

# Dahua (002236 CH)

## Gap with Hikvision not narrowed

Dahua FY20 revenue grew at mere 1% YoY to RMB26.5bn as channel sales in China -30% YoY despite +8% YoY in overseas business. GPM and cash flow continued to improve but these might not be sustainable in FY21E as 1) FY20 GPM improvement was due to COVID-19 related thermal camera sales in 1H20 and 2) better cash conversion was driven by longer DPO but not shorter DSO. We maintain our view that Dahua's AI technology gap with Hikvision will result in slower "To B" business growth amid AI deployment.

- **GPM increase may not be sustainable in FY21E.** Dahua delivered in-line FY4Q20 results with revenue growth of +6% YoY to RMB10,300mn but net profit dropped 18% YoY to RMB1,078mn. Dahua 4Q20 gross margin declined 2.3 pct pts YoY to 39.1% was a negative surprise (last time GPM <40% was in 1Q19). We attribute the margin drag to 1) more testing and delivery work for "To G" projects in 4Q20 and 2) weaker channel sales (FY20 revenue -30% YoY) and margin (GPM -4.4 pct pts to 25.9%). We believe FY20 margin improvement (GPM +1.6 pct pts YoY to 42.7%) was largely due to higher thermal camera sales to overseas market in 1H20 (FY1H20 overseas GPM: 57%) and such increment may not be sustainable in FY21E.
- **Cash flow improved but not driven by shorter DSO.** Operating cash flow in FY20 increased by 175% YoY to RMB4,402mn, compared to RMB1,600mn in FY19. Cash conversion ratio was at 1.13, the first time exceeding 1 in the past 10 years. However, we noticed that the cash flow improvement is largely driven by extending account payable days (123 in FY20 vs. 109 in FY19) rather than shortening days sales outstanding (182 in FY20 vs. 180 in FY19).
- **Increasing R&D to capture AI opportunities.** Dahua disclosed revenue and gross margin breakdown by product and customer segment for the first time. Dahua showed a similar pattern as Hikvision that its "To B" segment grew strongly at +24% YoY in FY20 amid COVID-19. This is in-line with our view that AI has led to diversified camera use cases rather than just public security ("To G" business). In FY20, Dahua increased R&D to RMB3bn (+11.3% YoY) and its AI R&D team size has exceeded a thousand people.
- **Maintain HOLD.** We largely maintained our FY21-22E revenue and net profit forecast. We slightly raised our target price to RMB25.42 (prior RMB25.35) on unchanged 17x FY22E P/E, in-line with its three-year mean.

### Earnings Summary

(YE 31 Dec)	FY19	FY20	FY21E	FY22E	FY23E
Revenue (RMB mn)	26,149	26,466	30,473	34,926	38,990
YoY growth (%)	10%	1%	15%	15%	12%
Net profit (RMB mn)	3,188	3,903	3,774	4,480	5,154
EPS (RMB)	1.06	1.30	1.26	1.50	1.72
YoY growth (%)	26%	23%	-3%	19%	15%
Consensus EPS (RMB)	1.06	1.30	1.48	1.77	n.a.
PE (x)	21.6	17.6	18.2	15.3	13.3
PB (x)	4.4	3.5	3.0	2.6	2.2
Dividend Yield (%)	0.23	0.29	0.33	0.38	0.45
ROE (%)	23%	22%	18%	18%	18%
Net debt to equity	net cash	net cash	net cash	net cash	net cash

Source: Company data, Bloomberg, CMBIS estimates

**HOLD (Maintain)**

Target Price **RMB25.42**  
 (Previous TP **RMB25.35**)  
 Up/Downside **+11.2%**  
 Current Price **RMB22.94**

### China Software & IT Services

#### Marley Ngan

(852) 3916 3719

marleyngan@cmbi.com.hk

#### Stock Data

Mkt Cap (RMB mn)	66,082
Avg 3 mths t/o (RMB mn)	1,381.20
52w High/Low (RMB)	27.26/ 14.61
Total Issued Shares (mn)	2,996

