

BYD Company (1211 HK)

Strong sales momentum, low assets efficiency

Maintain HOLD. BYD's sluggish gross margin for its business in FY21 despite 83% YoY growth in sales volume raises our concerns about its profitability in FY22E. On the other hand, BYD's strong sales volume momentum now backs up its share price and makes investors pay less attention to its 4Q21 earnings miss. we revise up our sales volume forecasts but lower net profit estimates for FY22-23E. BYD's heavy capex (RMB 51.4bn in FY21) is likely to continue, in our view, which could start to weigh on its margins in the next 2-3 years.

- 4Q21 earnings miss.** Despite a 40% QoQ sales volume growth, BYD's net profit dropped 27% QoQ to RMB 602mn in 4Q21, 41% lower than our prior forecast, mainly due to higher-than-expected business tax and R&D expenses. We estimate that BYD's auto business (excluding mask, monorail and semiconductor) gross margin narrowed by 0.4 pts to 14.5% in FY21 despite 83% YoY growth in sales volume, which raises our concerns about its profitability in FY22E, especially with heightened raw-material prices.
- Strong NEV order backlog.** Management indicates that the current order backlog has exceeded 400,000 units and demand for both *Dolphin BEV* and *Yuan Plus BEV* are over 30,000 units per month during the earnings call. Management also expects the *Han BEV* and PHEV combined to reach monthly volume of 30,000 units after the launch of the DM-i version. All of these exceeded our prior estimates. On the other hand, production capacity could cap its deliveries. Accordingly, we revise up our sales volume forecasts from 0.99mn/1.04mn units to 1.44mn/1.55mn units for FY22/23E, respectively. In our view, BYD's strong sales volume momentum now backs up its share price and makes investors pay less attention to its 4Q21 earnings miss.
- High NEV penetration in March may not be sustainable, which could result in BYD's share price volatility.** NEV market share reached a record high of 31% in the first four weeks of Mar 2022, based on our weekly retail sales data, much higher than our prior estimates. Should investors extrapolate YTD data with a similar pattern from 2021, NEV market share could exceed 40% in full 2022. We believe the NEV pattern should be different from last year and we see NEV sales volatility for the rest of the year. Therefore, BYD, as an NEV proxy in our view, may experience share price volatility along with investors' expectation revisions on NEVs.

Earnings Summary

(YE 31 Dec)	FY19A	FY20A	FY21A	FY22E	FY23E
Revenue (RMB mn)	127,739	156,598	216,142	305,841	322,950
YoY growth (%)	(1.8)	22.6	38.0	41.5	5.6
Net income (RMB mn)	1,614	4,234	3,045	5,261	7,100
EPS (RMB)	0.50	1.47	1.06	1.81	2.44
YoY growth (%)	(41.9)	162.3	(28.1)	72.7	35.0
P/E (x)	366.0	123.6	172.0	100.7	74.6
P/B (x)	9.3	9.3	5.6	5.3	5.0
Yield (%)	0.2	0.2	0.1	0.1	0.1
ROE (%)	2.9	7.5	4.0	5.4	6.9
Net gearing (%)	71.3	25.9	Net cash	Net cash	Net cash

Source: Company data, Bloomberg, CMBIGM estimates

HOLD (Maintain)

Target Price **HK\$ 255.00**
 (Previous TP **HK\$ 270.00**)
 Up/Downside **+13.6%**
 Current Price **HK\$ 224.40**

China Auto Sector

SHI Ji, CFA
 (852) 3761 8728
 shiji@cmbi.com.hk

DOU Wenjing, CFA
 (852) 6939 4751
 douwenjing@cmbi.com.hk

Stock Data

Mkt Cap (HK\$ mn) 653,260
 Avg 3 mths t/o (HK\$ mn) 1,786
 52w High/Low (HK\$) 324.60/138.40
 Total Issued Shares (mn) 2,911
 Source: Bloomberg

Shareholding Structure

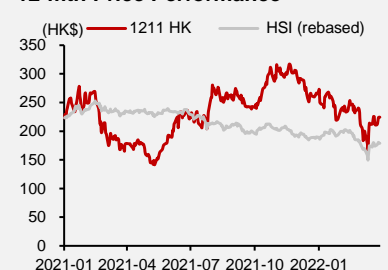
Wang Chuanfu 17.6%
 Lv Xiangyang 8.2%
 Berkshire Hathaway 7.7%
 Others 66.4%
 Source: HKEx

