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Oil Services – China

Strong oil & gas demand will underpin credit quality of oilfield services providers

» **Two main factors will support oilfield services (OFS) providers' domestic revenue over the next 12-18 months.** Strong oil and natural gas production in China (A1 stable) and the increase in national oil companies' (NOCs) aggregated capital spending will drive demand for oilfield services. With increasing work volume, domestic revenue for the rated OFS providers, China Oilfield Services Limited (COSL, A3 stable), Anton Oilfield Services Group (B1 negative) and Honghua Group Limited (B1 stable), will either rise or remain stable. Domestic revenue accounted for more than half of the three OFS companies' 2020 revenue, which reflects their high dependence on China's oil and gas production.

» **Rising oil and gas production in China will bolster OFS companies' operations**. China's continued economic growth and the government's push for energy security will drive oil and gas production, which in turn supports demand for oil and gas field products and services. In addition, a gradual oil-price recovery will propel oil and gas companies to increase oil production. Meanwhile, the country's plan to cut carbon emissions will boost demand and production of natural gas. All of these factors will support OFS companies' domestic businesses.

» **NOCs' increased aggregated capital spending budget for 2021 will also support OFS companies' domestic revenue.** Aggregated capital spending for the three major NOCs will likely rise around 9% in 2021, underpinning additional demand for oil and gas field services and products. OFS revenues and NOCs' capital spending are positively correlated because NOCs dominate China's upstream sector. However, the positive effect for OFS companies will not be immediate because of the time lag between the rise in NOC capital spending and when the OFS providers receive payment for their work. Meanwhile, demand for oil and gas services from overseas clients will remain weak as they focus on capital discipline and operating efficiency following a difficult year in 2020.

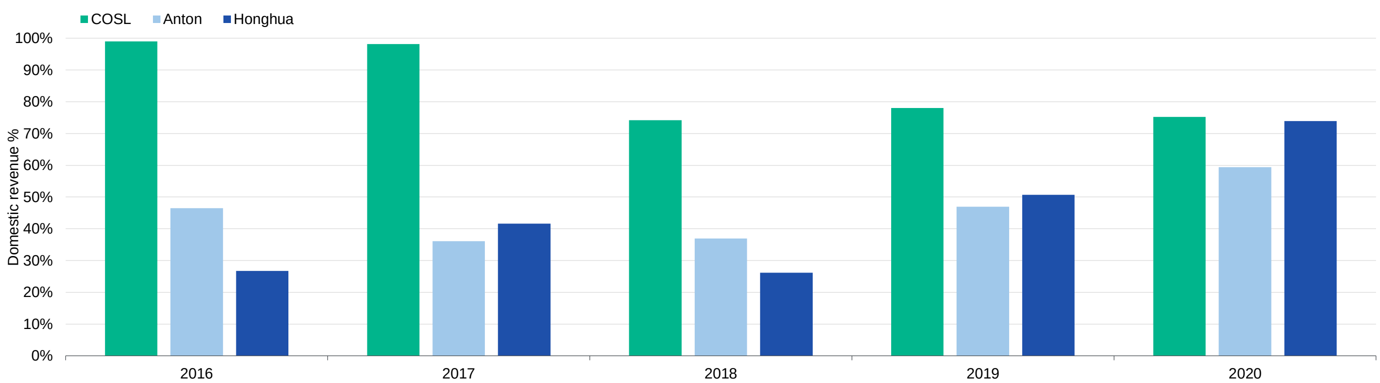
» **Positive impact on rated OFS companies' credit profiles will vary.** COSL will maintain stronger credit metrics than Anton and Honghua because of its significantly larger scale and its captive-services provider role. The company's large amount of captive orders limited its revenue decline during the pandemic. It will continue to maintain lower leverage and stronger interest coverage ratio than its domestic peers. Anton's credit profile is stronger than Honghua's standalone credit profile given its lower debt leverage and higher earnings. Still, support and operational benefits from Honghua's largest shareholder, China Aerospace Science and Industry Corporation (CASIC), will support its domestic revenue growth and overall earnings recovery in the next two years.

