profile at end-2018



Source: Company reports, Barclays Research

China Resources Land Ltd

Analyst
Wilson Ho

Company description: China Resources Land Ltd (CR Land, Baa1/BBB+/BBB+ Stb) is a property development and investment company. In 2018, its development properties business ranked top10 in China by contracted sales (CNY210.7bn). It also has a large investment property portfolio, with a nation-wide footprint. At end-2018, it operated 51 shopping malls, and plans to have 81 malls in operation by 2021. CR Land is 61.27% owned by China Resources (Holdings) Company Limited, a group ultimately owned by the SASAC. At end-2018, the total Land bank of CR Land amounts to 59.57mn sqm (attributable interest of 44.81mn sqm) across 70 cities worldwide, of which 50.14mn sqm are earmarked for development properties and 9.43 mn sqm for investment properties.

CRHZCH USD bonds

Bonds	Amt (mn)	Issuer	Offshore guarantor
CRHZCH 4.125% $' 29s (Baa1/BBB+/NR)	500	China Resources Land Ltd	NA
CRHZCH 3.75% $' 24s (Baa1/BBB+/NR)	300		
CRHZCH 6% $' 24s (Baa1/BBB+/BBB+)	700		
CRHZCH 6.1% $' 29s (Baa1/NR/NR)	451		

Financial snapshot

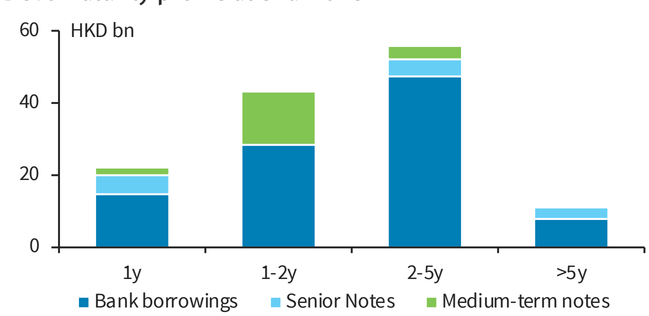
HKD mn	2018	2017	2016
Revenue	121,189	101,943	109,328
Gross Profit	52,582	40,962	36,889
Gross Profit Margin	43.4%	40.2%	33.7%
EBITDA	44,810	34,433	31,036
EBITDA Margin	37.0%	33.8%	28.4%
Total Debt	132,212	105,556	71,338
Net Debt	61,243	51,782	24,664
Credit Metrics			
Total Debt/EBITDA	3.0x	3.1x	2.3x
Net Debt/EBITDA	1.4x	1.5x	0.8x
EBITDA/Interest	7.3x	7.1x	7.8x
Total Debt/Capital	42.3%	42.3%	33.9%
Revenue breakdown			
Development properties for sale	86.8%	87.8%	90.3%
Rental income and property management services income from investment properties	6.7%	6.2%	5.7%
Hotel operations	1.2%	1.3%	0.9%
Construction, decoration services and others	5.4%	4.7%	3.1%

Source: Company reports, Barclays Research

Business highlights

- **Contracted sales.** In 2018, CR Land's contracted sales totalled CNY210.7bn (+22.3% y/y), from contracted GFA of 12 mn sqm (+17.6%). Contracted sales in Tier 1, 2 and 3 cities accounted for 30%, 60% and 10% of total, respectively. In 1H19, contacted sales rose by 26% y/y to CNY118.8bn (GFA 62.6mn sqm).
- **Land** bank. The company is one of the most geographically diversified Chinese developers. At end-2018, CR Land had business in 70 cities worldwide with a land bank GFA of 59.57mn sqm, sufficient for three years of development. In terms of development properties, its land bank in Greater Bay Area, Yangtze delta and Jing-jin-ji accounted for 11%, 17% and 6% of total, respectively.
- **Expertise in investment properties.** CR Land focuses on Tier 1 and strong Tier 2 cities and aims to be the leader in the investment properties business. In 2018, rental income rose by 24.5% to HKD9.52bn, which provides stability in earnings and partly mitigates the volatility in the property development business. At end-2018, the book value of its investment properties was HKD126.86bn, and operated 51 shopping malls (including 17 asset-light malls) in 2018 which generated CNY47.29bn in retail sales. CR Land plans to be operating 81 shopping malls by 2021, and a further 22 malls after then.
- **Low-cost funding.** As an important subsidiary of a large state-owned enterprise, CR Land has strong access to low-cost banking facilities. Its average borrowing cost was 4.47% as at end-2018, much lower than that of many of its property peers.
- **Leverage.** In 2018, CR Land's leverage was stable, in contrast to the large increase in 2017. At end-2018, total debt was HKD132.2bn (end 2017: HKD105.6), with a slightly lower debt/EBITDA ratio of 3.0x. Short-term debt amounted to HKD22.1bn (2017: HKD25.7bn), accounting for 16.7% of total debt. As a result, total cash/short-term debt recovered to 3.2x from 2.1x at the end of 2017.

Debt maturity profile at end-2018



Source: Company reports, Barclays Research

China Vanke Co Ltd

Analyst
Wilson Ho

Company description: China Vanke Co Ltd (Baa1/BBB+/BBB+ Stb) is one of the top three real estate developers in China by contracted sales (2018: CNY606.95bn, with sales area of 40.38mn sqm). At the end of 2018, Vanke had a record high market share of 4.06% in the commodity housing market, and ranked first in 24 cities in terms of sales. Vanke specialises in high-quality residential development and property services, and has strong brand recognition. In June 2017, Shenzhen Metro Group (SZMC) became its largest shareholder, holding 29.38% of Vanke's A shares. As at the end of 2018, Vanke had a total GFA of 149.49mn sqm, of which the Group's projects under construction amounted to 90.13mn sqm (attributable interest of 54.02mn sqm), with 59.36mn sqm of projects under planning (attributable interest of 35.80mn sqm).