Source: Bloomberg

#### Shareholding Structure

Fu Liquan - Chairman	34.2%
Zhu Jiangming - Director	5.4%

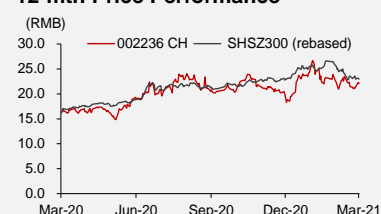
Source: HKEx

#### Share Performance

	Absolute	Relative
1-mth	-1.3%	9.3%
3-mth	11.9%	9.8%
6-mth	8.8%	-0.2%

Source: Bloomberg

#### 12-mth Price Performance



Source: Bloomberg

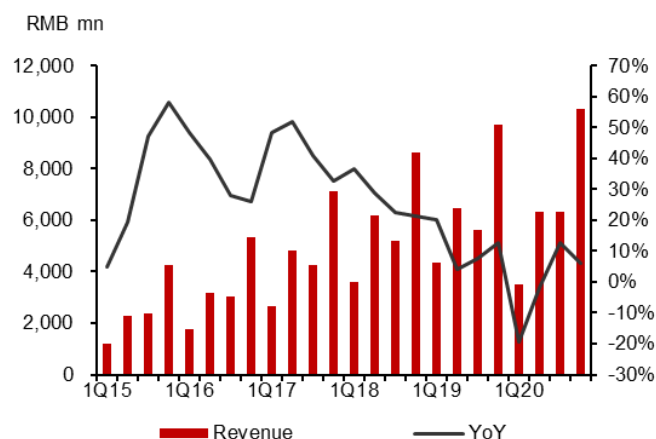
#### Auditor: BDO

#### Related Reports

"China AI surveillance – Ambarella suggested strong AI demand" – 4 Mar 2021

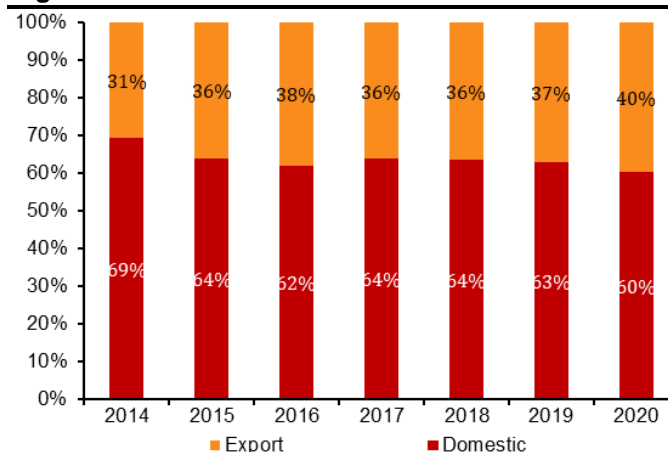
## Focus Charts

**Figure 1: Quarterly revenue and YoY growth**



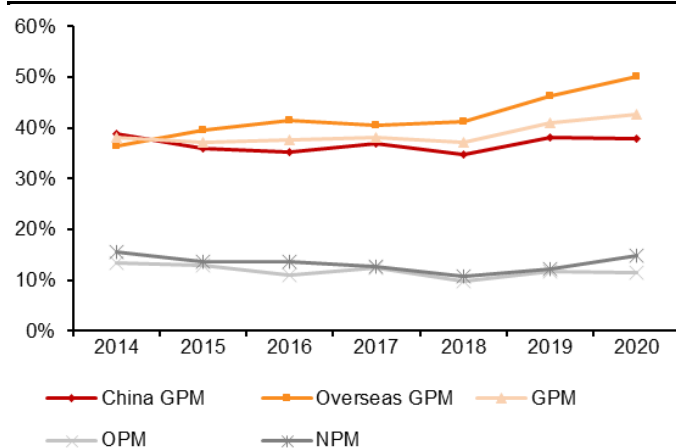
Source: Company data, CMBIS

**Figure 2: Revenue breakdown**



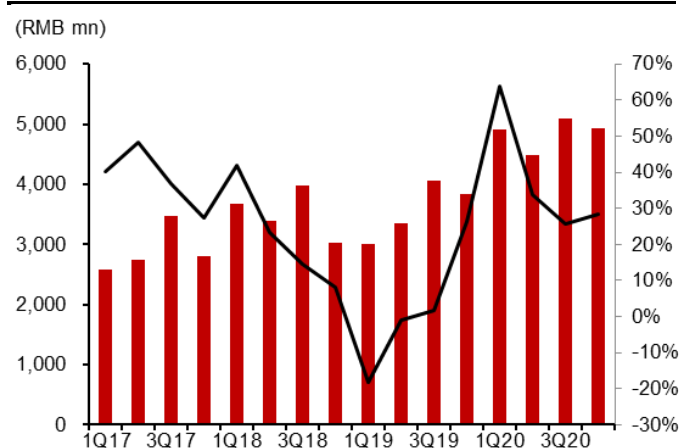
Source: Company data, CMBIS

**Figure 3: Margins**



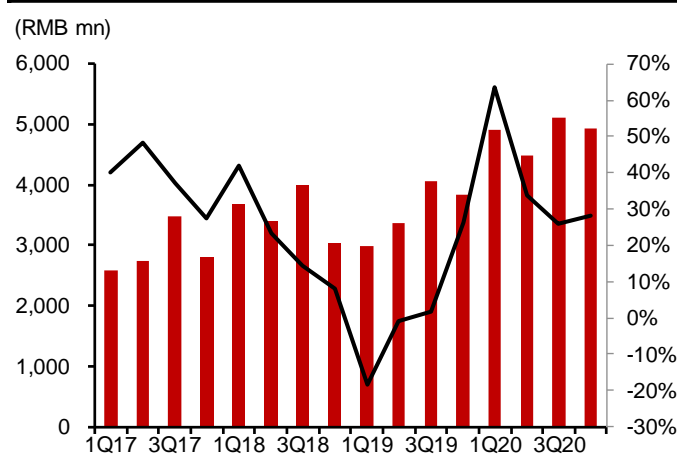
Source: Company data, CMBIS

**Figure 4: R&D**



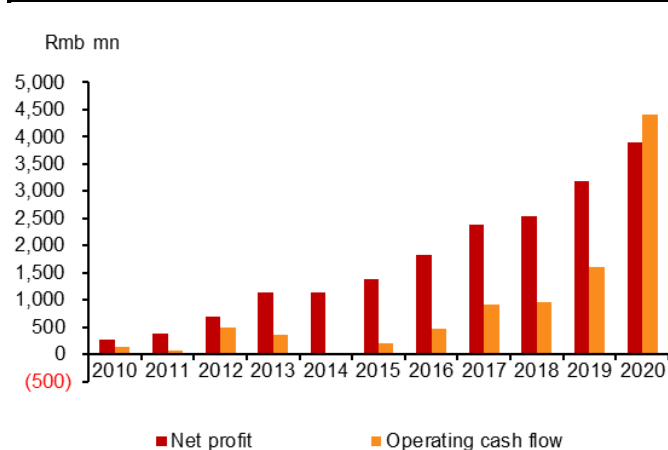
Source: Company data, CMBIS

**Figure 5: Inventory**



Source: Company data, CMBIS

**Figure 6: Net profit vs. operating cash flow**



Source: Company data, CMBIS

## FY4Q20 results review

- **Revenue** was at RMB10,300mn (+6% YoY, +63% QoQ), in-line with our estimate but below consensus by 4%.
- **Gross profit** was at RMB4,028mn (+0% YoY, +59% QoQ), below our estimate by 1% and consensus by 5%.
- **Gross margin** was at 39.1%, (-2.3 pct pts YoY, -0.9 pct pts QoQ), below both our and consensus estimates of 39.6%
- **Operating profit** was at RMB1,342mn (-15% YoY, +160% QoQ), below our estimates by 3%
- **Operating margin** was at 13.0% (-3.2 pct pts YoY, +4.9 pct pts QoQ), below our estimates by 0.5 pct pts
