

BYD (002594 CH)

Expect high growth of NEV in 2H20E

BYD announced its 1H20 results. 1H20 top-line dropped by 3% YoY to RMB60.5bn while NP increased by 14% YoY to RMB1.7bn, implying 2Q20 bottom-line recorded a YoY increase of 120%. We think 1H20 results were excellent on stronger-than-expected auto segment performance and mask business from BYDE. The Company guided bottom-line growth of 850%-1017% YoY in 3Q20E, implying the good momentum to sustain in 2H20. **We revised up FY20-22E EPS by 114%/53%/43% to reflect the strong earnings rebound. TP is lifted slightly to RMB113.09. Maintain BUY.**

- 1H20 excellent results.** In 1H20, revenue from auto and related products decreased by 6% YoY to RMB32.0bn, whereas revenue from handset components and assembly services remained flat at RMB23.3bn. GPM from auto and related products increased by 0.7ppt to 23.93% while GPM from HCAS business increased by 5.0ppt to 13.6%. Revenue from rechargeable batteries and photovoltaic increased 8% YoY to RMB4.8bn, whereas revenue from other businesses decreased by 39% YoY to RMB260mn.
- Strong 2Q20 results were supported by BYD's mask business under BYDE (285 HK).** It can be partially confirmed as the GPM for HCAS increased by 5ppt. In 1H20, operating cash inflow was RMB15.5bn with an OCF/Core profit ratio of 5.2. Advance receipt of good/service increased by RMB3.7bn compared with the beginning of the year, partially reflecting strong order on hand. One notable item was that BYD has a total of RMB658mn asset impairment (AR /inventory/ Intangible asset, etc.). We believe BYD was flashing out all historical burdens under the disguise of COVID-19, which will provide a healthier balance sheet in the future.
- Auto segment beat our expectations in 1H20.** Given sales volume slashed in 1H20, the auto segment achieved revenue of RMB32bn in 1H20 with a decrease of only 6% YoY. Even though sales volume fell by 30.4% YoY in 1H20, the unit revenue increased by 36% YoY to RMB202K, and GPM from auto sales also increased by 0.7ppt YoY to 23.9%. We believe it was mainly driven by higher proportion (+2ppt YoY) of CV sales within the NEV segment in 1H20, and that comes from strong NEV bus delivery with higher ASP both in the domestic market and abroad.

Earnings Summary

(YE 31 Dec)	FY18A	FY19A	FY20E	FY21E	FY22E
Revenue (RMB mn)	130,055	127,739	165,758	208,809	283,124
YoY growth (%)	22.79%	-1.78%	29.76%	25.97%	35.59%
Net income (RMB mn)	2,780	1,614	4,171	4,632	10,310
EPS (RMB)	0.93	0.50	1.43	1.60	3.68
YoY growth (%)	-34%	-47%	188%	12%	130%
Consensus EPS(RMB)	N/A	N/A	1.05	1.20	1.65
P/E (x)	91.23	170.94	59.36	53.09	23.08
P/B (x)	4.20	4.09	3.78	3.50	2.98
Yield (%)	0.24%	0.07%	0.18%	0.20%	0.44%
ROE (%)	5.05%	2.88%	7.06%	7.26%	14.31%
Net gearing (%)	64%	79%	91%	83%	78%

Source: Company data, Bloomberg, CMBIS estimates

BUY (Maintain)

Target Price	RMB113.09
(Previous TP	RMB112.12)
Up/Downside	+33.0%
Current Price	RMB85.00

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Stock Data

Mkt Cap (RMB mn)	216,484
Avg 3 mths t/o (RMB mn)	2,084
52-week high/low	97.84/42.27
Total Issued Shares (mn)	915 (H)
	1,813 (A)