VNKRLE USD bonds

Bonds	Amt (mn)	Issuer	Offshore guarantor	Keepwell provider	EIPU	Liquidity support deed
VNKRLE 4.2% $' 24s	600	Vanke Real Estate Hong Kong Co Ltd	NA	China Vanke Co Ltd (BBB2/BBB+/ BBB+)	Yes	No
VNKRLE 3.975% $' 27s	1,000					
VNKRLE 4.07063% $' 23s	650					
VNKRLE 5.35% $' 24s	630					
VNKRLE 4.15% $' 23s	971					
VNKRLE 3.95% $' 19s	600					
VNKRLE 2.95% $' 21s	220					

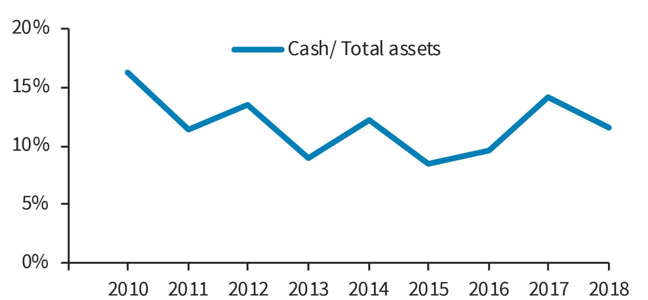
Note: Bond credit ratings – Baa1/BBB/BBB+. Source: Company reports

Financial snapshot

CNY mn	2018	2017	2016
Revenue	297,083	237,345	228,916
Gross Profit	109,952	76,723	58,314
Gross Profit Margin	37.0%	32.3%	25.5%
EBITDA	87,372	62,362	36,808
EBITDA Margin	29.4%	26.3%	16.1%
Total Debt	261,208	190,624	128,864
Net Debt	82,790	16,503	41,832
Credit Metrics			
Total Debt/EBITDA	3.0x	3.1x	3.5x
Net Debt/EBITDA	0.9x	0.3x	1.1x
EBITDA/Interest	6.2x	7.6x	6.6x
Total Debt/Capital	52.6%	50.5%	44.4%
Revenue breakdown			
Sales of Properties	93.6%	95.1%	97.2%
Property management and related services	3.3%	3.0%	1.8%
Construction contracts	1.1%	0.4%	0.2%
Other services	0.9%	0.9%	0.9%
Gross rentals from investment properties	1.0%	0.6%	-

Source: Company reports

Liquidity position (up to end-2018)

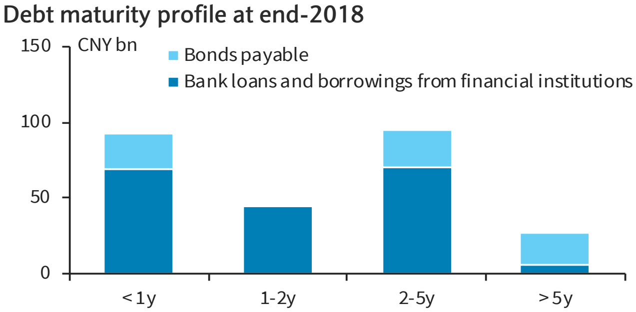


Note: Excludes restricted deposits. Source: Company reports, Barclays Research

Business highlights

- **Contracted sales.** China Vanke is a leading residential developer in China, with consistent strong across various cities. Sales from the Southern region, Shanghai, Northern region, Central and Western regions accounted for 23.64%, 29.84%, 24%, 21.49% of total, respectively, in 2018. In 1H19, contracted sales rose 9.6% to CNY334bn.
- **Business diversification with acquisitions.** Vanke's property strategy includes expansion through M&A and agreements with other developers. The Group is also involved in logistics, skiing resorts, long-term rental apartments, elderly care and education. In June 2016, Vanke acquired SCPG, which is engaged in commercial development and operations management. In January 2018, SCPG jointly purchased 20 shopping centres from CapitaLand. In logistics, Vanke participated in the privatisation of Global Logistic Properties Ltd in 2018 a leading global logistics facilities provider.
- **Expansion in rental housing market.** Vanke is one of the largest centralised long-term rental apartment service providers in China. Vanke expanded its rental housing business since 2017, driven by changes to housing purchasing and rentals policies. In 2018, the Group's long-term rental housing business covered 35 cities with more than 60,000 units, while for units open for more than six months the occupancy rate was 92%.
- **Credit metrics.** While the company's faster pace of land acquisitions and expansion in logistics properties increased its debt level, its credit and liquidity profile were maintained at a stable level. As at end-2018, Vanke had a relatively high 35.7% of its total debt set to mature in the next year. Cash/short-term debt fell to 1.91x at end-2018 from 2.8x one year earlier.

