

Chinasoft International | 354 HK

Coming out of the trough

- **Sentiment improved as effects of US-China dispute appear minimal on Huawei**
- **Better business outlook for 2020F**
- **Still attractive valuation, maintain Outperform**

Outperform (maintained)

Current price:

HK\$4.60

(as at mid-day 12 Dec 2019)

Target:

► **HK\$5.60**

(up from HK\$5.00)

Sentiment improved as effects of US-China dispute appear minimal on Huawei. Chinasoft's share price was depressed for most of 2019 as the market was concerned about the negative impact arising from the US-China dispute on Huawei, who is Chinasoft's largest revenue contributor. However, Huawei's business has remained solid and healthy in 2019, as its revenue grew by 24.4% YoY to reach RMB611b in 9M19, alongside a stable margin performance. Huawei and Chinasoft today announced to jointly build an artificial intelligence (AI) innovation center to develop AI and Huawei's Kunpeng Ecosystem. We take this as a very positive signal that Huawei will continue to invest in enterprise-level new initiatives and endorse Chinasoft as an important and reliable business partner.

Better business outlook for 2020F. Despite the soft macro-economy in China in the recent year, China's software industry's performance has largely been positive, with overall revenue up by 15.2% in Jan-Oct 2019, mildly higher than the 15.1% in Jan-Oct 2018. In addition, we see a few characteristics that may benefit Chinasoft in particular. Firstly, Chinasoft mainly serves large clients (including Huawei, HSBC, PingAn, BAT, SF Express, etc). These clients are relatively less affected by the soft economy compared to SMEs. Secondly, following the China-US tech war, the central government has been keen to improve information security and controllability, and Chinasoft is a reliable and experienced player to carry out this implementation. We expect its new business revenue to grow at c.50% YoY in 2020F to RMB3.0b, up from a growth rate of c.25% in 2019F.

Still attractive valuation. On a better business outlook, we raise our FY19F/20F earnings by 1.1%/13.5%. Chinasoft's share price has come out of a trough but remains at an undemanding valuation of 12.3x FY20F P/E, lower than its five year average of c.15.0x. We raise our target price from HK\$5.00 to HK\$5.60. Our target price is still based on 15x FY20F P/E, in-line with its five-year average. We believe the worst is over for Chinasoft and it should benefit from a new wave of Huawei's cloud and AI business growth and IT infrastructure localization in China.

Forecast and valuation

| Year to 31 Dec | 2017 | 2018 | 2019F | 2020F | 2021F |
|-------------------------|--------|--------|--------|--------|--------|
| Revenue (Rmbm) | 9,244 | 10,585 | 12,003 | 14,028 | 15,931 |
| YoY (%) | 36.3 | 14.5 | 13.4 | 16.9 | 13.6 |
| Net profit (Rmbm) | 566 | 716 | 733 | 908 | 1,075 |
| YoY (%) | 27.9 | 26.6 | 2.4 | 23.9 | 18.5 |
| Fully Diluted EPS (Rmb) | 0.22 | 0.26 | 0.27 | 0.33 | 0.40 |
| YoY (%) | 9.0 | 19.4 | 4.9 | 23.9 | 18.5 |
| P/E(x) | 17.8 | 15.7 | 15.2 | 12.3 | 10.4 |
| DPS (HK\$) | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 |
| Dividend yield (%) | 0.4 | 0.5 | 0.5 | 0.6 | 0.7 |
| P/B (x) | 2.1 | 1.9 | 1.7 | 1.5 | 1.3 |
| ROAE (%) | 12.0 | 12.9 | 11.6 | 12.8 | 13.4 |
| Net debt/equity (%) | (21.0) | (16.1) | (18.2) | (17.9) | (19.8) |

Source: Bloomberg, CCBIS estimates

Trading data

| | |
|--------------------------------|-----------------------|
| 52-week range | HK\$ 3.19 – 5.28 |
| Market capitalization (m) | HK\$ 12,782/US\$1,643 |
| Shares outstanding (m) | 2,779 |
| Free float (%) | 80 |
| 3M average daily T/O (m share) | 14.7 |
| 3M average daily T/O (US\$m) | 8.4 |
| Expected return (%) – 12 month | 21.7 |

Source: Bloomberg, CCBIS estimates

Share price vs HSCEI



Source: Bloomberg, CCBIS

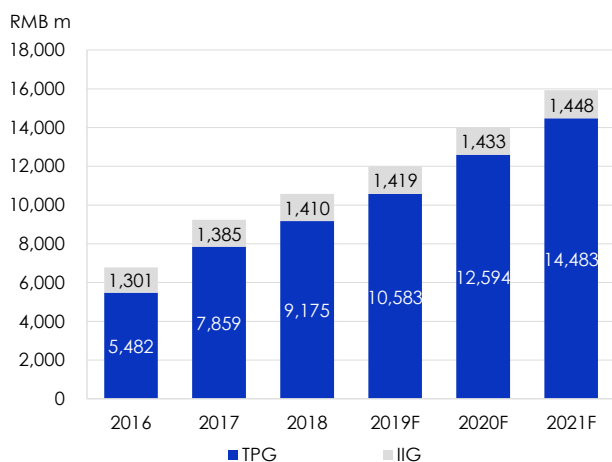
Stock performance

| Performance over | 1M | 3M | 12M |
|-----------------------|----|----|-----|
| Absolute | 27 | 30 | 16 |
| Relative (%) to HSCEI | 25 | 31 | 14 |