- **Net profit** was at RMB1,078mn (-18% YoY, -26% QoQ), below our estimates by 7% and consensus by 25%
- **EPS** was at RMB0.36 (-18% YoY, -26% QoQ), below our estimate

Figure 7: FY4Q20 results review

	Dec-19 4Q19	Sep-20 3Q20	Dec-20 4Q20			Dec-20 4Q20	versus	Dec-20 4Q20	versus
RMB mn	actual	actual	actual	YoY	QoQ	CMBI	CMBI	consensus	consensus
Revenue	9,721	6,328	10,300	6%	63%	10,297	0%	10,683	-4%
Gross profit	4,022	2,534	4,028	0%	59%	4,074	-1%	4,230	-5%
Gross margin	41.4%	40.0%	39.1%	-2.3 pct pts	-0.9 pct pts	39.6%	-0.4 pct pts	39.6%	-0.5 pct pts
Adj. Operating profit	1,575	516	1,342	-15%	160%	1,390	-3%		
Adj. Operating margin	16.2%	8.1%	13.0%	-3.2 pct pts	4.9 pct pts	13.5%	-0.5 pct pts		
Net non-op	-30	954	-103			-95			
PBT	1,545	1,469	1,239	-20%	-16%	1,295	-4%	1,255	-1%
Tax	-215	-22	-122			-143			
Minorities	-20	8	-39			3			
Net income	1,311	1,456	1,078	-18%	-26%	1,155	-7%	1,442	-25%
EPS RMB	0.44	0.49	0.36	-18%	-26%	0.39	-7%		

Source: Company data, CMBIS

Figure 8: FY20 results review

	FY 2019	FY 2020		FY 2020	versus	FY 2020	versus
RMB mn	actual	actual	YoY	CMBI	CMBI	consensus	consensus
Revenue	26,149	26,466	1%	26,463	0%	26,727	-1%
Gross profit	10,753	11,302	5%	11,347	0%	11,436	-1%
Gross margin	41.1%	42.7%	1.6 pct pts	42.9%	-0.2 pct pts	42.8%	-0.1 pct pts
Adj. Operating profit	3,083	3,066	-1%	3,114	-2%	4,324	-29%
Adj. Operating margin	11.8%	11.6%	-0.2 pct pts	11.8%	-0.2 pct pts	16.2%	-4.6 pct pts
Net non-op	416	1,183		1,191		77	
PBT	3,499	4,249	21%	4,304	-1%	4,401	-3%
Tax	-338	-314		-334			
Minorities	27	-32		10			
Net income	3,188	3,903	22%	3,980	-2%	4,050	-4%
EPS RMB	1.06	1.30	23%	1.33	-2%	1.35	-4%