Share Performance

	Absolute	Relative
1-mth	-6.2%	-4.6%
3-mth	-15.8%	-9.8%
6-mth	-7.7%	2.8%

Source: Bloomberg

12-mth Price Performance



Source: Bloomberg

Auditor: GrantThornton

Related Reports

"BYD Company - Do you want one champion or four runners-up?" – 13 Jan 2022

- **Earnings revision.** BYD's audited annual sales volume in FY21 was only about 19,000 units lower than its aggregated monthly sales volumes, better than the gaps of 32,000-86,000 units in FY14-20, reflecting improving management capabilities, although we do not see such gaps in its peers. We raise our revenue estimates by 8-16% for FY22-23E, respectively to reflect our higher sales volume forecasts now. We see low chance of significant margin improvement in FY22E for BYD given its low assets efficiency and heightened raw-material prices. We cut gross margin estimates by 2.0-2.5 pts to 13.0% and 14.0% for FY22/23E, respectively.

BYD spent RMB 51.4bn as capex in FY21, 3x higher than that in FY20. We expect such heavy investments to continue in FY22E for capacity expansion and R&D. The associated depreciation and amortization could weigh on the company's profitability in the following 2-3 years. It could be even worse if BYD's model cycle starts to deteriorate some time, which happened to Geely Automobile Holdings (175 HK, HOLD) during FY19-21. We cut our net profit estimates by 30-31% to RMB 5.3bn/7.1bn, respectively, for FY22/23E.

- **Valuation/Key risks.** We maintain our HOLD rating and arrive at our new target price of HK\$ 255 (from HK\$ 270) based on sum-of-the-parts (SOTP).

We value HK\$ 203 per share for BYD's auto business, equivalent to 2.5x our FY22E NEV revenue. We believe a slight valuation discount to Li Auto (LI US, BUY), Xpeng (XPEV US, BUY) and NIO (NIO US, BUY), which are now trading at 3-4x FY22E P/S, is justified, given BYD's lag in autonomous driving technologies and lower assets efficiency.

We value HK\$ 31 per share for BYD's battery segment, based on 5x our FY23E P/S including consumer electronics batteries and photovoltaic, or 17x FY23E P/S on our estimated external EV battery revenue at BYD.

We value HK\$ 8 per share for BYD's handset business, based on BYDE (285 HK, HOLD)'s current market cap of HK\$ 35.6bn, given the gloomy outlook for FY22E.

We value HK\$ 12 per share for BYD's semiconductor business, equivalent to 10x FY23E P/S on our estimated external semiconductor sales.

Key risks to our rating and target price include higher or lower NEV sale volume, faster or slower battery external supply progress than we expect, as well as sector re-rating or de-rating.

Figure 1: Quarterly results

RMB mn	1Q20	2Q20	3Q20	4Q20	1Q21	2Q21	3Q21	4Q21	YoY	QoQ
Sales volume (units)	61,273	97,355	110,347	157,997	104,145	142,544	206,055	287,387	81.9%	39.5%
Revenue	19,679	40,824	44,520	51,575	40,992	49,894	54,307	70,950	37.6%	30.6%
Gross profit	3,475	8,382	9,935	8,555	5,163	6,438	7,238	9,306	8.8%	28.6%
R&D expenses	(757)	(1,769)	(2,366)	(2,573)	(1,217)	(1,778)	(2,238)	(2,757)	7.2%	23.2%
SG&A expenses	(1,626)	(2,399)	(2,603)	(2,748)	(2,410)	(2,649)	(2,983)	(3,750)	36.4%	25.7%
Operating profit	375	2,574	2,852	1,285	646	1,570	1,653	763	-40.6%	-53.8%
Net profit	113	1,550	1,751	821	237	936	1,270	602	-26.6%	-52.6%
Gross margin	17.7%	20.5%	22.3%	16.6%	12.6%	12.9%	13.3%	13.1%	-3.5 ppt	-0.2 ppt
Operating margin	1.9%	6.3%	6.4%	2.5%	1.6%	3.1%	3.0%	1.1%	-1.4 ppt	-2.0 ppt
Net margin	0.6%	3.8%	3.9%	1.6%	0.6%	1.9%	2.3%	0.8%	-0.7 ppt	-1.5 ppt