Source: Bloomberg, CCBIS

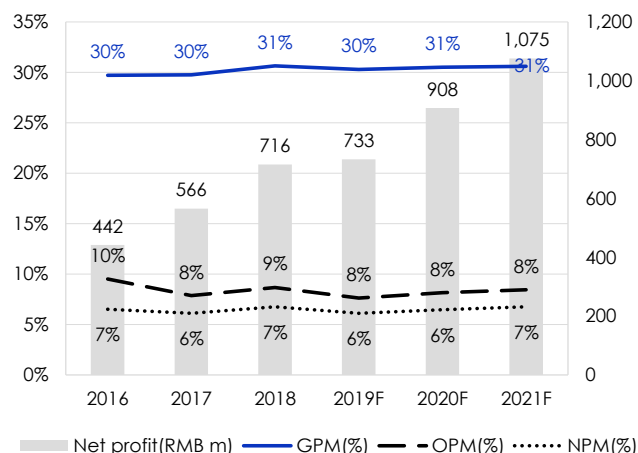
Eric Qiu, CFA(852)3911 8243
ericqiu@ccbintl.com**Ronnie Ho**(852)3911 8259
ronnieho@ccbintl.com

Chinasoft – revenue mix (RMB m)



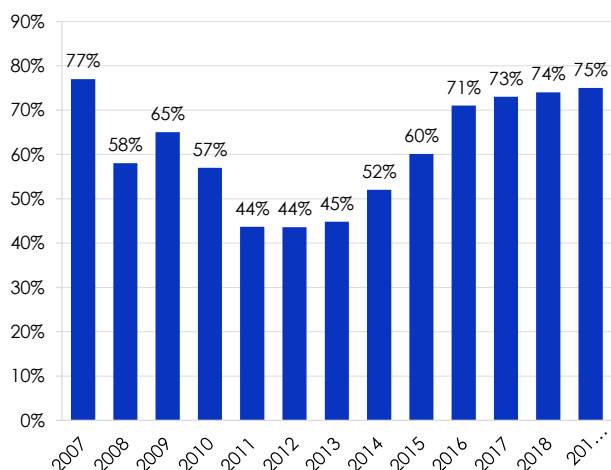
Source: Company data, CCBIS estimates

Chinasoft – net income (RMB m) and margin ratios



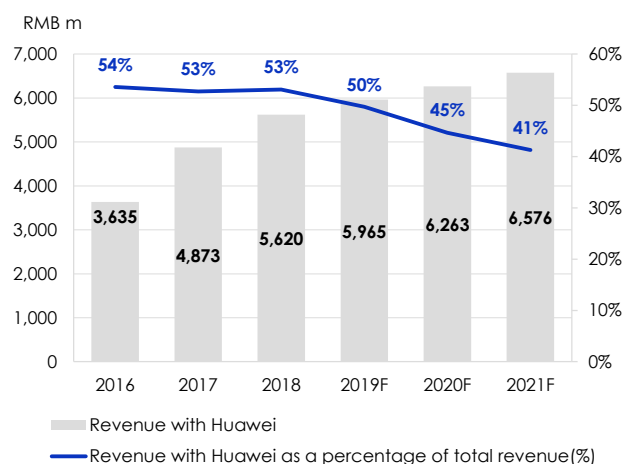
Source: Company data, CCBIS estimates

Chinasoft – top-10 customers by revenue contribution (%)