Source: Company data, CMBIS

## Earnings revision

Figure 9: Dahua earnings revision

RMB mn	2021E			2022E		
	New	Old	%Diff	New	Old	%Diff
Sales	30,473	30,481	-0%	34,926	34,514	1%
Gross profit	13,024	12,786	2%	15,062	14,619	3%
OP Profit	3,806	3,716	2%	4,655	4,548	2%
PBT	4,183	4,089	2%	5,003	4,918	2%
Net profit	3,774	3,731	1%	4,480	4,468	0%
EPS	1.26	1.25	1%	1.50	1.49	0%
<b>Margins</b>						
GM	42.7%	42.9%	-14 bps	43.1%	41.9%	118 bps
OPM	12.5%	11.8%	72 bps	13.3%	12.2%	114 bps
PBT margin	13.7%	16.3%	-254 bps	14.3%	13.4%	91 bps
Net margin	12.4%	15.0%	-266 bps	12.8%	12.2%	58 bps

Source: Company data, CMBIS

Figure 10: Dahua CMBI estimates vs. consensus

RMB mn	2021E			2022E		
	CMBI	Street	Diff	CMBI	Street	Diff
Sales	30,473	31,914	-5%	34,926	37,442	-7%
Gross profit	13,024	13,501	-4%	15,062	15,901	-5%
OP Profit	3,806	5,066	-25%	4,655	5,971	-22%
PBT	4,183	4,869	-14%	5,003	5,770	-13%
Net profit	3,774	4,431	-15%	4,480	5,246	-15%
EPS	1.3	1.5	-16%	1.5	1.8	-17%
<b>Margins</b>						
GM	42.7%	42.3%	43 bps	43.1%	42.5%	66 bps
OPM	12.5%	15.9%	-338 bps	13.3%	15.9%	-262 bps
PBT margin	13.7%	15.3%	-153 bps	14.3%	15.4%	-108 bps
Net margin	12.4%	13.9%	-150 bps	12.8%	14.0%	-118 bps

Source: Company data, CMBIS, Bloomberg

## Operating model

Figure 11: Dahua operating model

RMB mn	2019	2020	2021E	2022E	2023E
Revenues	26,149	26,466	30,473	34,926	38,990
Cost of sales	(15,396)	(15,164)	(17,450)	(19,864)	(21,994)
Gross Profit	10,753	11,302	13,024	15,062	16,996
<i>Gross margin</i>	<i>41.1%</i>	<i>42.7%</i>	<i>42.7%</i>	<i>43.1%</i>	<i>43.6%</i>
R&D	(2,794)	(2,998)	(3,347)	(3,737)	(4,116)
SG&A	(4,694)	(5,076)	(5,651)	(6,423)	(7,223)
Operating Income	3,083	3,066	3,806	4,655	5,380
<i>Operating margin</i>	<i>11.8%</i>	<i>11.6%</i>	<i>12.5%</i>	<i>13.3%</i>	<i>13.8%</i>
Non-Operating Income	416	1,183	376	348	345
Profit Before Tax	3,499	4,249	4,183	5,003	5,725
Income tax (expense) gain	(338)	(314)	(366)	(473)	(514)
Minorities	27	(32)	(43)	(50)	(57)
Net Income to Shareholders	3,188	3,903	3,774	4,480	5,154
<i>Net margin</i>	<i>12.2%</i>	<i>14.7%</i>	<i>12.4%</i>	<i>12.8%</i>	<i>13.2%</i>
EPS (RMB)	1.06	1.30	1.26	1.50	1.72
DPS (RMB)	0.10	0.13	0.27	0.26	0.31
<b><u>Growth YoY</u></b>					
Revenues	10%	1%	15%	15%	12%
Gross profit	22%	5%	15%	16%	13%
Operating Income	33%	-1%	24%	22%	16%
EPS	26%	23%	-3%	19%	15%
<b><u>Revenue mix (By geography)</u></b>					
Domestic	63%	60%	61%	61%	62%
Overseas	37%	40%	39%	39%	38%
<b><u>Revenue mix (By product)</u></b>					
Product	39%	39%			
Solution	49%	48%			
Innovative business	5%	7%			
Others	7%	6%			
<b><u>Domestic revenue mix</u></b>					
- To G	36%	36%	35%	35%	34%
- To B	33%	42%	44%	45%	46%
- Others	31%	22%	21%	20%	20%
<b><u>Gross margin breakdown</u></b>					
Domestic	38.0%	37.9%	41.4%	41.9%	41.9%
Overseas	46.4%	50.1%	44.9%	45.1%	46.3%
<b><u>Domestic gross margin breakdown</u></b>					
To G	41.1%	40.7%			
To B	41.7%	41.8%			
Others	30.2%	25.9%			