Debt maturity profile at end-2018



Source: Company reports, Barclays Research

Longfor Properties Co Ltd

Analyst
Wilson Ho

Company description: Longfor Properties Co Ltd (Baa3/BBB-/BBB Stb) is one of top 10 developers in China and achieved CNY200.6bn contracted sales in 2018. It is the only non-SOE developer with an investment-grade credit rating, due to its strong financial metrics and risk management ability. At the end of 2018, Longfor's total land bank was 66.36mn sqm (attributable interest of 45.59mn sqm (+32.2% y/y) across 47cities. Longfor has a balanced portfolio of property development, investment, management and long-term rental service.

LNGFOR USD bonds

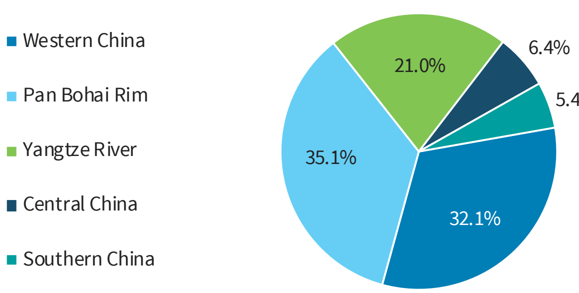
Bonds	Amt (mn)	Issuer	Offshore guarantor
LNGFOR 4.5% $' 28s (Baa3/NR/BBB)	500	Longfor Group Holdings Ltd	NA
LNGFOR 3.9% $' 23s (Baa3/NR/BBB)	300		
LNGFOR 3.875% $' 22s (NR/NR/BBB)	450		

Financial snapshot

CNY mn	2018	2017	2016
Revenue	115,799	72,075	54,799
Gross Profit	39,529	24,436	15,935
Gross Profit Margin	34.1%	33.9%	29.1%
EBITDA	31,161	19,400	12,532
EBITDA Margin	26.9%	26.9%	22.9%
Total Debt	119,820	77,404	57,872
Net Debt	74,737	50,762	40,614
Credit Metrics			
Total Debt/EBITDA	3.8x	4.0x	4.6x
Net Debt/EBITDA	2.4x	2.6x	3.2x
EBITDA/Interest	6.4x	5.7x	4.1x
Total Debt/Capital	46.0%	42.2%	43.5%
Revenue breakdown			
Sales of Properties	93.9%	93.6%	93.9%
Leasing of properties	3.5%	3.6%	3.5%
Provision of property management services	2.6%	2.8%	2.6%

Source: Company reports, Barclays Research

Land bank by regions (up to end-December 2018)

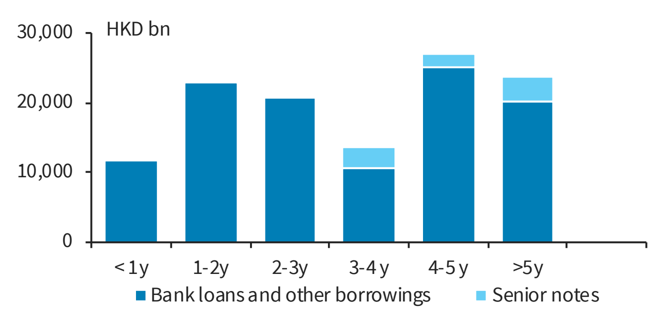


Source: Company reports, Barclays Research

Business highlights

- **Contacted sales.** In 2018, Longfor's contracted sales increased by 28.5% to CNY200.64bn on GFA sold of 12.63mn sqm (+21.6%). Contracted sales in the Pan Bohai Rim, Yangtze River Delta, western and accounted for 34.4%, 27.9%, 23.5% and 10.7% of total, respectively. In 1H19, Longfor achieved aggregated contracted sales of CNY105.6bn (+9% y/y) on GFA sold of 6.51mn sqm.
- **Land bank.** In 2018, Longfor entered 11 new cities through which the company will strengthen its regional blueprint, generating momentum for its mid to long term sales and profit growth. At end-2018, Longfor reported total attributable land reserves of 45.59mn sqm in 47 cities, of which Tier 1 and 2 cities accounted for 8% and 59% of total, respectively.
- **Steady IP income growth.** Focused on Tier 1 and 2 cities, Longor invests in projects located in city clusters within metropolitan circles. As of end-2018, Longfor operated 29 shopping malls with a total GFA of 2.96mn sqm (+14% y/y) and average occupancy rate of 97.4% (+2.1pt y/y). Rental income generated from shopping malls amounted to CNY3.6bn in 2018 (total rental income was CNY4.06bn), up 42% y/y, with a 42% CAGR over five years. The rental income continues to provide solid coverage on debt servicing.
- **Long-term rentals.** As of 30 June 2018, Champion Apartments, the long-term rental brand launched by Longfor, operated in 30 Tier 1 and 2 cities and targets the younger generations. By the end of 2018, the company was managing more than 50,000 rooms, making Champion Apartment one of the largest companies in the long-term rental apartment market in China. For apartments open for 3-6 months, the occupancy rate was 70.2%, while for units open for more than six months the rate was 87.4%. Income generated by Champion Apartment amounted to 10.4% of total rental income. Longfor expects its revenue from Champion to reach to CNY3bn by 2020.
- **Credit metrics.** After a significant improvement in 2017, the momentum keeps recovering Longfor's credit profile at a stable level in 2018. Total cash/short-term debt fell to 3.84x (2017: 4.77x), while total debt reached CNY119.8bn (+ 55% y/y), with short-term debt/total debt slightly higher at 10%. Liquidity remains strong due to its solid sales and flexible access to funding. Total cash was 3.84x of short term debt of CNY 11.7bn.