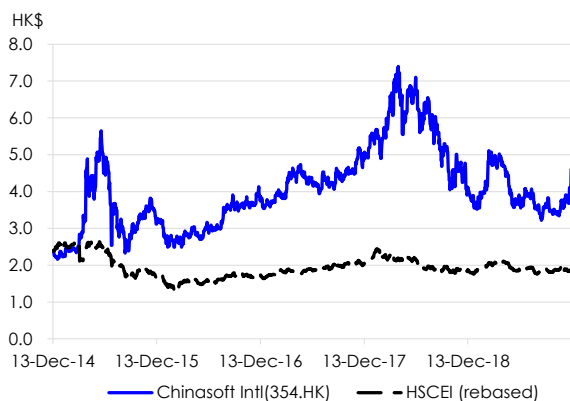
Source: Company data, CCBIS estimates

Chinasoft – revenue from Huawei



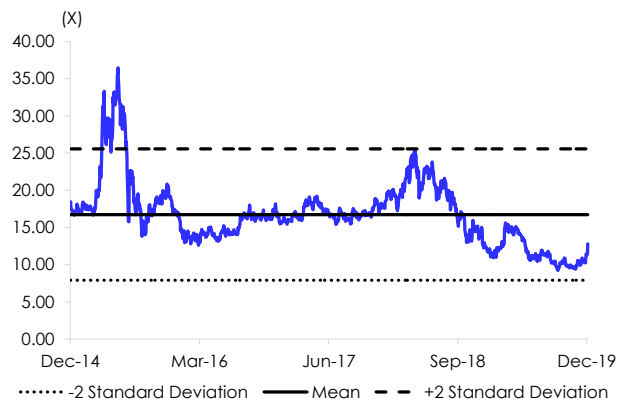
Source: Company data, CCBIS estimates

Chinasoft – price performance vs. HSCEI



Source: Bloomberg, CCBIS

Chinasoft – 5-year P/E bands



Source: Bloomberg, CCBIS

Chinasoft International – earnings revisions

| Profit and loss | New forecast | | | Previous forecast | | | Change (%) | | |
|------------------|--------------|--------|--------|-------------------|--------|--------|------------|-------|-------|
| | 2019F | 2020F | 2021F | 2019F | 2020F | 2021F | 2019F | 2020F | 2021F |
| RMB m | | | | | | | | | |
| Revenue | 12,003 | 14,028 | 15,931 | 12,003 | 13,604 | 15,323 | 0.0 | 3.1 | 4.0 |
| Gross profit | 3,635 | 4,278 | 4,875 | 3,635 | 4,149 | 4,689 | 0.0 | 3.1 | 4.0 |
| Opex | -2,721 | -3,135 | -3,529 | -2,721 | -3,095 | -3,471 | 0.0 | 1.3 | 1.7 |
| Operating profit | 914 | 1,143 | 1,346 | 914 | 1,054 | 1,218 | 0.0 | 8.4 | 10.5 |
| Net profit | 733 | 908 | 1,075 | 724 | 799 | 921 | 1.1 | 13.5 | 16.8 |
| % | | | | | | | | | |
| Gross margin | 30.3 | 30.5 | 30.6 | 30.3 | 30.5 | 30.6 | - | - | - |
| OPEX to sales | -22.7 | -22.4 | -22.2 | -22.7 | -22.8 | -22.7 | - | - | - |
| OPM | 7.6 | 8.2 | 8.5 | 7.6 | 7.8 | 8.0 | - | - | - |
| Net margin | 6.1 | 6.5 | 6.8 | 6.0 | 5.9 | 6.0 | - | - | - |

Source: CCBIS estimates

Software sector peer comparisons

| Year ended 31 Dec | Stock code | CCBIS rating# | Share price* (LC) | Market cap (US\$ m) | FY19F | P/E (x) FY20F | FY21F | EPS growth (%) | | |
|--------------------------------|---------------|-------------------|-------------------|---------------------|-----------|---------------|-----------|----------------|-----------|-----------|
| | | | | | | | | FY19F | FY20F | FY21F |
| HK listed | | | | | | | | | | |
| TravelSky | 696 HK | Not Rated | 18.98 | 7,115 | 20 | 17 | 16 | -1 | 14 | 10 |
| Kingsoft Corp | 3888 HK | Outperform | 19.52 | 3,433 | -28 | 73 | 41 | -475 | -139 | 78 |
| Chinasoft International | 354 HK | Outperform | 4.60 | 1,643 | 15 | 12 | 10 | 2 | 24 | 19 |
| Kingdee | 268 HK | Neutral | 8.25 | 3,509 | 74 | 63 | 50 | -11 | 19 | 25 |
| Digital China | 861 HK | Not Rated | 3.87 | 828 | 35 | 17 | N/A | -45 | 109 | N/A |
| Sinosoft | 1297 HK | Not Rated | 1.57 | 246 | 6 | 5 | 4 | 23 | 17 | 15 |
| Chanjet | 1588 HK | Not Rated | 7.80 | 217 | N/A | N/A | N/A | N/A | N/A | N/A |
| Average | | | | | 20 | 31 | 24 | -84 | 6 | 29 |
| A-share listed | | | | | | | | | | |
| iFlytek | 002230 CH | Outperform | 32.22 | 10,075 | 82 | 57 | 40 | 43 | 44 | 41 |
| Wangsu | 300017 CH | Underperform | 9.21 | 3,187 | 25 | 29 | 22 | 6 | -15 | 33 |
| Aisino | 600271 CH | Not Rated | 21.68 | 5,743 | 24 | 20 | 17 | 10 | 16 | N/A |
| Hundsun | 600570 CH | Not Rated | 76.39 | 8,726 | 65 | 55 | 43 | 52 | 18 | 28 |
| Yonyou | 600588 CH | Outperform | 29.19 | 10,393 | 79 | 65 | 49 | 45 | 21 | 32 |
| Shiji info | 002153 CH | Not Rated | 37.01 | 5,621 | 74 | 62 | 50 | 14 | 20 | 25 |
| Neusoft Corp | 600718 CH | Not Rated | 11.22 | 1,983 | 32 | 26 | N/A | 312 | 26 | N/A |
| Teamsun | 600410 CH | Not Rated | 10.78 | 1,685 | N/A | N/A | N/A | N/A | N/A | N/A |
| YGsoft Inc | 002063 CH | Not Rated | 11.24 | 1,356 | 43 | N/A | N/A | N/A | N/A | N/A |
| Average | | | | | 53 | 45 | 37 | 69 | 19 | 32 |
| Global peers | | | | | | | | | | |
| Microsoft | MSFT US | Not Rated | 151.70 | 1,157,290 | 28 | 25 | 22 | 17 | 12 | 15 |
| Oracle | ORCL US | Not Rated | 56.31 | 184,839 | 14 | 13 | 13 | 13 | 8 | 7 |
| IBM | IBM US | Not Rated | 133.76 | 118,463 | 10 | 10 | 9 | -7 | 4 | 7 |
| SAP | SAP US | Not Rated | 134.91 | 165,738 | 27 | 25 | 23 | 10 | 9 | 11 |
| Accenture | ACN US | Not Rated | 202.30 | 128,663 | 26 | 24 | 22 | 6 | 10 | 9 |
| Salesforce | CRM US | Not Rated | 156.39 | 138,718 | 54 | 50 | 40 | 11 | 7 | 25 |
| Workday Inc. | WDAY US | Not Rated | 165.00 | 37,950 | 92 | 76 | 59 | 41 | 22 | 29 |
| Netsuite | N US | Not Rated | 109.54 | 8,865 | 202 | 143 | 96 | 158 | 42 | 49 |
| Average | | | | | 57 | 46 | 35 | 31 | 14 | 19 |