Two main factors will support OFS providers' domestic revenue over the next 12-18 months

We expect that China Oilfield Services Limited (COSL, A3 stable), Anton Oilfield Services Group (B1 negative) and Honghua Group Limited (B1 stable) will benefit from strong oil and natural gas production in China (A1 stable) as well as increased capital spending by the three major Chinese national oil companies (NOCs) over the next 12-18 months. Production will be strong as China's economy gradually recovers from the pandemic and the government promotes natural gas as an important transition fuel in the national carbon emission reduction plan. Additionally, we expect the increase in the NOCs' aggregate 2021 capital spending will drive higher work volume for the three rated oilfield services (OFS) companies.

Revenues for COSL, Anton and Honghua are linked to the capital spending of the three NOCs because the NOCs dominate Chinese exploration and production (E&P) activity. As shown in Exhibit 1, COSL, Anton and Honghua generated 75%, 59%, 74% of their revenue from the domestic market in 2020, reflecting their high dependence on China's oil and gas production. We expect their 2021 and 2022 domestic revenue concentration will remain similar to the level in 2020.

Exhibit 1
COSL, Anton and Honghua have high revenue exposure to the domestic market
Percentage of domestic revenue out of total revenue



Source: Companies' annual reports

Rising NOC capital spending points to higher demand for the OFS companies' products and services. The three major NOCs, China National Petroleum Corporation (CNPC, A1 stable), China Petrochemical Corporation (Sinopec Group, A1 stable), and China National Offshore Oil Corporation (CNOOC Group, A1 stable), increased their capital spending budget on an aggregated basis for 2021 in response to the gradual recovery in oil prices and the country's continued push for energy security.

Rising oil & gas production in China will bolster OFS companies' operations

China's oil and gas production will rise for several reasons. Higher production will support the country's continued economic growth. In addition, increasing domestic oil and gas reserves and production is part of China's strategy to boost energy security. A gradual oil-price recovery will support oil production, while demand and production of natural gas will increase because of China's plan to reduce carbon emissions.

China's economic growth will boost demand for oil & gas

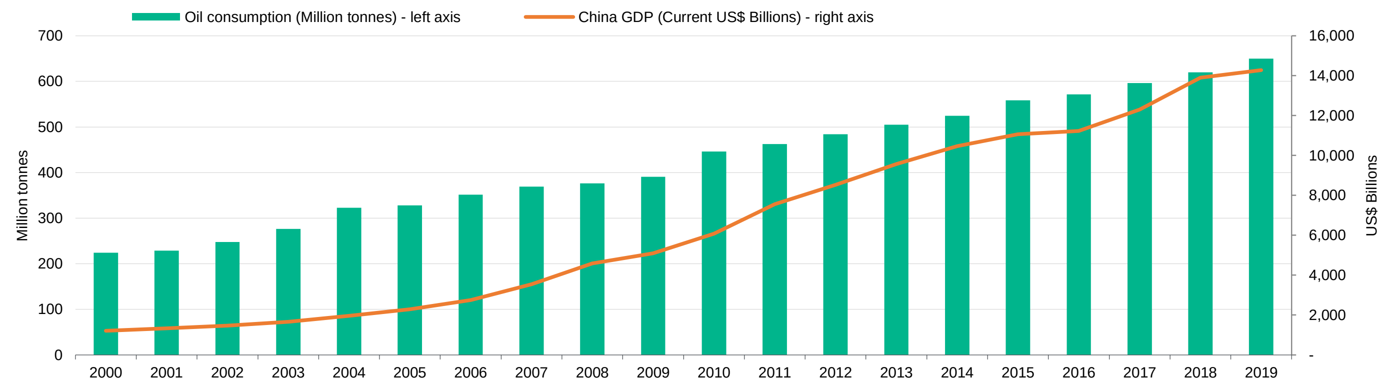
China's oil and gas consumption has been positively correlated with the country's GDP growth over the past two decades (Exhibits 2 and 3). Oil and gas consumption increased during this period to support China's growing economy.

We expect oil and gas consumption will continue to grow to support China's real GDP growth of 8.5% in 2021 and 5.5% in 2022.[1] Specifically, oil and gas demand growth will reach a mid-single-digit percentage in 2021 as the Chinese economy recovers from the coronavirus pandemic, based on Moody's oil and gas outlook for 2021. In comparison, demand for oil grew 3.3% and that for gas grew 7.2% in 2020, according to National Bureau of Statistics data.