Debt maturity profile -at end-2018



Source: Company reports, Barclays Research

Poly Real Estate Group

Analyst
Wilson Ho

Company description: Poly Real Estate Group (PRE, Baa2/BBB/BBB+ Stb) is one of the top five real estate developers in China in terms of contracted sales (2018: CNY404.8bn, with sales area of 27.66 mn sqm), and the largest state-owned real estate company in China, with a market share of 2.7%. China Poly Group, the largest shareholder, had a 40.87% stake in PRE directly or indirectly at the end of 2018. Poly Group was one of the first five SOEs approved to hold real estate operations as a core business. PRE focuses on mass-market housing in cities, which generates more than 95% of its revenue. Support from China Poly Group provides Poly Real Estate with flexibility and advantageous access to land resources and capital. At the end of 2018, PRE had 622 projects with a total GFA of 241mn sqm at different development stages across 100 cities in China.

POLYRE USD bonds

Bonds	Amt (mn)	Issuer	Offshore guarantor	Keepwell provider	EIPU	Liquidity support deed
POLYRE 3.875% $' 24s	500	Poly Real Estate Finance Ltd	Hengli Hong Kong Real Estate Ltd (Baa+/BBB-/NR Stb)	Poly Real Estate Group Co Ltd (Baa2/BBB/BBB+Stb)	Yes	No
POLYRE 4.75% $' 23s	500					
POLYRE 3.95% $' 23s	500					

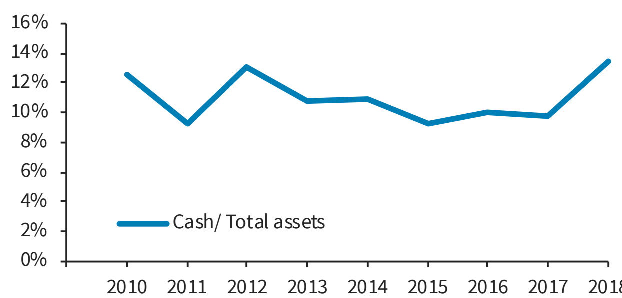
Note: Bond credit ratings – Baa2/BBB-/BBB+. Source: Company reports

Financial snapshot

CNY mn	2018	2017	2016
Revenue	194,514	146,623	154,752
Gross Profit	63,175	45,490	44,871
Gross Profit Margin	32.5%	31.0%	29.0%
EBITDA	41,317	29,998	26,314
EBITDA Margin	21.2%	20.5%	17.0%
Total Debt	263,654	204,601	112,225
Net Debt	155,218	136,800	65,241
Credit Metrics			
Total Debt/EBITDA	6.4x	6.8x	4.3x
Net Debt/EBITDA	3.8x	4.6x	2.5x
EBITDA/Interest	3.0x	3.1x	3.9x
Total Debt/Capital	58.6%	56.4%	48.7%
Revenue breakdown			
Sales of Properties	94.2%	94.1%	95.1%
Others	5.8%	5.9%	4.9%

Source: Company reports

Liquidity position (up to end-2018)

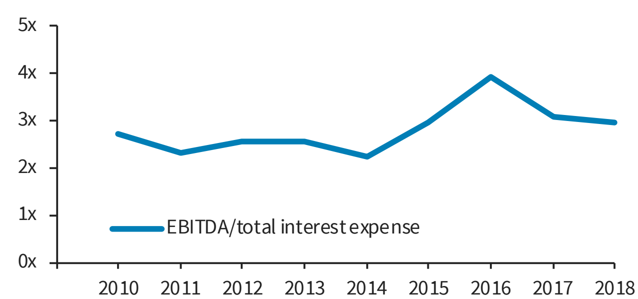


Note: Excludes restricted deposits. Source: Company reports, Barclays Research

Business highlights

- **Contracted sales.** In 2018, PRE's contracted sales rose by 30.91% y/y to CNY404.8bn with a total GFA of 27.66mn sqm (+23.36% y/y). Sales from the Southern, Eastern, Western and Northern regions accounted for 39.1%, 26.0%, 11.8% and 11.6%, of sales, respectively. In 1H19, contracted sales increased to CNY252.6bn, up by 17% y/y.
- **Land bank.** PRE has nationwide coverage and a balanced geographic exposure to Chinese major economics regions. At the end of 2018, PRE had 622 projects with total planned GFA 214 mn sqm across 100 cities in China, which can more than support five years of future contracted sales. After active land acquisitions in 2017, PRE cooled down its land acquisition progress in 2018, added 132 projects with a plot GFA of 31.16 mn sqm (61% located in Tier 1 and 2 cities), representing a decreasing GFA of 31% y/y.State-owned background. As the top state-owned developer, PRE has a flexible access to land and financing through its relationship with local governments. Also, the strong business performance and leading brand image provide local governments confidence to make PRE as their priority.
- **Credit metrics and liquidity.** At end-2018, total debt was CNY263.65bn, up 29% y/y (2017: debt increased by 82%). Debt set to mature within one year was a relatively healthy 18.5% at the end of 2018. The average funding cost increased to 5.03% in 2018 from 4.82% in 2017. In terms of liquidity, cash/short debt was 2.33x at end-2018, while cash/total assets increased to 13.4%, reaching the highest level since 2012.

