

BYD (002594 CH)

Upside remains as bottom-line revised up

BYD announced that total auto sales volume achieved 42K units in Sep, an increase of 3.6% YoY. Among these, NEPV achieved 20K units, an increase of 42.5% YoY/ 32.8% MoM. The Company raised its 3Q20E earnings guidance with a new bottom-line range of RMB 3.4-3.6bn in the first three quarters of 2020E. We have confidence in BYD's sales volume in the 4Q20E and remain optimistic about its performance in 2021E given its new product cycle. We raise our bottom-line forecast by 7% to RMB 4.2bn in 2020E. Reiterate BUY rating and raise TP to RMB155.7.

■ **Benefited from the recovery of China's overall NEV market, BYD achieved rapid growth in its NEV segment in Sep.** BYD sold 42K units (ICE+NEV) of auto in Sep, an increase of 3.6%YoY. Its NEV business has rebounded back to a high growth path with a total sales volume of 20K units, an increase of 45.3% YoY. Among these, NEPV achieved 19K units (+42.5%YoY) whereas NECV achieved 1.3K units (+32.8%YoY). We believe that the total delivery of model Han is in line with our expectations, with a total volume of 5,612 units in Sep. We expect that the sales volume of Han will continue to rise in 4Q20E as the production of the blade battery is ramping up. In terms of ICE, sales reached 22K units in Sep, down 17.6%YoY.

■ **Sales volume of NEPV in 4Q20E is expected to be doubled YoY.** Given the cut-off day of NEV subsidy, 4Q is the traditional sales peak season for commercial-used NEVs. Affected by COVID-19, NEV demand from the to-B side was postponed to 2H20E. As a result, we expect to-B side demand may exceed market expectations in 4Q20E. On the to-C end, BYD has launched its new model Tang DM and Song Plus since Aug. It is expected that the blade battery version of Tang EV, e2, e3, together with Yuan EV (facelift version), will be launched in the 4Q20E. We believe that a series of new models, underpinned by production ramp-up of blade battery, will bring BYD's NEV sales back to the high growth path in 4Q20E. We expect BYD will achieve total NEPV sales of 67K units in 4Q20E, an increase of 102%YoY.

Earnings Summary

(YE 31 Dec)	FY18A	FY19A	FY20E	FY21E	FY22E
Revenue (RMB mn)	130,055	127,739	156,971	201,032	269,702
YoY growth (%)	22.79%	-1.78%	22.88%	28.07%	34.16%
Net income (RMB mn)	2,780	1,614	4,218	5,287	10,287
EPS (RMB)	0.93	0.50	1.45	1.84	3.67
YoY growth (%)	-34%	-47%	192%	27%	100%
Consensus EPS(RMB)	N/A	N/A	1.05	1.20	1.65
P/E (x)	140.07	262.44	90.03	70.87	35.52
P/B (x)	6.45	6.27	5.80	5.31	4.53
Yield (%)	0.17%	0.05%	0.13%	0.16%	0.32%
ROE (%)	5.05%	2.88%	7.14%	8.23%	14.12%
Net gearing (%)	64%	79%	88%	80%	75%

Source: Company data, Bloomberg, CMBIS estimates

BUY (Maintain)

Target Price	RMB155.7
(Previous TP	RMB113.1)
Up/Downside	+19.3%
Current Price	RMB130.5

China NEV Sector

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Stock Data

Mkt Cap (HK\$ mn)	343,248
Avg 3 mths t/o (HK\$ mn)	3,009
52-week high/low	132.3/42.3
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%