Higher oil and gas consumption will drive production, which will in turn support the domestic revenue of OFS companies.

Exhibit 2

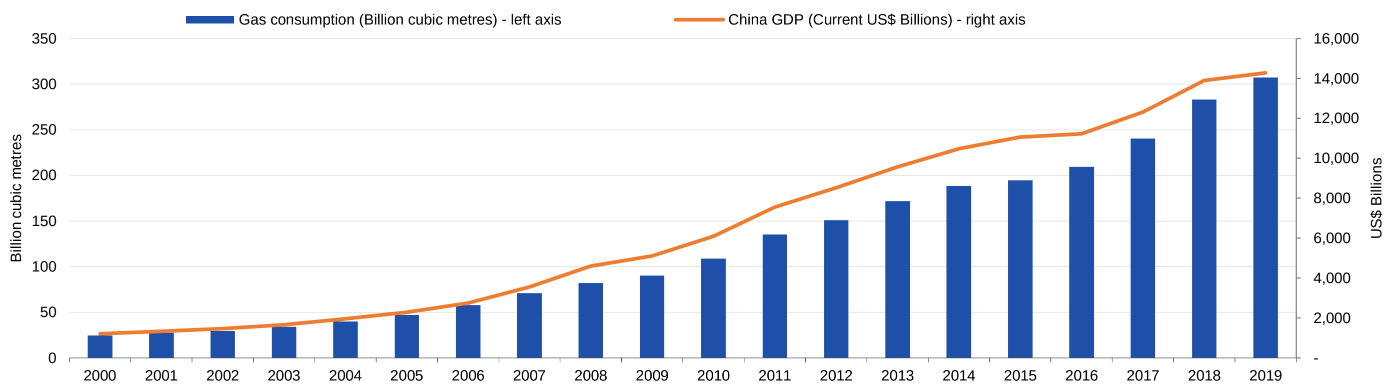
China's GDP growth supports domestic oil consumption



Source: World Bank - World Development Indicators, BP Statistical Review of World Energy - all data, 1965-2019 (latest available data)

Exhibit 3

China's GDP growth supports domestic gas consumption



Source: World Bank - World Development Indicators, BP Statistical Review of World Energy - all data, 1965-2019 (latest available data)

Government's continued push for energy security will drive oil & gas production

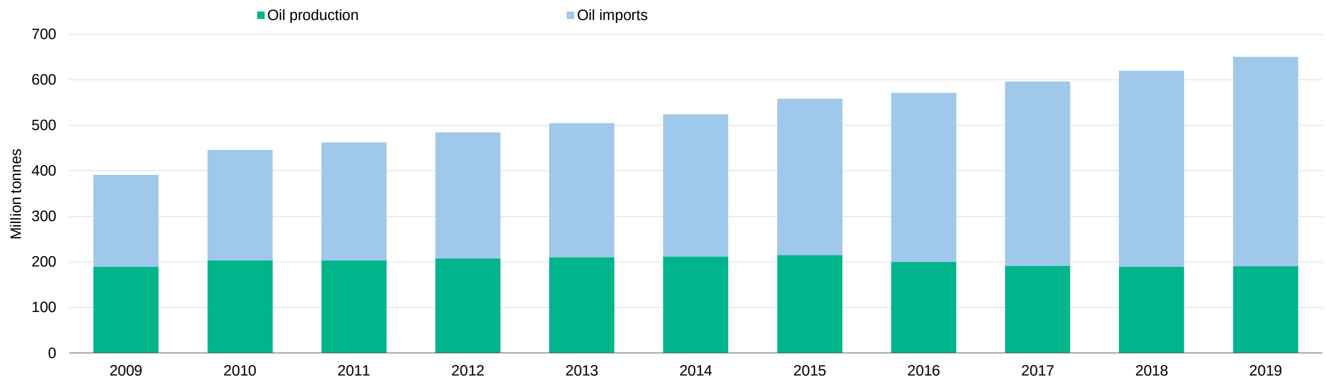
China's push to reduce its reliance on imports and improve energy security is another factor supporting domestic oil and gas production over the next 12-18 months. Demand for oil and gas field products and services will rise because of this.