EBITDA/Total interest expense ratio (up to end-2018)



Source: Company reports, Barclays Research

Sino-Ocean Group Holding

Analyst
Wilson Ho

Company description: Sino-Ocean Group Holding (Baa3 stb/NR/BBB- stb) is a large-scale Chinese property developer. Its largest shareholder is China Life Insurance (29.59% at end-2018) followed by Anbang Life Insurance (29.58%). The company's businesses include property development (85.7% of 2018 revenues), property investment (2.6%), and property management (2.7%). Sino-Ocean's CNY109.5bn in contracted sales in 2018 came from several regions, including Beijing-Tianjin-Hebei, the Yangtze River Delta, and the Pearl River Delta. The company had a total land bank of 40.4mn sqm (attributable interest of 21.8mn sqm), and had over 200 projects at end-2018, of which 86.3% were in Tier 1 and Tier 2 cities.

SINOCE bonds

Bond	Amt outstanding	Rating	Bond structure	Issuer	Guarantor
SINOCE 4.9% perps	600	Ba2/NA/BB	Onshore Guarantee	Sino-Ocean Treasure IV Limited	Sino-Ocean Group Holding Limited
SINOCE Float $'21	700	Baa3/NR/BBB-			
SINOCE 4.45% $'20	700				
SINOCE 6% $'24	700				
SINOCE 5.95% $'27	500				
SINOCE 5.25% $ '22 Callable	500				

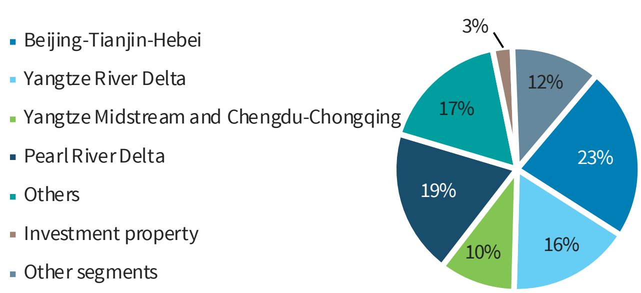
Source: Company reports, Bloomberg

Financial Statement

CNY mn	2018	2017	2016	2015
Revenue	41,422	45,837	34,551	30,824
EBITDA	12,750	12,596	9,326	5,356
EBITDA margin	31.01%	27.58%	27.12%	17.52%
Total debt	88,575	61,032	43,810	51,926
Net debt	49,367	39,063	24,757	31,656
Credit Metrics				
Gross debt/EBITDA	6.9x	4.8x	4.7x	9.7x
Net debt/EBITDA	3.9x	3.1x	2.7x	5.9x
EBITDA/interest	3.0x	4.0x	3.3x	1.5x
Debt/capital	57%	50%	46%	51%

Source: Company reports; Moody's

2018 disaggregation of revenue by segment



Source: Company reports

Business highlights

- **Contracted sales.** Sino-Ocean 2018 contracted sales increased by 55% y/y, to CNY 109.51bn. Sales rose 41.0% y/y in Beijing-Tianjin-Hebei, 26.6% in the Pearl River Delta, 10.6% in Yangtze Mid-stream, 8.5% in the Yangtze River Delta and 3.2% in Chengdu-Chongqing. Contracted GFA increased 39%, to 5.17mn sqm. Its contracted ASP was CNY21,187/sqm, up 11% y/y.
- **Land bank:** At end-2018, Sino-Ocean had a presence in 45 cities throughout China and entered 11 new cities in the year, including Maoming, Xi'an, Yantai and Jinan. At end-2018, the company had total land reserves of more than 40mn sqm, of which over 90% was in Tier 1 and Tier 2 cities. In 2018, it acquired total GFA of 10.18mn sqm of land (attributable GFA 5.67mn sqm). Its average acquisition cost of land plots was CNY7,100/sqm.
- **Funding from China Life Insurance Co:** The strategic partnership provides Sino-Ocean a funding channel for projects. Sino-Ocean benefits from a two-notch rating uplift from Moody's based on the agency's expectation of strong financial support from China Life, if needed. However, downward rating pressure could emerge if China Life reduces its shareholding or if its support weakens. Increasing competition from large national property developers and overseas developers in the Beijing-Tianjin-Hebei region may adversely affect China Life's funding decisions, given that government controls almost all land supply.
- **Sells most developed properties; retains some as investments or for rentals.** Sino-Ocean's investment properties include mainly grade-A office space, shopping malls, and commercial complexes, with a total leasable area of 1.2mn sqm. During 2018, the company's rental income increased 10.2% y/y, to CNY1,076.6mn. Sino-Ocean's business strategy aims to generate strong sales and recurring income from the property investment portfolio.
- **High debt leverage.** Gross debt/EBITDA rebounded to 6.9x in 2018 after two years of deleveraging, due to an increase in debt to replenish its property holdings and a drop in revenue driven by a construction delay. In addition, its interest coverage ratio declined to 7.2x, after improving for three years.

Yuexiu Property

Analyst
Wilson Ho

Company description: Yuexiu Property Company Ltd (Baa3/NR/BBB- Neg) a property developer operating in Guangzhou. It is 49.7% owned by Yue Xiu Enterprises (Holdings) Limited, which is a wholly-owned subsidiary of Guangzhou Yuexiu Holdings which is under the supervision of Guangzhou SASAC. Yuexiu achieved CNY57.78bn of contracted sales in 2018, up 41.4% y/y, and was above its full year target of CNY55.0bn. As at end-2018, unrecognised sales totalled CNY63.9bn (+61% y/y). The company has significant exposure to the Greater Bay Area, which contributed 60% of total contacted sales in 2018. Yuexiu has a unique business model, as it is the first real estate developer in China with a REIT platform listed on the HKSE (Yuexiu REIT, HKSE 00405). As of 31 December 2018, Yuexiu had a total land bank GFA of 19.41mn sqm, of which 9.42mn sqm (or 48%) was located in Greater Bay Area.