Source: Company data, CMBIS

**Figure 12: Dahua quarterly model**

RMB mn	1Q20	2Q20	3Q20	4Q20	1Q21E	2Q21E	3Q21E	4Q21E
Revenues	3,502	6,337	6,328	10,300	4,266	7,618	7,009	11,580
Gross Profit	1,724	3,015	2,534	4,028	1,661	3,354	3,052	4,957
Operating profit	177	1,031	516	1,342	214	1,195	472	1,926
Net profit (loss)	318	1,051	1,456	1,078	348	1,070	608	1,747
EPS (RMB)	0.35	0.49	0.36	0.13	0.36	0.20	0.58	0.15
<b>Margins</b>								
Gross margin	49.2%	47.6%	40.0%	39.1%	38.9%	44.0%	43.5%	42.8%
Operating margin	5.1%	16.3%	8.1%	13.0%	5.0%	15.7%	6.7%	16.6%
Net margin	9.1%	16.6%	23.0%	10.5%	8.2%	14.0%	8.7%	15.1%
<b>Growth (QoQ)</b>								
Revenues	-64%	81%	0%	63%	-59%	79%	-8%	65%
Gross Profit	-57%	75%	-16%	59%	-59%	102%	-9%	62%
Operating profit	-89%	482%	-50%	160%	-84%	457%	-61%	308%
Net profit (loss)	-76%	231%	39%	-26%	-68%	207%	-43%	187%
<b>Growth (YoY)</b>								
Revenues	-19%	-2%	13%	6%	22%	20%	11%	12%
Gross Profit	6%	10%	7%	0%	-4%	11%	20%	23%
Operating profit	-31%	13%	51%	-15%	21%	16%	-9%	43%
Net profit (loss)	0%	14%	128%	-18%	10%	2%	-58%	62%

Source: Company data, CMBIS

## Valuation

### Dahua (002236 CH, HOLD, TP RMB25.42)

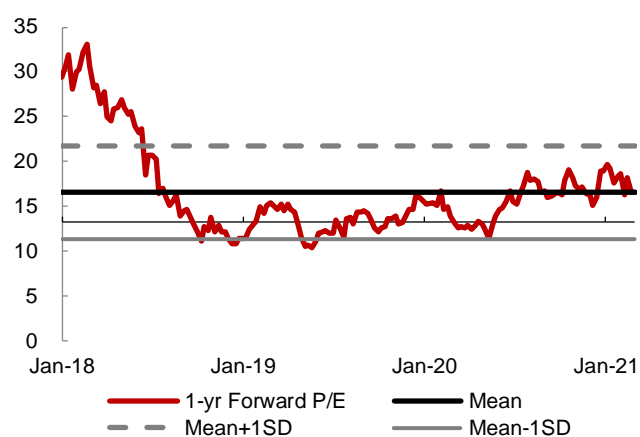
We slightly raised our target price to RMB25.42 (prior RMB25.35), based on unchanged 17x FY22 P/E, in-line with its 3-year mean. We are less positive on Dahua given weaker R&D in Hikvision. We expect Hikvision valuation gap will continue to widen.

Figure 13: Peers' valuation

Company	Ticker	Rating	Market Cap (US\$ mn)	Price (LC)	TP (LC)	P/E		ROE	
						FY21E	FY22E	FY21E	FY22E
Dahua	002236 CH	HOLD	10,540	22.94	11.00	15.5	12.9	19.6	19.5
Hikvision	002415 CH	BUY	73,417	51.23	11.00	29.1	24.4	28.4	28.7
China Transinfo	002373 CH	NR	3,885	16.02	N/A	18.9	15.1	11.4	12.7
Thunisoft	300271 CH	NR	2,480	19.50	N/A	20.5	15.3	10.4	12.4
iFlytek	002230 CH	NR	15,325	44.91	N/A	64.2	47.0	11.8	14.0
Cambricon Tech	688256 CH	NR	8,677	141.40	N/A	N/A	N/A	-7.4	-5.0
Mean						29.6	22.9	12.4	13.7
Median						20.5	15.3	11.6	13.4