* Price as at close on mid-day 12 Dec 2019 (local currency)

Source: Bloomberg, CCBIS estimates

Chinasoft International – P&L assumptions

| RMB m | FY16 | FY17 | FY18 | FY19F | FY20F | FY21F | 1H18 | 2H18 | 1H19 | 2H19F |
|--|--------------|--------------|---------------|---------------|---------------|---------------|--------------|--------------|--------------|--------------|
| Revenue breakdown | | | | | | | | | | |
| TPG business | 5,482 | 7,859 | 9,175 | 10,583 | 12,594 | 14,483 | 4,029 | 5,146 | 4,748 | 5,835 |
| IIG business | 1,301 | 1,385 | 1,410 | 1,419 | 1,433 | 1,448 | 785 | 626 | 790 | 629 |
| Total revenue | 6,783 | 9,244 | 10,585 | 12,003 | 14,028 | 15,931 | 4,814 | 5,771 | 5,538 | 6,464 |
| YoY (%) | 32 | 36 | 15 | 13 | 17 | 14 | 16 | 13 | 15 | 12 |
| Cost of revenues | -4,768 | -6,493 | -7,340 | -8,367 | -9,749 | -11,056 | -3,424 | -3,917 | -3,971 | -4,396 |
| Gross profit | 2,016 | 2,750 | 3,245 | 3,635 | 4,278 | 4,875 | 1,390 | 1,855 | 1,567 | 2,069 |
| Gross profit margin (%) | 30 | 30 | 31 | 30 | 31 | 31 | 29 | 32 | 28 | 32 |
| Sales and marketing expense | -219 | -370 | -496 | -557 | -638 | -725 | -233 | -263 | -266 | -291 |
| General & administrative expense | -807 | -1,086 | -1,091 | -1,350 | -1,543 | -1,721 | -680 | -411 | -833 | -517 |
| Research and development | -345 | -567 | -739 | -815 | -954 | -1,083 | 0 | -739 | 0 | -815 |
| Total operating expense | -1,371 | -2,023 | -2,326 | -2,721 | -3,135 | -3,529 | -913 | -1,413 | -1,099 | -1,623 |
| Operating profit | 645 | 727 | 919 | 914 | 1,143 | 1,346 | 477 | 441 | 468 | 446 |
| Operating profit margin (%) | 10 | 8 | 9 | 8 | 8 | 8 | 10 | 8 | 8 | 7 |
| Other income, gains and losses | 44 | 96 | 64 | 120 | 120 | 120 | 19 | 45 | 60 | 60 |
| Allowance for doubtful debts | -18 | -26 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other expenses | -88 | -82 | -68 | -50 | -50 | -50 | -37 | -32 | -30 | -20 |
| Fair value gain on derivative financial instruments | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Finance costs | -96 | -103 | -118 | -145 | -148 | -150 | -59 | -59 | -85 | -60 |
| Share of results of associates | 17 | 20 | 12 | -8 | -4 | 0 | -15 | 27 | -8 | 0 |
| Gain on disposal of associates | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Loss arising from changes in fair value of contingent consideration payable on acquisition of a subsidiary | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Profit before tax | 525 | 633 | 760 | 801 | 1,031 | 1,236 | 388 | 372 | 390 | 411 |
| Taxation | -115 | -71 | -44 | -72 | -124 | -161 | -33 | -12 | -31 | -41 |
| Effective tax rate (%) | -22 | -11 | -6 | -9 | -12 | -13 | -8 | -3 | -8 | -10 |
| Net income | 410 | 561 | 716 | 729 | 908 | 1,075 | 356 | 360 | 359 | 370 |
| - Minority interests | -32 | -4 | 0 | -4 | 0 | 0 | -3 | 3 | -4 | 0 |
| Net income attributable to common shareholders | 442 | 566 | 716 | 733 | 908 | 1,075 | 359 | 357 | 363 | 370 |
| YoY (%) | 58 | 28 | 27 | 2 | 24 | 19 | 46 | 12 | 1 | 4 |
| Net profit margin (%) | 7 | 6 | 7 | 6 | 6 | 7 | 7 | 6 | 7 | 6 |
| EPS diluted (HK\$) | 0.22 | 0.26 | 0.29 | 0.30 | 0.37 | 0.44 | 0.15 | 0.15 | 0.15 | 0.15 |
| Diluted share volume (m) | 2,400 | 2,621 | 2,779 | 2,711 | 2,711 | 2,711 | 2,789 | 2,779 | 2,711 | 2,711 |
| Key ratios (%) | | | | | | | | | | |
| EPS growth | 36 | 17 | 13 | 4 | 23 | 19 | 30 | 0 | 3 | 4 |
| Gross profit margin | 30 | 30 | 31 | 30 | 31 | 31 | 29 | 32 | 28 | 32 |
| Operating profit margin | 10 | 8 | 9 | 8 | 8 | 8 | 10 | 8 | 8 | 7 |
| Net profit margin | 7 | 6 | 7 | 6 | 6 | 7 | 7 | 6 | 7 | 6 |
| ROAE | 12 | 12 | 13 | 12 | 13 | 13 | N/A | N/A | N/A | N/A |
| Net debt-to-equity | -4 | -21 | -16 | -18 | -18 | -20 | N/A | N/A | N/A | N/A |