YUEXIU USD bonds

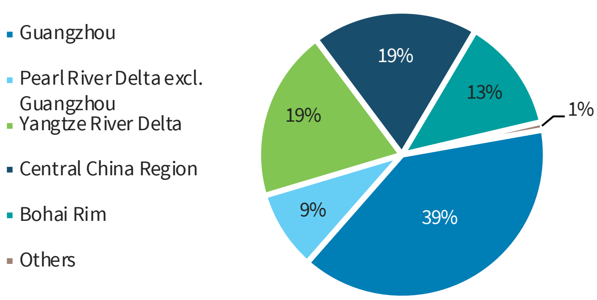
Bonds	Amt (mn)	Issuer	Offshore guarantor
YUEXIU 5.375% $' 23s (Baa3/BBB-/NR)	400	Westwood Group Holdings Ltd	Yuexiu Property Co Ltd
YUEXIU 4.875% $' 21s (Baa3/BBB-/NR)	800		
YUEXIU 4.5% $' 23s (Baa3/BBB-/NR)	500	Leading Affluence Ltd	

Financial snapshot

CNY mn	2018	2017	2016
Revenue	26,433	23,794	20,871
Gross Profit	8,393	6,108	4,340
Gross Profit Margin	31.8%	25.7%	20.8%
EBITDA	6,773	4,554	2,941
EBITDA Margin	25.6%	19.1%	14.1%
Total Debt	53,406	47,709	40,293
Net Debt	31,416	31,054	9,546
Credit Metrics			
Total Debt/EBITDA	7.9x	10.5x	13.7x
Net Debt/EBITDA	4.6x	6.8x	3.2x
EBITDA/Interest	2.2x	2.1x	1.4x
Total Debt/Capital	55.4%	56.3%	54.0%
Revenue breakdown			
Property development	91.9%	91.6%	92.7%
Property management	3.2%	3.1%	2.9%
Property investment	2.6%	2.6%	2.5%
Others	2.3%	2.7%	2.0%

Source: Company reports, Barclays Research

Land bank GFA distribution (up to end-2018)

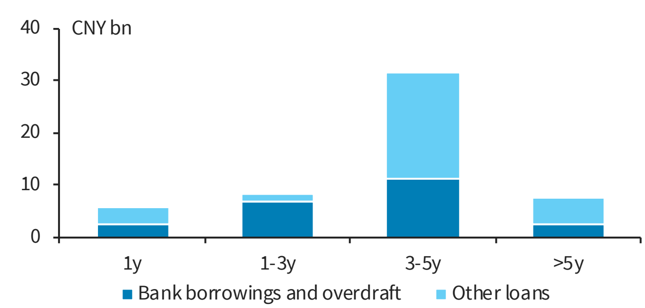


Source: Company reports, Barclays Research

Business highlights

- **Contracted sales.** In 2018, Yuexiu achieved contracted sales of CNY57.78bn (+41%) from contracted sales GFA of 2.77mn sqm. Its ASP was CNY20,900/sqm (+13.6% y/y). In 1H19, Yuexiu's contracted sales amounted to CNY36.9.0bn (+32% y/y), or 54.3% of its full-year contracted sales target of CNY68bn.
- **Concentrated geographic exposure.** At end-2018, Yuexiu had a total land bank GFA of 19.41mn sqm across 14 cities, of which 48% was located in the Greater Bay Area and 39.3% in Guangzhou city. This geographic concentration exposes the company to the risk of potential regulatory change and economic downturns in the region. However, thanks to a close relationship with the Guangzhou municipal government, its land bank is of good quality. These advantages enable Yuexiu to meet the growing housing demand in its core markets. The company also has business elsewhere, such as the Yangtze River Delta and Central areas, accounting to 22.8% and 15.2% of its total land bank, respectively.
- **Unique "Property←→ REIT" business model.** Yuexiu is first real estate developer with a listed REIT in Hong Kong that invests in China's property market, making it a "dual platform" business model. The REIT acts as a platform for Yuexiu Property to raise capital on completed and mature properties. At end-2018, Yuexiu owned 36.12% of Yuexiu REIT, which had 0.97mn sqm of commercial properties for lease, achieving revenue of CNY2.03bn in 2018 (+9.6%). In 2018, Yuexiu REIT distributed dividends of CNY850mn (+2.8% y/y), of which Yuexiu Property received CNY307mn.
- **Credit metrics.** Cash/short-term debt rose to 3.8x as at end-2018, up from 1.97x a year earlier, reaching a 5-year high. Total debt/EBITDA fell to 7.9x in 2018, from 10.5x (2016: 13.7x). At end-22018, cash had increased to 13% of total assets, from 12.5% the year before. Of total debt, 10.8% was set to mature with the next year at the end of 2018.