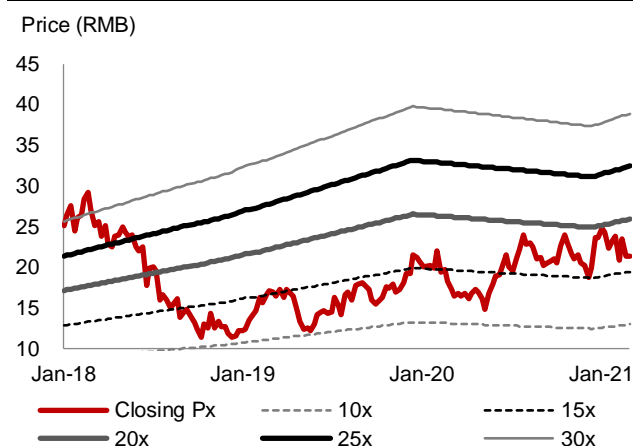
Source: Bloomberg, CMBIS

Figure 14: 12M forward P/E chart



Source: Company data, CMBIS

Figure 15: 12M forward P/E band



Source: Company data, CMBIS

## Financial Summary

### Income statement

YE 31 Dec (RMB mn)	FY19	FY20	FY21E	FY22E	FY23E
<b>Revenue</b>	<b>26,149</b>	<b>26,466</b>	<b>30,473</b>	<b>34,926</b>	<b>38,990</b>
Cost of sales	(15,396)	(15,164)	(17,450)	(19,864)	(21,994)
<b>Gross profit</b>	<b>10,753</b>	<b>11,302</b>	<b>13,024</b>	<b>15,062</b>	<b>16,996</b>
Selling exp	(3,953)	(4,291)	(4,807)	(5,460)	(6,133)
Admin exp	(741)	(785)	(844)	(962)	(1,089)
R&D exp	(2,794)	(2,998)	(3,347)	(3,737)	(4,116)
Other operating exp.	(183)	(162)	(220)	(247)	(277)
<b>Operating profit</b>	<b>3,083</b>	<b>3,066</b>	<b>3,806</b>	<b>4,655</b>	<b>5,380</b>
Finance costs	33	58	(10)	(19)	(13)
Other non-oper exp.	383	1,125	386	368	359
<b>Pre-tax profit</b>	<b>3,499</b>	<b>4,249</b>	<b>4,183</b>	<b>5,003</b>	<b>5,725</b>
Income tax expense	(338)	(314)	(366)	(473)	(514)
Minority interests	27	(32)	(43)	(50)	(57)
<b>Net profit to S/H</b>	<b>3,188</b>	<b>3,903</b>	<b>3,774</b>	<b>4,480</b>	<b>5,154</b>

### Cash flow summary

YE 31 Dec (RMB mn)	FY19	FY20	FY21E	FY22E	FY23E
<b>Net profit</b>	<b>3,188</b>	<b>3,903</b>	<b>3,774</b>	<b>4,480</b>	<b>5,154</b>
Depreciation/amortization	297	331	662	662	662
Change in working capital	(28)	(186)	(6,603)	(2,442)	(714)
Others	(1,857)	354	43	50	57
<b>Net cash from operating</b>	<b>1,601</b>	<b>4,402</b>	<b>(2,124)</b>	<b>2,750</b>	<b>5,159</b>
Capex	(531)	(642)	(457)	(524)	(585)
Other	(309)	452	0	0	0
<b>Net cash from investing</b>	<b>(840)</b>	<b>(190)</b>	<b>(457)</b>	<b>(524)</b>	<b>(585)</b>
Net borrowings	(1,462)	715	384	113	245
Dividend paid	(300)	(399)	(803)	(776)	(922)
Other	(120)	53	(43)	(50)	(57)
<b>Net cash from financing</b>	<b>(1,882)</b>	<b>369</b>	<b>(462)</b>	<b>(713)</b>	<b>(733)</b>
<b>Net change in cash</b>	<b>(1,121)</b>	<b>4,580</b>	<b>(3,043)</b>	<b>1,512</b>	<b>3,841</b>
Cash at beginning of the year	4,160	3,084	7,472	4,428	5,941
Exchange difference	45	(193)	0	0	0
<b>Cash at the end of the year</b>	<b>3,084</b>	<b>7,472</b>	<b>4,428</b>	<b>5,941</b>	<b>9,782</b>