Source: Bloomberg

Shareholding Structure

Wang Chuanfu	18.83%
Lv Xiangyang	8.77%
Bershire Hathaway Energy	8.25%

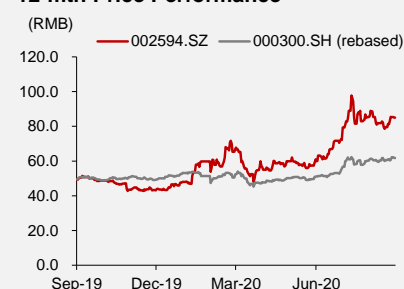
Source: Company announcement

Share Performance

	Absolute	Relative
1-mth	-0.4%	-2.9%
3-mth	43.4%	18.2%
6-mth	30.1%	6.5%

Source: Bloomberg

12-mth Price Performance



Source: Wind

Auditor: Ernst & Young

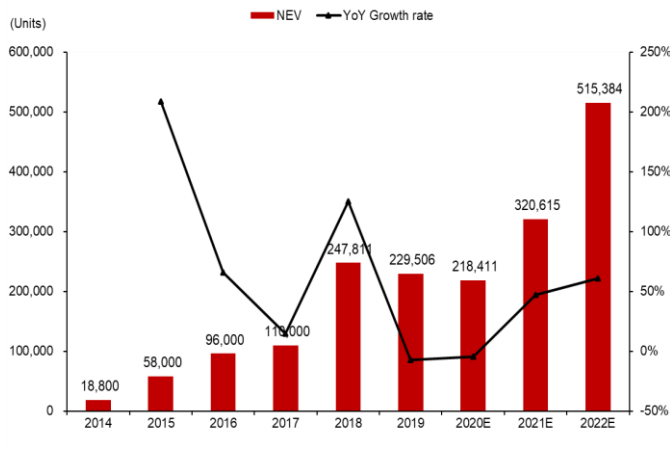
Related Report

"BYD (1211 HK) – Hidden giant in the cave" – 23 Jul 2020

- **Auto sales to have further rebound in 2H20E.** Led by strong sales from “Song Pro”, ICE sales grew by 13% YoY, while the magnitude of NEV decline narrowed to 9% YoY in Jul. Looking ahead to 2H20E, supported by strong consumer demand for “Han”, we expect PV sales to have a significant rebound. Mgmt. disclosed Han had accumulated order backlog of 300k, while BYD is ramping up capacity with bottleneck from blade battery supply. BYD guided 4k/6k/8k shipment capability for Han EV in Aug/Sep/Oct and thereafter. Furthermore, due to the gradual rise in the proportion of Han, we expect that the ASP of NEPV for 2020E will increase by 18% YoY to RMB196K. Along with the recovery of overall China’s NEV market (both to B/to C business), we expect BYD’s NEPV sales volume to increase by 74% YoY in 2H20E.
- **BYDE to become a major supplier of Apple for iPad/iWatch.** Benefited from the 1) orders ramp up from its major customers (Apple/Xiaomi); 2) the increase in shipments of high-margin smartphones and tablets; 3) the shipment of glass and ceramic products, BYDE is entering into a high growth stage. The new smart products (drone/electronic cigarettes) will bring incremental revenue.
- **Valuation is largely unchanged.** Based on 1H20 operating updates, we revise BYD’s FY20-22E EPS up by 114%/53%/43% mainly on 1) more optimistic auto sales for higher volume and ASP, 2) strong HCIS earnings growth in the near-term and 3) we trim down cloud rail’s contribution on more conservative assumption. We raise our NEV segment valuation to reflect the strong NEV sales forecast supported by Han and new PHEV products with DM4.0 in 2021E. In the meanwhile, we revised down our cloud rail valuation to reflect the possible contact delay affected by the COVID-19 situation in Brazil. CMBI TMT team (Alex Ng) has raised THE valuation forecast for BYDE (285 HK) on 31 Aug 2020. We directly take CMBI valuation on BYDE to be consistent. Based on the SOTP method, we derive BYD’s overall value at RMB363.0bn in 2021E. **Our TP for BYD-A is lifted slightly to RMB113.09, reflecting 79.0/70.6x FY20/21E PER. Reiterate BUY rating.**