Debt maturity profile at end-2018



Source: Company reports, Barclays Research

Analyst Certification

We, Kai Chang, Wilson Ho, CFA, Avanti Save, CFA, Eugene Tham and Yimin Weng, CFA, 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/D/J/K/L/M/N
Representative Bond: BABA 3.6 11/28/24 (USD 104.87, 07-Aug-2019)

ALUMINUM CORP OF CHINA, CD/D/J/L

BAIDU INC, Market Weight, CD/CE/FA/FC/J
Representative Bond: BIDU 3 5/8 07/06/27 (USD 101.81, 07-Aug-2019)

BAOSTEEL FINANCING 2015 PTY LTD, CD/J

BEIJING ENTERPRISES HOLDINGS LTD, CD/J

BEIJING GAS SINGAPORE CAPITAL CORP, CD/J

BEIJING INFRASTRUCTURE INVESTMENT CO LTD, CD/J

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

CHINA BAOWU STEEL GROUP CORP LTD, CD/J

CHINA COMMUNICATIONS CONSTRUCTION CO LTD, CD/J

CHINA HUADIAN CORP LTD, CD/J

CHINA JINMAO HOLDINGS GROUP LTD, CD/D/J/K/L/M/N

CHINA MENGNIU DAIRY CO LTD, CD/E/J/L

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

CHINA METALLURGICAL GROUP CORP, CD/J

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

CHINA MOLYBDENUM CO LTD, CD/J

CHINA NATIONAL BLUESTAR GROUP CO LTD, Market Weight, A/CD/D/E/J/K/L/M/N
Representative Bond: CNBG 3 1/2 09/30/21 (USD 101.28, 07-Aug-2019)

CHINA NATIONAL CHEMICAL CORP LTD, Market Weight, CD/D/E/J/K/L/M/N
Representative Bond: HAOHUA 3.9 PERP (USD 99.92, 07-Aug-2019)

CHINA NATIONAL OFFSHORE OIL CORP, J

CHINA NATIONAL PETROLEUM CORP, Market Weight, CD/D/J/K/L/M/N
Representative Bond: CNPCCH 3.4 04/16/23 (USD 103.05, 07-Aug-2019)

CHINA NATIONAL TRAVEL SERVICE GROUP CORP LTD, CD/J

CHINA OILFIELD SERVICES LTD, Market Weight, CD/J
Representative Bond: COSL 3 1/4 09/06/22 (USD 100.91, 07-Aug-2019)

CHINA OVERSEAS LAND & INVESTMENT LTD, J

CHINA PETROCHEMICAL CORP, Underweight, A/CD/D/J/K/L/M
Representative Bond: SINOPE 3.9 05/17/22 (USD 103.86, 07-Aug-2019)

CHINA PETROLEUM & CHEMICAL CORP, Underweight, CD/CE/J
Representative Bond: SINOPC 3 1/8 04/24/23 (USD 102.38, 07-Aug-2019)

CHINA RAILWAY CONSTRUCTION CORP LTD, Market Weight, CD/D/E/J/K/L/M/N
Representative Bond: RLCONS 3.5 05/16/2023 (USD 103.44, 07-Aug-2019)

CHINA RAILWAY GROUP LTD, Market Weight, CD/J
Representative Bond: CHRAIL 3.85 02/05/23 (USD 104.32, 07-Aug-2019)

CHINA RESOURCES GAS GROUP LTD, CD/J

CHINA RESOURCES LAND LTD, CD/J

CHINA SHENHUA ENERGY CO LTD, J

CHINA SOUTHERN POWER GRID CO LTD, CD/D/E/J/K/L/M/N

CHINA STATE CONSTRUCTION ENGINEERING CORP LTD, CD/J

CHINA STATE CONSTRUCTION FINANCE CAYMAN I LTD, CD/J

CHINA THREE GORGES CORP, CD/D/E/J/K/L/M/N

CHINA VANKE CO LTD, CD/J

CHONGQING INTERNATIONAL LOGISTICS HUB INDUSTRY ZONE CONSTRUCTION CO LTD, CD/J

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

CITIC LTD, Underweight, CD/D/J/K/L/M/N
Representative Bond: CITLTD 3.7 06/14/26 (USD 103.35, 07-Aug-2019)

CNOOC LTD, Market Weight, CD/CE/J
Representative Bond: CNOOC 3 7/8 05/02/22 (USD 103.55, 07-Aug-2019)

ENN ENERGY HOLDINGS LTD, CD/J

GEELY AUTOMOBILE HOLDINGS LTD, CD/E/J/L

GLP CHINA HOLDINGS LTD, CD/J

GLP PTE LTD, CD/J

GUANGDONG HENGJIAN INVESTMENT HOLDING CO LTD, CD/J

HBIS GROUP CO LTD, CD/J

JD.COM INC, CD/CE/E/J/K/L/M

JIAXING CITY INVESTMENT & DEVELOPMENT GROUP CO LTD, CD/J

KING POWER CAPITAL LTD, A/CD/D/E/J/K/L/M/N

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

LENOVO GROUP LTD, CD/D/J/K/L/M

Longfor Group Holdings Ltd, CD/J

METALLURGICAL CORP OF CHINA LTD, CD/J

NANJING YANGZI STATE-OWNED INVESTMENT GROUP CO LTD, CD/J

OVERSEAS CHINESE TOWN ENTERPRISES CO LTD, CD/D/E/J/K/L/M/N

POLY DEVELOPMENTS AND HOLDINGS GROUP CO LTD, CD/J

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

PROVEN GLORY CAPITAL LTD, CD/D/J/K/L/M/N
Representative Bond: HUAWEI 3 1/4 02/21/22 (USD 99.17, 07-Aug-2019)
Representative Bond: HUAWEI 4 02/21/27 (USD 98.63, 07-Aug-2019)