As shown in Exhibit 4, a sizeable imbalance exists between China's consumption of oil and domestic production, with imports accounting for more than half of annual consumption. Meanwhile, the surge in natural gas imports in the last few years reflects a shortage in domestic supply (Exhibit 5).

Exhibit 4

China continues to import a large portion of its oil needs

Annual domestic consumption of oil

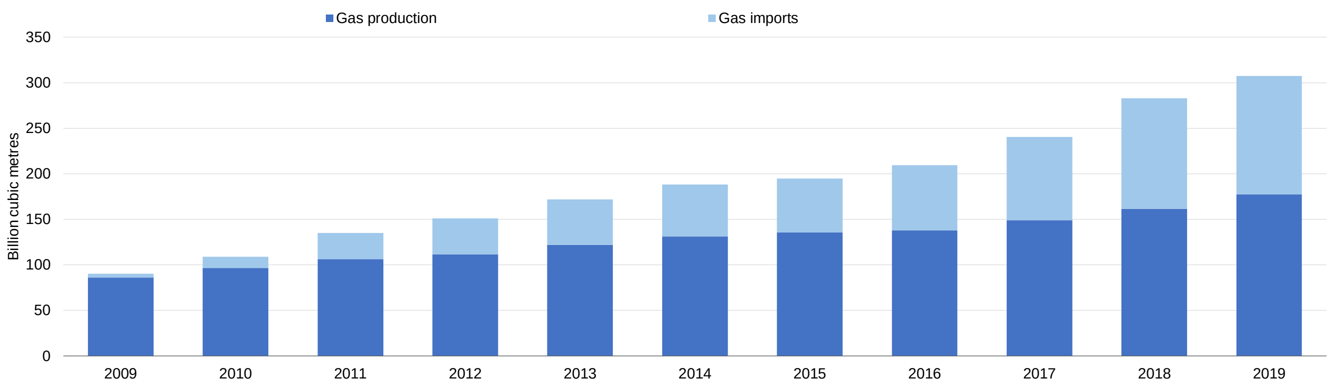


Source: BP Statistical Review of World Energy - all data, 1965-2019 (latest available data)

Exhibit 5

Natural gas imports have grown rapidly in recent years to meet China's growing consumption

Annual domestic consumption of natural gas



Source: BP Statistical Review of World Energy - all data, 1965-2019 (latest available data)

China has been a net importer of oil for the past 20 years because of growing consumption but limited sources of easily exploitable oil. The gap between consumption and production has only widened during this period. By 2020, China was the world's largest oil importer and one of the world's largest gas importers. China imported around 73% of its oil and 43% of its natural gas needs in 2020. To reduce dependence on imports, the government has called for action to improve self-sufficiency in oil and gas, which was further reinforced in China's 14th 5-year plan.

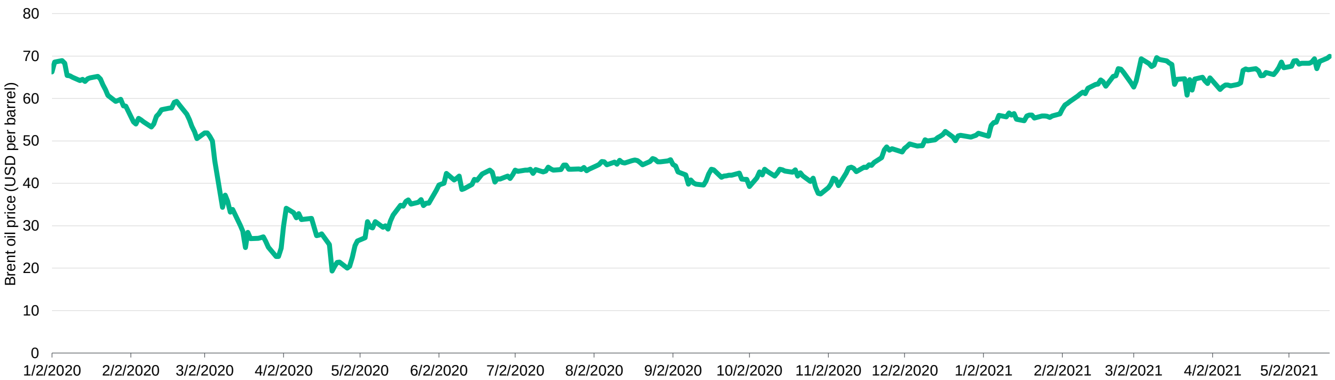
In addition, all three NOCs have released seven-year action plans to intensify domestic E&P from 2019 to 2025. The objective of these plans is to stabilize oil output and increase natural gas production.