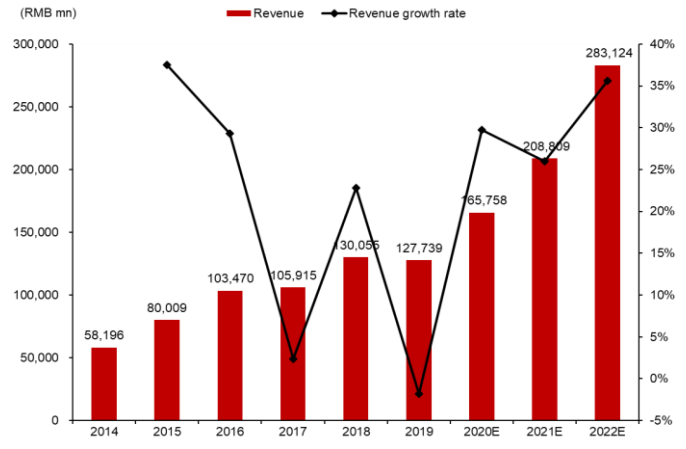
Focus chart

Figure 1: NEV Sales volume forecast: BYD



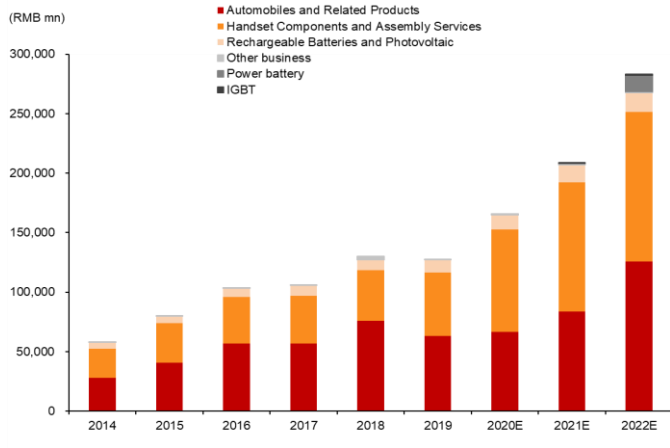
Source: Company data, CMBIS estimates

Figure 2: Revenue forecast



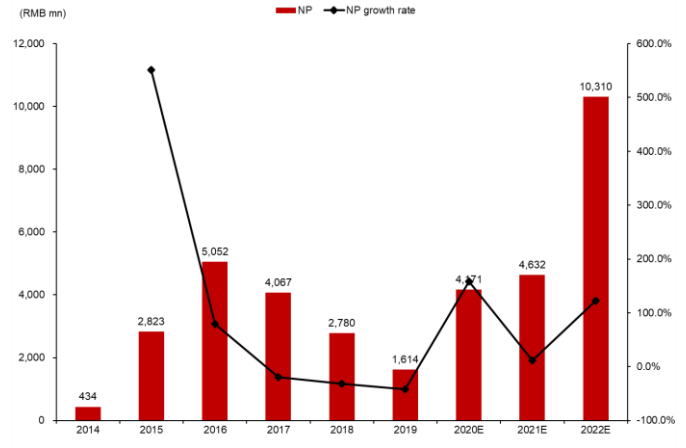
Source: Company data, CMBIS estimates

Figure 3: Revenue forecast by business segments



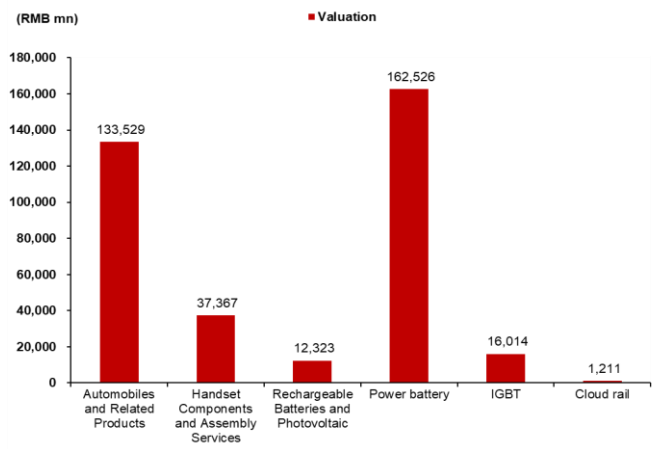
Source: Company data, CMBIS estimates

Figure 4: Bottom-line forecast



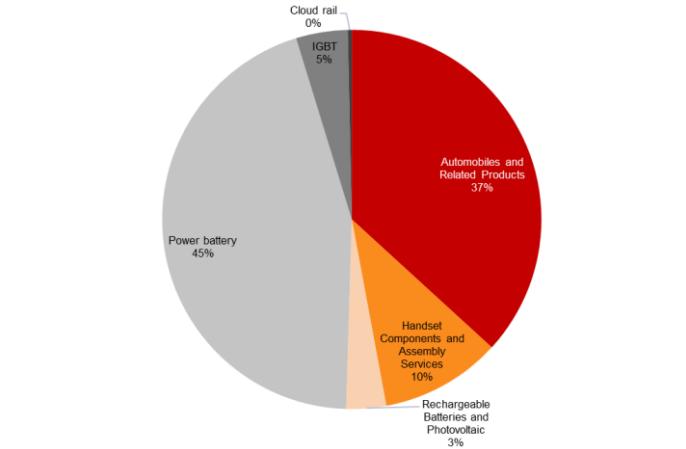
Source: Company data, CMBIS estimates

Figure 5: SOTP Valuation by segment in 2021E



Source: Company data, CMBIS estimates

Figure 6: Valuation by business segments



Source: Company data, CMBIS estimates

Earnings Revision

Figure 7: Earnings revision

(RMB mn)	New		Old		Change (%)	
	FY20E	FY21E	FY20E	FY21E	FY20E	FY21E
Revenue	165,758	208,809	148,901	190,449	11%	10%
Gross profit	27,979	33,131	22,921	28,892	22%	15%
Operating profit	5,820	6,709	2,764	4,445	111%	51%
Net profit	4,171	4,632	2,087	3,112	100%	49%
EPS (RMB)	1.43	1.60	0.67	1.04	114%	53%
GPM	16.88%	15.87%	15.39%	15.17%	1.5 ppt	0.7 ppt
OPM	3.51%	3.21%	1.86%	2.33%	1.7 ppt	0.9 ppt
NPM	2.52%	2.22%	1.40%	1.63%	1.1 ppt	0.6 ppt

Source: CMBIS estimates

Figure 8: CMBIS estimates vs consensus

(RMB mn)	CMBIS		Consensus		Diff (%)	
	FY20E	FY21E	FY20E	FY21E	FY20E	FY21E
Revenue	165,758	208,809	138,018	160,339	20%	30%
Gross profit	27,979	33,131	22,806	25,909	23%	28%
Operating profit	5,820	6,709	3,653	4,432	59%	51%
Net profit	4,171	4,632	2,738	3,230	52%	43%
EPS (RMB)	1.43	1.60	1.02	1.19	40%	35%
GPM	16.88%	15.87%	16.52%	16.16%	0.4 ppt	-0.3 ppt
OPM	3.51%	3.21%	2.65%	2.76%	0.9 ppt	0.4 ppt