### Balance sheet

YE 31 Dec (RMB mn)	FY19	FY20	FY21E	FY22E	FY23E
<b>Current assets</b>	<b>22,975</b>	<b>29,112</b>	<b>32,176</b>	<b>37,814</b>	<b>43,442</b>
Cash & equivalents	3,084	7,472	4,428	5,941	9,782
Account receivables	13,241	13,090	19,035	21,526	22,992
Inventory	3,840	4,928	5,517	7,081	7,334
Other current assets	2,810	3,622	3,194	3,267	3,333
<b>Non-current assets</b>	<b>6,589</b>	<b>7,483</b>	<b>7,278</b>	<b>7,140</b>	<b>7,063</b>
PPE	1,958	2,680	2,611	2,610	2,669
Intangible assets	492	482	345	209	73
Other non-current assets	4,139	4,321	4,321	4,321	4,321
<b>Total assets</b>	<b>29,565</b>	<b>36,595</b>	<b>39,454</b>	<b>44,954</b>	<b>50,505</b>
<b>Current liabilities</b>	<b>12,531</b>	<b>14,662</b>	<b>14,166</b>	<b>15,850</b>	<b>16,923</b>
ST borrowings	427	402	402	402	402
Account payables	8,098	9,703	9,404	10,549	11,584
Accrued expense	3,935	3,676	3,479	4,019	4,056
Other current liabilities	71	881	881	881	881
<b>Non-current liabilities</b>	<b>1,057</b>	<b>1,729</b>	<b>2,113</b>	<b>2,226</b>	<b>2,471</b>
LT borrowings	154	878	1,262	1,375	1,620
Other non-current liabilities	904	851	851	851	851
<b>Total liabilities</b>	<b>13,588</b>	<b>16,391</b>	<b>16,279</b>	<b>18,076</b>	<b>19,394</b>
Share capital	3,004	2,996	2,996	2,996	2,996
Capital surplus	1,883	1,990	1,990	1,990	1,990
Retained earnings	11,802	15,309	18,280	21,983	26,216
Other reserve	(1,045)	(521)	(521)	(521)	(521)
<b>Minority interest</b>	<b>333</b>	<b>431</b>	<b>431</b>	<b>431</b>	<b>431</b>
<b>Total equity</b>	<b>15,643</b>	<b>19,773</b>	<b>22,744</b>	<b>26,448</b>	<b>30,680</b>
<b>Total liabilities and</b>	<b>29,231</b>	<b>36,164</b>	<b>39,023</b>	<b>44,524</b>	<b>50,074</b>

### Key ratios

YE 31 Dec	FY19	FY20	FY21E	FY22E	FY23E
<b>Revenue mix</b>					
Domestic	63%	60%	61%	61%	62%
Overseas	37%	40%	39%	39%	38%
<b>Growth (%)</b>					
Domestic	9%	-3%	17%	14%	13%
Overseas	13%	8%	12%	15%	10%
Revenue	10%	1%	15%	15%	12%
Gross profit	22%	5%	15%	16%	13%
Operating profit	33%	-1%	24%	22%	16%
EPS	26%	23%	-3%	19%	15%
<b>Profit &amp; loss ratio (%)</b>					
Gross margin	41%	43%	43%	43%	44%
Operating margin	11.8%	11.6%	12.5%	13.3%	13.8%
Net profit margin	12.2%	14.7%	12.4%	12.8%	13.2%
<b>Balance sheet ratio</b>					
Current ratio (x)	1.83	1.99	2.27	2.39	2.57
Receivable turnover days	180	182	192	212	208
Inventory turnover days	48	60	63	66	67
Payable turnover days	109	123	114	104	104
Net debt to equity	net	net	net	net	net
<b>Profitability (%)</b>					
ROE	22.6%	22.0%	17.8%	18.2%	18.0%
ROIC	26.3%	24.0%	22.3%	21.1%	22.9%
<b>Per share data (RMB)</b>					
EPS (RMB)	1.06	1.30	1.26	1.50	1.72
DPS (RMB)	0.10	0.13	0.27	0.26	0.31
BVPS (RMB)	5.21	6.60	7.59	8.83	10.24

Source: Company data, CMBIS estimates



# Disclosures & Disclaimers

## Analyst Certification

The research analyst who is primary responsible for the content of this research report, in whole or in part, certifies that with respect to the securities or issuer that the analyst covered in this report: (1) all of the views expressed accurately reflect his or her personal views about the subject securities or issuer; and (2) no part of his or her compensation was, is, or will be, directly or indirectly, related to the specific views expressed by that analyst in this report.

Besides, the analyst confirms that neither the analyst nor his/her associates (as defined in the code of conduct issued by The Hong Kong Securities and Futures Commission) (1) have dealt in or traded in the stock(s) covered in this research report within 30 calendar days prior to the date of issue of this report; (2) will deal in or trade in the stock(s) covered in this research report 3 business days after the date of issue of this report; (3) serve as an officer of any of the Hong Kong listed companies covered in this report; and (4) have any financial interests in the Hong Kong listed companies covered in this report.