Source: Company data, CMBIGM

Figure 2: Earnings revision

RMB mn	New		Old		Diff (%)	
	FY22E	FY23E	FY22E	FY23E	FY22E	FY23E
Revenue	305,841	322,950	264,217	299,234	15.8%	7.9%
Gross profit	39,628	45,062	39,879	46,215	-0.6%	-2.5%
Operating profit	7,115	9,647	10,117	13,733	-29.7%	-29.8%
Net profit	5,261	7,100	7,499	10,276	-29.9%	-30.9%
Gross margin	13.0%	14.0%	15.1%	15.4%	-2.1 ppt	-1.5 ppt
Operating margin	2.3%	3.0%	3.8%	4.6%	-1.5 ppt	-1.6 ppt
Net margin	1.7%	2.2%	2.8%	3.4%	-1.1 ppt	-1.2 ppt

Source: CMBIGM estimates

Figure 3: CMBI estimates vs consensus

RMB mn	CMBIGM		Consensus		Diff (%)	
	FY22E	FY23E	FY22E	FY23E	FY22E	FY23E
Revenue	305,841	322,950	299,835	370,758	2.0%	-12.9%
Gross profit	39,628	45,062	46,265	59,162	-14.3%	-23.8%
Operating profit	7,115	9,647	13,747	18,355	-48.2%	-47.4%
Net profit	5,261	7,100	7,285	10,550	-27.8%	-32.7%
Gross margin	13.0%	14.0%	15.4%	16.0%	-2.5 ppt	-2.0 ppt
Operating margin	2.3%	3.0%	4.6%	5.0%	-2.3 ppt	-2.0 ppt
Net margin	1.7%	2.2%	2.4%	2.8%	-0.7 ppt	-0.6 ppt

Source: Bloomberg, CMBIGM estimates

Figure 4: SOTP valuation table

Segment	Estimated Revenue of FY22E (RMB mn)	Estimated Revenue of FY23E (RMB mn)	Target P/S Multiple	Target Market Cap (HK\$ mn)	Target Price (HK\$)
NEV	189,629		2.5x	592,272	203
Battery and photovoltaic		20,887	3.5x	89,738	31
- External sales of EV battery		4,487	16x		
Handset				23,411	8
External sales of semiconductor		3,000	10x	35,895	12
SOTP				741,317	255

Source: CMBIGM estimates

Financial Summary

Income statement

YE 31 Dec (RMB mn)	FY19A	FY20A	FY21A	FY22E	FY23E
Revenue	127,739	156,598	216,142	305,841	322,950
Cost of sales	(106,924)	(126,251)	(187,998)	(266,213)	(277,888)
Gross profit	20,814	30,346	28,145	39,628	45,062
Selling exp.	(4,346)	(5,056)	(6,082)	(8,723)	(9,338)
Admin exp.	(4,141)	(4,321)	(5,710)	(7,822)	(8,444)
R&D exp.	(5,629)	(7,465)	(7,991)	(10,800)	(12,000)
Others	(4,386)	(6,419)	(3,730)	(5,167)	(5,633)
Operating profit	2,312	7,086	4,632	7,115	9,647
Non-operating income	226	282	338	300	300
Non-operating expenses	(107)	(485)	(452)	(450)	(450)
Pre-tax profit	2,431	6,883	4,518	6,965	9,497
Tax	(312)	(869)	(551)	(959)	(1,306)
Minority interests	(504)	(1,780)	(922)	(745)	(1,091)
Net profit	1,614	4,234	3,045	5,261	7,100