NPM	2.52%	2.22%	1.98%	2.01%	0.5 ppt	0.2 ppt

Source: Bloomberg, CMBIS estimates

Figure 9: Revenue breakdown

(RMB mn)	FY18A	FY19A	FY20E	FY21E	FY22E
Automobiles and Related Products	76,007	63,266	66,457	83,563	125,690
...YoY	34%	-17%	5%	26%	50%
Handset Components and Assembly Services	42,230	53,380	86,049	108,851	125,832
...YoY	4%	26%	61%	27%	16%
Rechargeable Batteries and Photovoltaic	8,950	10,506	12,607	14,498	16,238
...YoY	2%	17%	20%	15%	12%
Other business	2,868	587	646	807	969
...YoY	5524%	-80%	10%	25%	20%
Total Explicit revenue	130,055	127,739	165,758	207,719	268,728
...YoY	23%	-2%	30%	25%	29%
Power battery				720	13,619
...YoY					1790%
IGBT				370	777
...YoY					110%
Total	130,055	127,739	165,758	208,809	283,124
...YoY	23%	-2%	30%	26%	36%

Source: Company data, CMBIS estimates

Figure 10: P&L breakdown

(RMB mn)	FY18A	FY19A	FY20E	FY21E	FY22E
Revenue	130,055	127,739	165,758	208,809	283,124
...YoY	22.79%	-1.78%	29.76%	25.97%	35.59%
Cost of sales	(108,725)	(106,924)	(137,779)	(175,678)	(235,442)
Gross profit	21,330	20,814	27,979	33,131	47,682
GPM (%)	16.40%	16.29%	16.88%	15.87%	16.84%
...YoY	5.91%	-2.42%	34.42%	18.42%	43.92%
Selling Exp	(4,729)	(4,346)	(5,636)	(7,308)	(9,909)
...% of rev	-3.64%	-3.40%	-3.40%	-3.50%	-3.50%
Admin Exp	(4,989)	(5,629)	(6,630)	(7,935)	(9,343)
...% of rev	-3.84%	-4.41%	-4.00%	-3.80%	-3.30%
Operating profit	4,241	2,312	5,820	6,709	14,856
OPM (%)	3.26%	1.81%	3.51%	3.21%	5.25%
...YoY	-21.62%	-45.48%	151.70%	15.27%	121.44%
Net profit	2,780	1,614	4,171	4,632	10,310
NPM (%)	2.14%	1.26%	2.52%	2.22%	3.64%
...YoY	-31.64%	-41.93%	158.33%	11.06%	122.59%