Source: Company data, CCBIS estimates

Chinasoft Intl. | 354 HK – financial summary

Profit and loss

| FYE 31 Dec (Rmb m) | 2017 | 2018 | 2019F | 2020F | 2021F |
|---|--------------|---------------|---------------|---------------|---------------|
| TPG business | 7,859 | 9,175 | 10,583 | 12,594 | 14,483 |
| IIG business | 1,385 | 1,410 | 1,419 | 1,433 | 1,448 |
| Revenue | 9,244 | 10,585 | 12,003 | 14,028 | 15,931 |
| COGS | (6,493) | (7,340) | (8,367) | (9,749) | (11,056) |
| Gross profit | 2,750 | 3,245 | 3,635 | 4,278 | 4,875 |
| Other income | — | — | — | — | — |
| Operating expenses | (2,023) | (2,326) | (2,721) | (3,135) | (3,529) |
| EBIT | 727 | 919 | 914 | 1,143 | 1,346 |
| Net financial inc.(exp) | (103) | (118) | (145) | (148) | (150) |
| JV & associate | — | — | — | — | — |
| Others | 9 | (40) | 33 | 36 | 40 |
| Forex | — | — | — | — | — |
| Profit before tax | 633 | 760 | 801 | 1,031 | 1,236 |
| Tax | (71) | (44) | (72) | (124) | (161) |
| Total profit | 561 | 716 | 729 | 908 | 1,075 |
| Extraordinary items | — | — | — | — | — |
| Minority interest | 4 | (0) | 4 | — | — |
| Net profit attrib to shareholder | 566 | 716 | 733 | 908 | 1,075 |
| Reported EPS (HK\$) | — | — | — | — | — |
| Diluted EPS (Rmb) | 0.22 | 0.26 | 0.27 | 0.33 | 0.40 |
| Core EPS (Rmb) | — | — | — | — | — |
| Dividend (Rmb)(m) | 39 | 52 | 51 | 64 | 75 |
| DPS (Rmb) | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 |

Cash flow

| FYE 31 Dec (Rmb m) | 2017 | 2018 | 2019F | 2020F | 2021F |
|------------------------------------|--------------|--------------|--------------|--------------|--------------|
| Profit before tax | 633 | 760 | 801 | 1,031 | 1,236 |
| Amort. & depr. | 178 | 192 | 207 | 223 | 239 |
| Net financial charge adj. | 103 | 118 | 145 | 148 | 150 |
| Non-cash items adj. | 154 | 67 | — | — | — |
| Change in working capital | (687) | (743) | (422) | (741) | (695) |
| Tax paid | (48) | (82) | (72) | (124) | (161) |
| Other | — | (152) | — | — | — |
| Operating cash flow | 332 | 161 | 660 | 538 | 770 |
| Disposal of fixed assets | — | — | — | — | — |
| Capex | (160) | (151) | (160) | (160) | (160) |
| Investment | — | — | — | — | — |
| Net interest rec.(paid) | — | — | — | — | — |
| Other | (74) | (16) | (50) | (50) | (50) |
| Investment cash flow | (234) | (167) | (210) | (210) | (210) |
| Change in borrowings | (431) | 984 | — | — | — |
| Equity issues | 943 | 109 | — | — | — |
| Amount due | — | — | — | — | — |
| Dividend paid | (25) | (37) | (52) | (51) | (64) |
| Other | (54) | (203) | (145) | (148) | (150) |
| Financing cash flow | 432 | 853 | (197) | (199) | (214) |
| Change in cash flow | 530 | 847 | 253 | 128 | 346 |
| Cash & equivalents, begin | 1,299 | 1,785 | 2,646 | 2,899 | 3,027 |
| Forex | (44) | 14 | — | — | — |
| Cash & equivalents, end | 1,785 | 2,646 | 2,899 | 3,027 | 3,373 |
| Free cash flow | (25) | 164 | 457 | 328 | 555 |