Gradual recovery in oil price propels oil & gas companies to increase production

Higher oil prices will support oil and gas companies' revenues and incentivize them to increase production.

Exhibit 6

Oil prices have gradually recovered after tumbling in March 2020



Source: Bloomberg

Oil prices tumbled in March 2020 following the coronavirus outbreak but staged an impressive recovery since. Oil is now trading at or above the upper level of Moody's medium-term oil price range of $45-$65/barrel. Restrained supply amid steadily improving demand for oil and refined products at a global level propelled prices upward. We expect that Brent spot prices will average $62/barrel in 2021 and $60/barrel in 2022,[2] which will prompt oil and gas companies to increase production over the next 12-18 months.

The national carbon emission reduction plan will boost demand and production of natural gas

China's push to reduce the percentage of coal-fired power from its overall power generation mix will further promote natural gas consumption over the next 12-18 months. Natural gas will serve as an important transition fuel to complement other clean energies in the national carbon emission reduction plan.

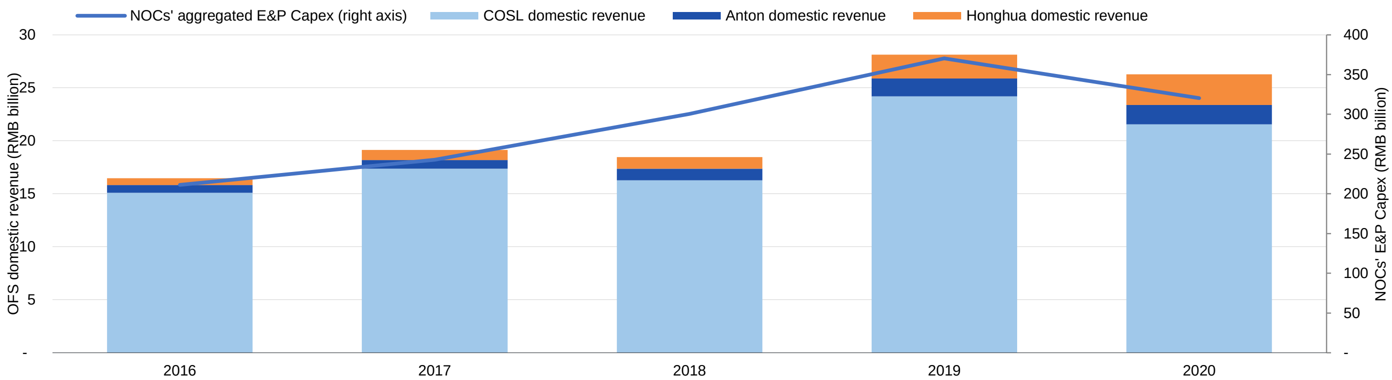
Increasing natural gas in the primary energy mix has been an important approach to achieve China's carbon reduction targets. Natural gas is a lower-carbon transition fuel that can bridge the gap between the present energy mix and lower-carbon fuels. Specifically, China aims to increase natural gas consumption to 15% of its primary energy mix by 2030, compared with around 8% in 2019. As a result, we estimate that China's natural gas demand will grow around 10% annually through 2025 (see Oil and Gas – Global: 2021 Outlook, 8 December 2020). We expect domestic production will rise to meet China's growth in demand and also to partially mitigate the risk of reliance on imports.

NOCs' increased aggregated capital spending budget for 2021 will also support OFS companies' domestic revenue

The three NOCs raised their aggregated capital spending budget by around 9% in 2021 to RMB501 billion from actual capital spending of RMB461 billion in 2020. The increase in NOCs' aggregated spending will result in additional demand for COSL, Anton and Honghua's products and services.

Higher capital spending, in particular spending on E&P, by the NOCs will support OFS companies domestic revenue (Exhibit 7).