Cash flow summary

YE 31 Dec (RMB mn)	FY19A	FY20A	FY21A	FY22E	FY23E
Profit before taxation	2,431	6,883	4,518	6,965	9,497
Depreciation/amortization	9,840	12,519	14,108	15,831	17,710
Change in working capital	(1,721)	21,399	44,083	(18,102)	(1,423)
Others	4,191	4,592	2,757	3,009	2,005
Net cash from operating	14,741	45,393	65,467	7,703	27,789
Capex	(20,627)	(11,774)	(37,344)	(25,230)	(25,530)
Others	(254)	(2,670)	(8,060)	(900)	(990)
Net cash from investing	(20,881)	(14,444)	(45,404)	(26,130)	(26,520)
Share issuance	-	-	37,314	-	-
Net borrowings	9,879	(24,490)	(17,006)	(628)	1,415
Others	(3,269)	(4,418)	(4,245)	(1,664)	(2,783)
Net cash from financing	6,610	(28,907)	16,063	(2,292)	(1,369)
Net change in cash	470	2,041	36,125	(20,720)	(100)
Cash at beginning of the year	11,151	11,674	13,738	49,820	29,100
Exchange difference	53	23	(44)	-	-
Cash at the end of the year	11,674	13,738	49,820	29,100	29,000

Balance sheet

YE 31 Dec (RMB mn)	FY19A	FY20A	FY21A	FY22E	FY23E
Current assets	106,967	111,605	166,110	175,874	184,525
Cash & equivalents	12,650	14,445	50,457	30,000	30,000
Account receivables	50,943	50,079	44,994	60,540	63,926
Inventories	25,572	31,396	43,355	58,348	62,430
Other current assets	17,802	15,685	27,304	26,986	28,169
Non-current assets	88,675	89,412	129,670	140,815	150,203
PP&E	49,443	54,585	61,221	67,758	72,794
Intangibles	12,716	11,870	17,171	16,657	16,079
Investment in JVs&assos	4,060	5,466	7,905	9,075	10,285
Other non-current assets	22,455	17,492	43,373	47,325	51,045
Total assets	195,642	201,017	295,780	316,688	334,728
Current liabilities	108,029	106,431	171,304	178,892	186,131
Bank borrowings	45,330	16,401	10,204	9,311	3,726
Account payables	22,521	42,983	73,160	87,522	91,360
Contract Liabilities	4,504	8,193	14,934	14,587	3,426
Other current liabilities	35,674	38,854	73,006	67,472	87,619
Non-current liabilities	25,011	30,133	20,232	26,848	29,959
Bank borrowings	11,948	14,745	8,744	11,744	13,744
Bond payables	9,969	8,880	2,046	5,046	6,046
Other non-current liabilities	3,095	6,507	9,442	10,058	10,169
Total liabilities	133,040	136,563	191,536	205,741	216,090
Share capital	2,728	2,728	2,911	2,911	2,911
Reserves	49,640	53,052	92,159	97,213	103,888
Non-controlling interests	5,839	7,580	9,175	10,823	11,840
Shareholders' equity	56,762	56,874	95,070	100,125	106,799
Total equity and liabilities	195,642	201,017	295,780	316,688	334,728

Key ratios

YE 31 Dec	FY19A	FY20A	FY21A	FY22E	FY23E
Sales mix (%)					
Automobile	49.5	53.6	52.0	65.7	63.1
Handset	41.8	38.3	40.0	28.4	30.4
Battery & others	8.7	8.0	8.0	5.8	6.5
Growth (%)					
Revenue	(1.8)	22.6	38.0	41.5	5.6
Gross profit	(2.4)	45.8	(7.3)	40.8	13.7
Operating profit	(45.5)	206.4	(34.6)	53.6	35.6
Net profit	(41.9)	162.3	(28.1)	72.7	35.0
Profit & loss ratio (%)					
Gross margin	16.3	19.4	13.0	13.0	14.0
Operating margin	1.8	4.5	2.1	2.3	3.0
Net profit margin	1.3	2.7	1.4	1.7	2.2
Balance sheet ratio					
Net cash/total equity (x)	(0.7)	(0.3)	0.3	0.1	0.1
Current ratio (x)	1.0	1.0	1.0	1.0	1.0
Receivable turnover days	172	136	94	85	85
Inventory turnover days	87	91	84	80	82
Payable turnover days	123	150	156	150	150
Profitability (%)					
ROE	2.9	7.5	4.0	5.4	6.9
ROA	0.8	2.1	1.2	1.7	2.2
Per share data (RMB)					
EPS	0.50	1.47	1.06	1.81	2.44
DPS	0.06	0.15	0.11	0.18	0.24

Source: Company data, CMBIGM estimates

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CMB International Global Markets Limited

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

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