Source: Company data, CMBIS estimates

Figure 11: Interim/Full-year P&L breakdown

(RMB mn)	1H19	1H20	YoY	2H19	2H20E	YoY
Revenue	62,184	60,503	-3%	65,554	105,255	61%
Cost of sales	(51,523)	(48,647)	-6%	(55,401)	(89,133)	61%
Gross profit	10,661	11,856	11%	10,153	16,122	59%
Taxes and levies	(769)	(676)	-12%	(792)	(1,314)	66%
Selling and distribution exp	(2,301)	(2,005)	-13%	(2,045)	(3,630)	77%
Administrative expenses	(2,071)	(2,020)	-2%	(2,070)	(2,952)	43%
R&D expenses	(2,495)	(2,525)	1%	(3,134)	(4,105)	31%
Finance costs	(1,453)	(1,664)	15%	(1,561)	(2,097)	34%
Other income	899	733	-18%	824	1,652	100%
Investment income	(273)	(128)	-53%	(535)	(452)	-16%
GL from changes in fair values	5	42	787%	5	(102)	-2156%
Impairment losses on assets/credit	(389)	(659)	69%	(247)	(177)	-28%
GL on disposal of subsidiaries	(26)	(7)	-73%	(74)	(73)	-1%
Operating profit/(loss)	1,789	2,948	65%	523	2,872	449%
Non-operating income	112	104	-7%	115	394	244%
Non-operating expense	(27)	(124)	355%	(80)	(0)	-99%
Profit before income tax	1,874	2,928	56%	557	3,265	486%
Income tax expense	(225)	(545)	142%	(87)	(369)	325%
Profit for the year	1,648	2,383	45%	471	2,896	515%
Non-controlling interests	194	721	272%	311	388	25%
NP	1,455	1,662	14%	160	2,508	1469%

Source: Company data, CMBIS estimates

Financial Summary

Income statement

YE 31 Dec (RMB mn)	FY18A	FY19A	FY20E	FY21E	FY22E
Revenue	130,055	127,739	165,758	208,809	283,124
Cost of sales	(108,725)	(106,924)	(137,779)	(175,678)	(235,442)
Gross profit	21,330	20,814	27,979	33,131	47,682
Taxes and levies	(2,146)	(1,561)	(1,989)	(2,506)	(3,397)
S&D exp	(4,729)	(4,346)	(5,636)	(7,308)	(9,909)
R&D exp	(3,760)	(4,141)	(4,973)	(6,055)	(8,069)
Admin exp	(4,989)	(5,629)	(6,630)	(7,935)	(9,343)
Finance costs	(2,997)	(3,014)	(3,761)	(4,355)	(4,260)
Impairment losses	(1,020)	(636)	(836)	(1,044)	(1,417)
Other income	2,328	1,724	2,386	3,187	4,072
Investment income	248	(809)	(580)	(313)	(283)
GL from changes in FV	(5)	10	(59)	4	(40)
GL on disposal	(19)	(100)	(80)	(97)	(179)
Operating profit/(loss)	4,241	2,312	5,820	6,709	14,856
Non-operating income	230	226	497	418	510
Non-operating expense	(86)	(107)	(124)	(157)	(225)
Profit before income tax	4,385	2,431	6,193	6,970	15,141
Income tax expense	(829)	(312)	(914)	(1,106)	(2,090)
Profit for the year	3,556	2,119	5,279	5,863	13,051
Non-controlling interests	776	504	1,109	1,231	2,741
NP	2,780	1,614	4,171	4,632	10,310