Source: Company data, CCBIS estimates

Balance sheet

| FYE 31 Dec (Rmb m) | 2017 | 2018 | 2019F | 2020F | 2021F |
|--------------------------------------|--------------|---------------|---------------|---------------|---------------|
| Cash & equivalents | 1,785 | 2,646 | 2,899 | 3,027 | 3,373 |
| Pledge dep., restricted cash | 1 | 19 | 19 | 19 | 19 |
| Receivables | 4,637 | 5,495 | 5,972 | 6,964 | 7,897 |
| Inventory | 26 | 64 | 64 | 64 | 64 |
| Other current assets | — | — | — | — | — |
| Total current assets | 6,449 | 8,225 | 8,954 | 10,075 | 11,354 |
| Property, plant & equip. | 853 | 838 | 865 | 881 | 886 |
| Intangible assets | 179 | 148 | 124 | 95 | 60 |
| JV & associate | — | — | — | — | — |
| Other non-current assets | 1,271 | 1,278 | 1,278 | 1,278 | 1,278 |
| Total non-current assets | 2,303 | 2,264 | 2,266 | 2,253 | 2,224 |
| Total assets | 8,752 | 10,488 | 11,221 | 12,328 | 13,578 |
| Short-term borrowings | 686 | 1,676 | 1,676 | 1,676 | 1,676 |
| Trade & bill payable | 1,605 | 1,542 | 1,598 | 1,849 | 2,087 |
| Other current liabilities | 262 | 508 | 508 | 508 | 508 |
| Total current liabilities | 2,552 | 3,726 | 3,781 | 4,033 | 4,271 |
| Long-term borrowings | — | — | — | — | — |
| Other non-current liabilities | 970 | 731 | 731 | 731 | 731 |
| Total non-current liabilities | 970 | 731 | 731 | 731 | 731 |
| Total liabilities | 3,522 | 4,457 | 4,512 | 4,764 | 5,002 |
| Share capital | 2,920 | 3,095 | 3,095 | 3,095 | 3,095 |
| Reserves and retained profits | 2,246 | 2,872 | 3,552 | 4,409 | 5,420 |
| Shareholders' equity | 5,166 | 5,967 | 6,648 | 7,504 | 8,516 |
| Minority interest | 64 | 65 | 61 | 61 | 61 |
| Total equity | 5,230 | 6,032 | 6,708 | 7,565 | 8,577 |
| Total equity and liabilities | 8,752 | 10,488 | 11,221 | 12,328 | 13,578 |

Ratios

| FYE 31 Dec | 2017 | 2018 | 2019F | 2020F | 2021F |
|-----------------------------------|--------|--------|--------|--------|--------|
| Growth (%) | | | | | |
| Revenue | 36.3 | 14.5 | 13.4 | 16.9 | 13.6 |
| EBITDA | 14.6 | 22.7 | 1.0 | 21.8 | 16.0 |
| EBIT | 12.7 | 26.3 | (0.5) | 25.1 | 17.7 |
| Net profit | 27.9 | 26.6 | 2.4 | 23.9 | 18.5 |
| Core net profit | — | — | — | — | — |
| Profitability (%) | | | | | |
| Gross margin | 29.8 | 30.7 | 30.3 | 30.5 | 30.6 |
| EBITDA margin | 9.8 | 10.5 | 9.3 | 9.7 | 9.9 |
| EBIT margin | 7.9 | 8.7 | 7.6 | 8.2 | 8.5 |
| Net margin | 6.1 | 6.8 | 6.1 | 6.5 | 6.8 |
| Core net margin | — | — | — | — | — |
| Tax rate | 11.3 | 5.8 | 9.0 | 12.0 | 13.0 |
| Efficiency (days) | | | | | |
| Inventory turnover | 1 | 2 | 3 | 2 | 2 |
| Trade receivables | 81 | 79 | 84 | 82 | 83 |
| Trade payable | 79 | 78 | 68 | 65 | 65 |
| Returns & leverage (%) | | | | | |
| ROAA | 7.1 | 7.4 | 6.7 | 7.7 | 8.3 |
| ROAE | 12.0 | 12.9 | 11.6 | 12.8 | 13.4 |
| Net debt (cash)/equity | (21.0) | (16.1) | (18.2) | (17.9) | (19.8) |
| Liquidity (x) | | | | | |
| Current ratio | 2.5 | 2.2 | 2.4 | 2.5 | 2.7 |
| Quick ratio | 2.5 | 2.2 | 2.4 | 2.5 | 2.6 |

Rating definitions:**Outperform (O) – expected return > 10% over the next twelve months****Neutral (N) – expected return between -10% and 10% over the next twelve months****Underperform (U) – expected return < -10% over the next twelve months****Analyst certification:**

The author(s) of this document, hereby declare that: (i) all of the views expressed in this document accurately reflect his/her personal views about any and all of the subject securities or issuers and were prepared in an independent manner; and (ii) no part of any of his/her compensation was, is, or will be directly or indirectly related to the specific recommendations or views expressed in this document; and (iii) he/she receives no insider information/non-public price-sensitive information in relation to the subject securities or issuers which may influence the recommendations made by him.