QINGDAO CITY CONSTRUCTION INVESTMENT GROUP CO LTD, CD/J

SANDS CHINA LTD, CD/D/E/J/K/L/M

SF HOLDING INVESTMENT LTD, CD/J

SHANGHAI INTERNATIONAL PORT GROUP CO LTD, CD/J

SHENZHEN EXPRESSWAY CO LTD, CD/J

SHENZHEN INTERNATIONAL HOLDINGS LTD, CD/J

SHOUGANG GROUP CO LTD, CD/J

SIHC INTERNATIONAL CAPITAL LTD, CD/J

SINO-OCEAN GROUP HOLDING LTD, A/CD/D/E/J/L

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

SINOCHEM INTERNATIONAL CORP, CD/D/J/K/L/M/N

STATE DEVELOPMENT & INVESTMENT CORP LTD, CD/D/E/J/K/L/M/N

STATE GRID CORP OF CHINA, CD/J

STATE POWER INVESTMENT CORP LTD, CD/J

SUNNY OPTICAL TECHNOLOGY GROUP CO LTD, CD/J

SYNGENTA FINANCE AG, CD/J

TENCENT HOLDINGS LTD, Market Weight, CD/D/J/K/L/M/N
Representative Bond: TENCNT 2 7/8 02/11/20 (USD 100.25, 07-Aug-2019)

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

TIANJIN RAIL TRANSIT GROUP CO LTD, CD/J

WANT WANT CHINA FINANCE LTD, CD/J

WEIBO CORP, CD/CE/J

WEICHAI INTERNATIONAL HONG KONG ENERGY GROUP CO LTD, CD/E/J/L
Representative Bond: WEICHA 4 1/8 09/30/20 (USD 101.50, 07-Aug-2019)

WESTWOOD GROUP HOLDINGS LTD, CD/J

XIAMEN XIANGYU GROUP CORP, CD/J

YIWU STATE-OWNED CAPITAL OPERATION CO LTD, CD/J

YUNNAN ENERGY INVESTMENT OVERSEAS FINANCE CO LTD, CD/J

ZHONGYUAN YUZI INVESTMENT HOLDINGS GROUP CO LTD, CD/J

ZIJIN MINING GROUP CO LTD, CD/J

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V: The equity securities of this Canadian issuer include non-voting restricted shares.

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Overweight (OW):
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.

Sector definitions:
Sectors in U.S. High Grade Research are defined using the sector definitions of the Bloomberg Barclays U.S. Credit Index and are rated against the Bloomberg Barclays U.S. Credit Index.
Sectors in U.S. High Yield Research are defined using the sector definitions of the Bloomberg Barclays U.S. High Yield 2% Issuer Capped Credit Index and are rated against the Bloomberg Barclays U.S. High Yield 2% Issuer Capped Credit Index.

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Sectors in Industrials and Utilities in European High Yield Research are defined using the sector definitions of the Bloomberg Barclays Pan-European High Yield 3% Issuer Capped Credit Index excluding Financials and are rated against the Bloomberg Barclays Pan-European High Yield 3% Issuer Capped Credit Index excluding Financials.
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Sectors in Asia High Yield Research are defined on Barclays Live and are rated against the Bloomberg Barclays EM Asia USD High Yield Corporate Credit Index.

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To view sector definitions and monthly sector returns for Asia, EEMEA and Latin America Research, go to https://live.barcap.com/go/research/EMSectorReturns on Barclays Live.

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For all High Grade issuers covered in the US, Europe or Asia, and for all issuers in Latin America and EEMEA, the credit rating system is based on the analyst's view of the expected excess return over a six-month period of the issuer's index-eligible corporate debt securities* relative to the expected excess return of the relevant sector, as specified on the report.

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.
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.
Not Covered (NC): Barclays' fundamental credit research team does not provide formal, continuous coverage of this issuer and has not assigned a rating to the issuer or its debt securities. Any analysis, opinion or trade recommendation provided on a Not Covered issuer or its debt securities is valid only as of the publication date of this report and there should be no expectation that additional reports relating to the Not Covered issuer or its debt securities will be published thereafter.

For all High Yield issuers (excluding those covered in EEMEA or Latin America), the credit rating system is based on the analyst's view of the expected total returns over a six-month period of the rated debt security relative to the expected total return of the relevant sector, as specified on the report.

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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26% have been assigned an Underweight rating which, for purposes of mandatory regulatory disclosures, is classified as a Sell rating; 60% of issuers 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.

Explanation of the Barclays EM Sovereign Credit Issuer Rating System
Overweight (OW):
The analyst expects the six-month excess return of the country's index eligible bonds to exceed the six-month excess return of the Bloomberg Barclays EM USD Sovereign Index.
Market Weight (MW):
The analyst expects the six-month excess return of the country's index eligible bonds to be in line with the six-month excess return of the Bloomberg Barclays EM USD Sovereign Index.
Underweight (UW):
The analyst expects the six-month excess return of the country's index eligible bonds to be less than the six-month excess return of the Bloomberg Barclays EM USD Sovereign Index.
Rating Suspended (RS):
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44% have been assigned Market Weight rating which, for purposes of mandatory regulatory disclosures, is classified as a Hold rating; 20% of issuers with this rating category are investment banking clients of the Firm; 67% of the issuers with this rating have received financial services from the Firm.
26% have been assigned an Underweight rating which, for purposes of mandatory regulatory disclosures, is classified as a Sell rating; 44% of issuers with this rating category are investment banking clients of the Firm; 89% of the issuers with this rating have received financial services from the Firm.

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