Cash flow

YE 31 Dec (RMB mn)	FY18A	FY19A	FY20E	FY21E	FY22E
Net income	3,556	2,119	5,279	5,863	13,051
D&A	9,995	9,933	10,035	12,193	14,571
Change in working capital	(291)	3,233	5,493	5,814	1,738
Others	(1,319)	5,923	-	-	-
Net cash from operating	12,523	14,741	10,735	13,348	27,973
Capex & investments	(6,076)	(12,040)	(12,992)	(13,608)	(14,961)
Associated companies	(496)	(499)	(406)	(447)	(491)
Others	(7,659)	(8,342)	(4,265)	(4,872)	(6,829)
Net cash from investing	(14,231)	(20,881)	(17,663)	(18,927)	(22,281)
Equity raised	-	-	-	-	-
Change of Debts	5,076	10,535	16,355	13,244	6,006
Dividend paid	(557)	(164)	(417)	(463)	(1,031)
Others	(603)	(3,761)	7,726	(8)	10,702
Net cash from financing	3,917	6,610	10,019	12,060	(3,172)
Net change in cash	2,209	470	3,091	6,481	2,520
Cash at the beginning	9,903	13,052	12,650	16,183	16,705
Others	941	(872)	442	(5,959)	594
Cash at the end	13,052	12,650	16,183	16,705	19,819
Less: pledged cash	-	-	-	-	-

Balance sheet

YE 31 Dec (RMB mn)	FY18A	FY19A	FY20E	FY21E	FY22E
Non-current assets	79,361	88,675	101,903	115,442	131,283
Fixed asset	43,679	49,443	58,001	66,220	74,742
Intangible assets	11,314	12,650	14,840	16,943	19,123
Interest in joint	3,561	4,060	4,466	4,913	5,404
Other non-current assets	20,807	22,521	24,597	27,366	32,015
Current assets	115,211	106,967	134,346	161,215	198,408
Cash	13,052	12,650	16,183	16,705	19,819
Account receivable	49,284	43,934	55,253	67,358	80,893
Inventory	26,330	25,572	33,442	41,828	52,321
Other current assets	26,545	24,811	29,469	35,324	45,376
Current liabilities	116,569	108,029	139,117	171,571	207,814
Borrowings	37,789	40,332	53,093	65,014	68,917
Account payables	46,283	36,168	45,926	56,670	73,576
Other payables	13,568	11,217	14,467	18,446	24,721
Tax payables	18,930	20,311	25,631	31,440	40,600
Non-current liabilities	17,308	25,011	29,812	32,249	36,326
Borrowings	13,924	21,916	25,511	26,834	28,937
Provisions	66	103	73	88	167
Deferred income tax	-	-	-	-	-
Others	3,317	2,992	4,228	5,326	7,222
Total equity	60,694	62,601	67,320	72,837	85,550
Minority Interest	5,496	5,839	5,980	6,620	7,688
Shareholders' equity	55,198	56,762	61,340	66,217	77,863

Key ratios

YE 31 Dec	FY18A	FY19A	FY20E	FY21E	FY22E
Sales mix (%)					
Automobiles	58%	50%	40%	40%	44%
Handset Components	32%	42%	52%	52%	44%
Rechargeable Batteries	7%	8%	8%	7%	6%
Other business	2%	0%	0%	0%	0%
Power battery	0%	0%	0%	0%	5%
IGBT	0%	0%	0%	0%	0%
Total	100%	100%	100%	100%	100%
P&L ratios (%)					
Gross profit margin	16%	16%	17%	16%	17%
Pre-tax margin	3%	2%	4%	3%	5%
Net margin	3%	2%	3%	3%	5%
Effective tax rate	19%	13%	15%	16%	14%
Balance sheet ratios					
Current ratio (x)	0.99	0.99	0.97	0.94	0.95
Quick ratio (x)	0.59	0.59	0.56	0.53	0.52
Cash ratio (x)	0.11	0.12	0.12	0.10	0.10
Debtors turnover days	138	126	122	118	104
Total debt / total equity	221%	213%	251%	280%	285%
Net debt / equity ratio	64%	79%	91%	83%	78%
Returns (%)					
ROE	5%	3%	7%	7%	14%
ROA	4%	3%	5%	4%	6%
Per share					
EPS (RMB)	0.93	0.50	1.43	1.60	3.68
DPS (RMB)	0.20	0.06	0.15	0.17	0.38
BVPS (RMB)	20.23	20.81	22.48	24.27	28.54

Source: Company data, CMBIS estimates

Note: *All numbers are based on A share financial statement

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