The author(s) of this document further confirm that (i) neither he/she nor his/her respective associate(s) (as defined in the Code of Conduct for Persons Licensed by or Registered with the Securities and Futures Commission issued by the Hong Kong Securities and Futures Commission) has dealt in/traded or will deal in /trade the securities covered in this document in a manner contrary to his/her outstanding recommendation, or neither he/she nor his/her respective associate(s) has dealt in or traded in the securities covered in this document within 30 calendar days prior to the date of issue of this document or will so deal in or trade such securities within 3 business days after the date of issue of this document; (ii) neither he/she nor his/her respective associate(s) serves as an officer of any of the companies covered in this document; and (iii) neither he/she nor his/her respective associate(s) has any financial interests in the securities covered in this document.

Disclaimers:

This document is prepared by CCB International Securities Limited. CCB International Securities Limited is a wholly-owned subsidiary of CCB International (Holdings) Limited ("CCBIH") and China Construction Bank Corporation ("CCB"). Information herein has been obtained from sources believed to be reliable but CCB International Securities Limited, its affiliates and/or subsidiaries (collectively "CCBIS") do not guarantee, represent and warrant (either express or implied) its completeness or accuracy or appropriateness for any purpose or any person whatsoever. Opinions and estimates constitute our judgment as of the date of this document and are subject to change without notice. CCBIS seeks to update its research as appropriate, but various regulations may prevent it from doing so. Besides certain industry reports published on a periodic basis, the large majority of reports are published at irregular intervals as appropriate according to the analyst's judgment. Forecasts, projections and valuations are inherently speculative in nature and may be based on a number of contingencies. Readers should not regard the inclusion of any forecasts, projections and valuations in this document as a representation or warranty by or on behalf of CCBIS that these forecasts, projections or valuations or their underlying assumptions will be achieved. Investment involves risk and past performance is not indicative of future results. Information in this document is not intended to constitute or be construed as legal, financial, accounting, business, investment, tax or any professional advice for any prospective investors and should not be relied upon in that regard. This document is for informational purposes only and should not be treated as an offer or solicitation for the purchase or sale of any products, investments, securities, trading strategies or financial instruments of any kind in any jurisdiction. CCBIS makes no representations on the availability of the securities covered in this document (or related investment) to the recipients. The securities described herein may not be eligible for sale in all jurisdictions or to certain categories of investors. Neither CCBIS nor any other persons accept any liability whatsoever for any loss or damages (whether direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential) arising from any use of this document or its contents or otherwise arising in connection therewith. Securities, financial instruments or strategies mentioned herein may not be suitable for all investors. The opinions and recommendations herein do not take into account prospective investors' financial circumstances, investment objectives, or particular needs and are not intended as recommendations of particular securities, financial instruments or strategies to any prospective investors. The recipients of this document should consider this document as only a single factor in making their investment decision and shall be solely responsible for making their own independent investigation of the business, financial condition and prospects of companies referred to in this document. Readers are cautioned that (i) the price and value of securities referred to in this document and the income derived from them may fluctuate; (ii) past performance is not a guide to future performance; (iii) any analysis, ratings and recommendations made in this document are intended for long-term (at least for 12 months) and is not linked to a near-term assessment of the likely performance of the securities or companies in question. In any event, future actual results may differ materially from those set forth in any forward-looking statements herein; (iv) future returns are not guaranteed, and a loss of original capital may occur; and (v) fluctuations in exchange rates may adversely affect the value, price or income of any security or related instrument referred to in this document. It should be noted that this document covers only those securities or companies as specified herein and does not extend to any derivative instruments thereof, the value of which may be affected by many factors and may not correspond with the value of the underlying securities. Trading in these instruments is considered risky and are not suitable for all investors. While all reasonable care has been taken to ensure that the facts stated herein are accurate and that the forward-looking statements, opinions and expectations contained herein are based on fair and reasonable assumptions, CCBIS has not been able to verify independently such facts or assumptions and CCBIS shall not be liable for the accuracy, completeness or correctness thereof and no representation or warranty is made, express or implied, in this regard. All pricing referred to in this document is as of the close of local market for the securities discussed, unless otherwise stated and for information purposes only. There is no representation that any transaction can or could have been effected at those prices, and any prices do not necessarily reflect CCBIS' internal books and records or theoretical model-based valuations and may be based on certain assumptions. Different assumptions could result in substantially different results. Any statements which may be contained herein attributed to a

third-party represent CCBIS' interpretation of the data, information and/or opinions provided by that third party either publicly or through a subscription service, and such use and interpretation have not been reviewed or endorsed by the third party. Reproduction and distribution of these third party contents in any form is prohibited except with the prior written consent of such third party. The recipients must make their own assessments of the relevance, accuracy and adequacy of the information contained in this document and make such independent investigation as they may consider necessary or appropriate for such purpose.