Exhibit 7
The three major NOCs' E&P capital spending drives domestic revenue of OFS companies



Source: Companies' annual reports

Despite higher NOC capital spending in 2021, COSL's revenue will decline 3% in 2021 to around RMB28 billion, before improving by 5% in 2022 to around RMB30 billion. The company continues to suffer the effects of a drop in new orders in 2020 and lower order price on contracts signed last year. In addition, we expect work orders from overseas clients will remain weak. Despite the gradual recovery in oil prices, many foreign E&P companies will limit capital spending in 2021 and focus intensely on capital discipline and operating efficiency following a difficult 2020. Moreover, a time lag between when NOCs increase their capital spending and when COSL will reap the benefit will also weigh on the company's revenue in 2021. However, COSL's revenue will gradually improve over the next 12-18 months from our expectation of NOCs' increased capital spending and a gradual improvement in oil prices leading to higher work volume. But pricing power will likely remain weak.

For Anton, we expect its revenue will grow by 6% and 8% in 2021 and 2022, respectively, because of projected growth in its domestic business. Anton has high business exposure to natural gas. Around 80% of Anton's projects support natural gas development in China, and therefore it is well positioned to benefit from strong growth in China's natural gas sector over the next two years. Additionally, gradual recovery in its overseas operations in markets such as Iraq, as well as a gradual increase in oil prices will support Anton's revenue over the next 12-18 months.

We estimate Honghua's revenue will increase by around 9% and 6% in 2021 and 2022, respectively. A gradual recovery in oil prices will drive oil and gas companies' E&P activities, in turn boosting demand for Honghua's products and services. Because of its high exposure to the natural gas sector in China, with 50%-60% of its service and equipment revenue in China related to natural gas, Honghua will also benefit from increasing production activity in the country over the next 12-18 months.

Positive impact on rated OFS companies' credit profiles will vary

COSL will maintain stronger credit metrics than Anton and Honghua over the next 12-18 months, but we expect Anton's and Honghua's credit metrics will improve in the same period.

COSL

COSL will continue to maintain the strongest credit metrics among the three rated OFS companies. COSL's significantly larger scale and its large amount of captive orders from its parent, CNOOC, underscore its better credit quality. COSL's revenue was more than 9x that of Anton's and 7x that of Honghua's in 2020. Its total assets were around 10x that of Anton's and 6x that of Honghua's as of year-end 2020.

COSL generated 70%-81% of its revenue over the past five years from captive orders from CNOOC family companies. Captive orders face less cancellation and renewals risks than external ones, especially during periods of low oil prices. The large amount of captive orders limited COSL's revenue decline during the pandemic. COSL's total revenue only fell 7% in 2020, compared with declines of 14% and 11% for Anton and Honghua.

We expect COSL's leverage, as measure by adjusted debt/EBITDA, will increase to 2.7x-2.8x in 2021 and 2022, from 2.4x in 2020. EBITDA will be lower than the level in 2020 because of weaker revenue while debt will remain largely flat. However, COSL's leverage in

2021-22 will still be appropriate for its current standalone credit profile. COSL's leverage will remain the lowest among the three OFS companies. Anton's leverage will be around 3.0x-3.5x and Honghua's around 6.0x-6.5x in 2021-22.

COSL will also maintain much stronger interest coverage ratio, as measured by EBITDA/interest expense, than Anton and Honghua in 2021-22, as shown in Exhibit 8. COSL's high interest coverage ratio is helped by its strong financial links with the CNOOC family companies and low interest rate intercompany loans from group companies.

COSL's importance to CNOOC is reflected in a four-notch parental uplift incorporated in its A3 issuer rating. We expect that the company will receive a high level of support from parent CNOOC in times of need. COSL is the primary provider of the group's drilling and oilfield services, and the company fulfills most of CNOOC's drilling, well services, marine support and seismic survey needs.

Anton

Anton's credit profile is stronger than Honghua’s standalone credit profile given its lower debt leverage and higher earnings.

We expect Anton's leverage to improve toward 3.0x-3.5x over the next two years from 4.6x in 2020, driven by improved earnings and a slight decrease in debt. These levels are stronger than Honghua's leverage of 6.0x-6.5x.

We project the company's adjusted EBITDA margin to improve to around 25% over the next two years from 21% in 2020. Sustained cost and expense control measures and increasing revenue contribution from its overseas drilling projects that have higher gross margins will partially offset intense price competition. Therefore, adjusted EBITDA will increase to about RMB932 million in 2022 from RMB654 million in 2020. These levels are higher than our current estimate of Honghua's adjusted EBITDA of about RMB693 million in 2022 and RMB478 million in 2020.