## CMBIS Ratings

**BUY** : Stock with potential return of over 15% over next 12 months  
**HOLD** : Stock with potential return of +15% to -10% over next 12 months  
**SELL** : Stock with potential loss of over 10% over next 12 months  
**NOT RATED** : Stock is not rated by CMBIS

**OUTPERFORM** : Industry expected to outperform the relevant broad market benchmark over next 12 months  
**MARKET-PERFORM** : Industry expected to perform in-line with the relevant broad market benchmark over next 12 months  
**UNDERPERFORM** : Industry expected to underperform the relevant broad market benchmark over next 12 months

## CMB International Securities Limited

**Address:** 45/F, Champion Tower, 3 Garden Road, Hong Kong, Tel: (852) 3900 0888 Fax: (852) 3900 0800

**CMB International Securities Limited ("CMBIS") is a wholly owned subsidiary of CMB International Capital Corporation Limited (a wholly owned subsidiary of China Merchants Bank)**

## Important Disclosures

There are risks involved in transacting in any securities. The information contained in this report may not be suitable for the purposes of all investors. CMBIS does not provide individually tailored investment advice. This report has been prepared without regard to the individual investment objectives, financial position or special requirements. Past performance has no indication of future performance, and actual events may differ materially from that which is contained in the report. The value of, and returns from, any investments are uncertain and are not guaranteed and may fluctuate as a result of their dependence on the performance of underlying assets or other variable market factors. CMBIS recommends that investors should independently evaluate particular investments and strategies, and encourages investors to consult with a professional financial advisor in order to make their own investment decisions.

This report or any information contained herein, have been prepared by the CMBIS, solely for the purpose of supplying information to the clients of CMBIS or its affiliate(s) to whom it is distributed. This report is not and should not be construed as an offer or solicitation to buy or sell any security or any interest in securities or enter into any transaction. Neither CMBIS nor any of its affiliates, shareholders, agents, consultants, directors, officers or employees shall be liable for any loss, damage or expense whatsoever, whether direct or consequential, incurred in relying on the information contained in this report. Anyone making use of the information contained in this report does so entirely at their own risk.

The information and contents contained in this report are based on the analyses and interpretations of information believed to be publicly available and reliable. CMBIS has exerted every effort in its capacity to ensure, but not to guarantee, their accuracy, completeness, timeliness or correctness. CMBIS provides the information, advices and forecasts on an "AS IS" basis. The information and contents are subject to change without notice. CMBIS may issue other publications having information and/or conclusions different from this report. These publications reflect different assumption, point-of-view and analytical methods when compiling. CMBIS may make investment decisions or take proprietary positions that are inconsistent with the recommendations or views in this report.

CMBIS may have a position, make markets or act as principal or engage in transactions in securities of companies referred to in this report for itself and/or on behalf of its clients from time to time. Investors should assume that CMBIS does or seeks to have investment banking or other business relationships with the companies in this report. As a result, recipients should be aware that CMBIS may have a conflict of interest that could affect the objectivity of this report and CMBIS will not assume any responsibility in respect thereof. This report is for the use of intended recipients only and this publication, may not be reproduced, reprinted, sold, redistributed or published in whole or in part for any purpose without prior written consent of CMBIS.

Additional information on recommended securities is available upon request.

For recipients of this document in the United Kingdom

This report has been provided only to persons (I) falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (as amended from time to time) ("The Order") or (II) are persons falling within Article 49(2) (a) to (d) ("High Net Worth Companies, Unincorporated Associations, etc.") of the Order, and may not be provided to any other person without the prior written consent of CMBIS.

For recipients of this document in the United States

CMBIS is not a registered broker-dealer in the United States. As a result, CMBIS is not subject to U.S. rules regarding the preparation of research reports and the independence of research analysts. The research analyst who is primary responsible for the content of this research report is not registered or qualified as a research analyst with the Financial Industry Regulatory Authority ("FINRA"). The analyst is not subject to applicable restrictions under FINRA Rules intended to ensure that the analyst is not affected by potential conflicts of interest that could bear upon the reliability of the research report. This report is intended for distribution in the United States solely to "major US institutional investors", as defined in Rule 15a-6 under the US, Securities Exchange Act of 1934, as amended, and may not be furnished to any other person in the United States. Each major US institutional investor that receives a copy of this report by its acceptance hereof represents and agrees that it shall not distribute or provide this report to any other person. Any U.S. recipient of this report wishing to effect any transaction to buy or sell securities based on the information provided in this report should do so only through a U.S.-registered broker-dealer.

For recipients of this document in Singapore

This report is distributed in Singapore by CMBI (Singapore) Pte. Limited (CMBISG) (Company Regn. No. 201731928D), an Exempt Financial Adviser as defined in the Financial Advisers Act (Cap. 110) of Singapore and regulated by the Monetary Authority of Singapore. CMBISG may distribute reports produced by its respective foreign entities, affiliates or other foreign research houses pursuant to an arrangement under Regulation 32C of the Financial Advisers Regulations. Where the report is distributed in Singapore to a person who is not an Accredited Investor, Expert Investor or an Institutional Investor, as defined in the Securities and Futures Act (Cap. 289) of Singapore, CMBISG accepts legal responsibility for the contents of the report to such persons only to the extent required by law. Singapore recipients should contact CMBISG at +65 6350 4400 for matters arising from, or in connection with the report.