Recipients should seek independent legal, financial, accounting, business, investment and/or tax advice if they have any doubt about the contents of this document and satisfy themselves prior to making any investment decision that such investment is in line with their own investment objectives and horizons.

Use of hyperlinks to other internet sites or resources (if any) as referred to in this document is at users' own risk. They are provided solely for the purpose of convenience and information and the content of these internet sites or resources does not in any way form part of this document. The contents, accuracy, opinion expressed, and other links provided at these sites are not investigated, verified, monitored, or endorsed by CCBIS. CCBIS expressly disclaims any responsibility for and does not guarantee, represent and warrant (either express or implied) the completeness, accuracy, appropriateness, availability or security of information found on these websites. Users of these websites are solely responsible for making all enquiries, investigation and risk assessment before proceeding with any online or offline access or transaction with any of these third parties. All activities conducted by users via or at these websites are at their own risk. CCBIS does not guarantee the security of any information users may forward or be requested to provide to any third parties via these websites. Users are deemed to have irrevocably waived any claims against CCBIS for any loss or damage suffered as a result of any access to or interaction with any of these websites.

Upon request CCBIS may provide specialized research products or services to certain customers focusing on the prospects for specific securities as compared with other covered securities over varying time horizons or under differing market conditions. While the views expressed in these situations may not always be directionally consistent with the long-term views expressed in the analyst's published research, CCBIS has procedures in place to prevent selective disclosure and will update the relevant readers when our views has changed. CCBIS also has procedures in place to identify and manage potential conflicts of interest that may arise in connection with its research business and services. Chinese Wall procedures are also in place to ensure that any confidential and/or price sensitive information is properly handled. CCBIS will use its best endeavors to comply with the relevant laws and regulations in this respect. Nevertheless, the recipients should be aware that CCB, CCBIS, their affiliates and/or their officers, directors and employees may do business with the issuer(s) of the securities covered in this document, including investment banking business or direct investment business or may hold interest in (and/or later add or dispose) such securities (or in any related investment) for themselves and/or on behalf of their clients from time to time. As a result, investors should be aware that CCBIS may have a conflict of interest that could affect the objectivity of this document and CCBIS will not assume any responsibility in respect thereof. Further, the information contained herein may differ or be contrary to opinions expressed by other associates of CCBIS or other members of the CCB or CCBIH group of companies.

Where this document refers to any products, investments, securities, financial instruments or industry sectors, this is for the information of the institutional and professional customers of CCBIS only and this document should not be distributed to retail customers. This document is not directed at you if CCBIS is prohibited or restricted by any legislation or regulation in any jurisdiction from making it available to you. You should satisfy yourself before reading it that CCBIS is permitted to provide research material concerning investments to you and that you are permitted and entitled to receive and read the document under relevant legislation and regulations. In particular, this document is only distributed to certain US Persons to whom CCBIS is permitted to distribute according to US securities laws, but cannot otherwise be distributed or transmitted, whether directly or indirectly, into the US or to any other US person. Any U.S. person (as defined under the Exchange Act or the U.S. Internal Revenue Code of 1986, as amended) who is a recipient of this material wishing to effect any transaction to buy or sell securities or related financial instruments based on the information provided herein should direct such transaction exclusively to and such transaction shall be effected only through CCB International Overseas (USA), Inc. This document also cannot be distributed or transmitted, whether directly or indirectly, into Japan and Canada and not to the general public in the People's Republic of China (for the purpose of this document, excluding Hong Kong, Macau and Taiwan) unless under applicable laws.

Any unauthorized reproduction or redistribution by any means to any persons, in whole or in part of this document is strictly prohibited and CCBIS accepts no liability whatsoever for the actions of third parties in distributing this research report.

If this document has been distributed by electronic transmission, such as e-mail, then such transmission cannot be guaranteed to be secure or error-free as information could be intercepted, corrupted, lost, destroyed, arrive late or incomplete, or contain viruses. CCBIS therefore does not accept liability for any errors or omissions in the contents of this document, which may arise as a result of electronic transmission. The disclosures contained in this document prepared by CCBIS shall be governed by and construed in accordance with the laws of Hong Kong.

Copyright 2019 CCBIS. The signs, logos and insignia used in this research report and the company name "CCB International Securities Limited" are the registered and unregistered trademarks of CCB, CCBIH and/or CCBIS. All rights are hereby reserved. All material presented in this document, unless indicated otherwise, is under copyright to CCBIS. This document or any portion hereof may not be reproduced, sold or redistributed without the written consent of CCBIS.

CCB International Securities Limited
12/F, CCB Tower, 3 Connaught Road, Central, Hong Kong
Tel: (852) 3911 8000 / Fax: (852) 2537 0097