Anton's adjusted debt should decline slightly from about RMB3 billion as of year-end 2020. The decline will come on the back of solid free cash flow, supported by strong cash flow from operations because of improved profitability, better working capital cycle management to reduce account receivables and inventory turnover days, and prudent capital spending. Also, we expect Anton's cash position will increase from RMB879 million at year-end 2020. The expected lower debt level and strengthened balance sheet liquidity will provide a buffer against oil price volatility.

Honghua

Honghua's standalone credit profile is the weakest among the three rated OFS companies. However, support and operational benefits from the company's largest shareholder, China Aerospace Science and Industry Corporation (CASIC), will support its domestic revenue growth and overall earnings recovery over the next two years. CASIC is a central state-owned enterprise in China and Honghua's largest shareholder with 29.98% ownership as of year-end 2020.

Honghua's rating incorporates a one-notch uplift on account of our expectation that the company will receive extraordinary support from CASIC in times of financial distress. Honghua is important to CASIC because it is CASIC's main platform for energy equipment manufacturing to support the country's energy security target. Honghua is also a major affiliate for CASIC’s international operations and an overseas investment and financing platform.

CASIC has increased its support to Honghua’s operations and capital structure since it became the company's largest shareholder in May 2017. Such support is reflected in Honghua’s significant domestic sales growth over 2017-20, with more orders from China’s oil majors.

Honghua's revenue from China increased 364% (or at a four-year compound annual growth rate of 47%) to RMB2.91 billion in 2020 from RMB626 million in 2016. Revenue from China accounted for 74% of total revenue in 2020 compared with only 27% in 2016. We expect the concentration to stay between 70% and 75% over the next two years.

Support from CASIC is also reflected in Honghua’s enhanced access to domestic bank funding, with large undrawn credit facilities and low funding costs, and the credit facilities that Honghua can access from CASIC’s subsidiaries.

Excluding higher-than-normal impairment losses on financial and contract assets in 2020, Honghua's adjusted debt/EBITDA will improve to 6.0x-6.5x over the two years from 7.2x in 2020, underpinned by higher earnings and a modest decrease in adjusted debt.

Exhibit 8

Key metrics for COSL, Anton and Honghua

RMB millions	COSL			Anton			Honghua		
	2020	2021E	2022E	2020	2021E	2022E	2020	2021E	2022E
Total assets	75,942	78,725	80,478	7,881	7,981	8,215	11,877	12,040	12,317
Total revenue	28,925	28,112	29,505	3,088	3,273	3,536	3,931	4,291	4,552
Adjusted EBITDA	10,785	9,460	9,945	654	790	932	478	634	693
Adjusted debt	25,805	26,500	26,500	2,992	2,892	2,792	4,573	4,343	4,263
Adjusted debt/EBITDA	2.4x	2.8x	2.7x	4.6x	3.7x	3.0x	9.6x	6.8x	6.1x
Adjusted EBITDA/interest	12.1x	10.6x	11.0x	1.8x	2.8x	3.5x	2.2x	2.8x	3.1x

All ratios are based on Moody's 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Nonfinancial Corporations
Source: Moody's Financial Metrics™ and Moody's Investors Service estimates

Moody's related publications

Credit Opinion

» Credit Opinion - China Oilfield Services Limited, 11 December 2020

» Credit Opinion - Anton Oilfield Services Group, 06 May 2021

» Credit Opinion - Honghua Group Limited, 28 April 2021

Issuer Comment

» Issuer Comment - COSL: CNOOC Limited's increased capital spending is credit positive for China Oilfield Services Limited, 5 February 2021

» Issuer Comment - Anton: Weak 2020 results because of lower earnings amid the coronavirus pandemic, 30 March 2021

Endnotes

1 See **Global Macro Outlook 2021-22 (May 2021 Update): Recovery solidifies in the US and Europe, while emerging markets face multiple risks**, 26 May 2021.

2 See **Global Macro Outlook 2021-22 (May 2021 Update): Recovery solidifies in the US and Europe, while emerging markets face multiple risks**, 26 May 2021

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