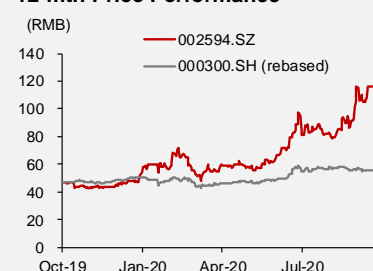
Source: Company announcement

Share Performance

	Absolute	Relative
1-mth	55.7%	55.5%
3-mth	62.9%	68.3%
6-mth	221.7%	218.7%

Source: Bloomberg

12-mth Price Performance



Source: Wind

Auditor: Ernst & Young

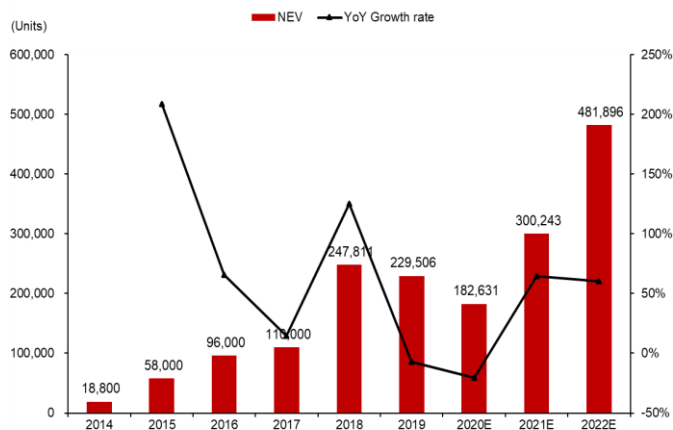
Related Report

1. "BYD (002594 CH) – A shining monthly delivery of model "Han" – 8 Sep 2020
2. "BYD (002594 CH) – Expect high growth of NEV in 2H20E – 1 Sep 2020
3. "BYD (002594 CH) – Hidden giant in the cave" – 23 Jul 2020

- **BYDE (285 HK) is expected to beat market expectations.** For Apple business, the iPad/Watch assembly components are on track. We believe that BYDE has obtained a 20-30% share of the latest 2H20E iPad models, and it will reach 30-40% of all iPad products by 2021E. As Apple will accelerate the diversification of suppliers, we expect BYDE will expand to iPad metal casing and gain share in iPhone/watch ceramic products in 2021E. In terms of headset EMS, Xiaomi will offset the negative impact of Huawei in 2021E. In order to mitigate the downside risks brought about by the Huawei ban, we expect BYDE to expand EMS capacity for Xiaomi with share allocation to 40% in FY21E (vs. 10-20% in FY20E). In addition, backed by Samsung/Xiaomi's promising outlook in 2021, we expect strong demand for glass/ceramic casing given rapid 5G adoption.
- **The Company revised up its 3Q20E earnings guidance.** BYD revised its performance guidance for the first three quarters from the previous RMB2.8-3.0bn to RMB3.4-3.6bn, representing an increase of 116-129% YoY. It implies the net profit will achieve RMB1.4-1.9bn in 3Q20E, an increase of 1352% to 1519% YoY. We believe it was mainly due to the recovery of the auto industry and the introduction of new business in BYDE. We slightly lowered our full-year revenue forecast by 3% to RMB 157bn to reflect the revenue adjustment of BYDE. In the meanwhile, we raised our bottom-line forecast by 7% to RMB 4.2bn in 2020E to reflect the rise in profitability of the auto and BYDE business. The Company plans to release 3Q quarterly reports on 29 Oct.
- **Continuous valuation boost from NEV segment; raise TP by 37.6% to RMB155.7. BYD's share price has surged more than 37% since our previous update (8 Sep).** We think BYD's strong share price momentum reflects re-rating on the NEV segment, as we expect current valuation indicates ~2.5x FY21E P/S on forward-looking NEV sales. Based on the rapid sales growth of BYD's flagship Han EV comparing with major NEV rivals, we think the NEV segment's re-rating is not yet done. We lift our NEV P/S multiple from 2.0x to 4.0x (vs. 7.0x from emerging NEV names) and boost our NEV segment valuation by 89.1%. Our SOTP TP is raised by 37.6% to RMB155.7. Maintain BUY.

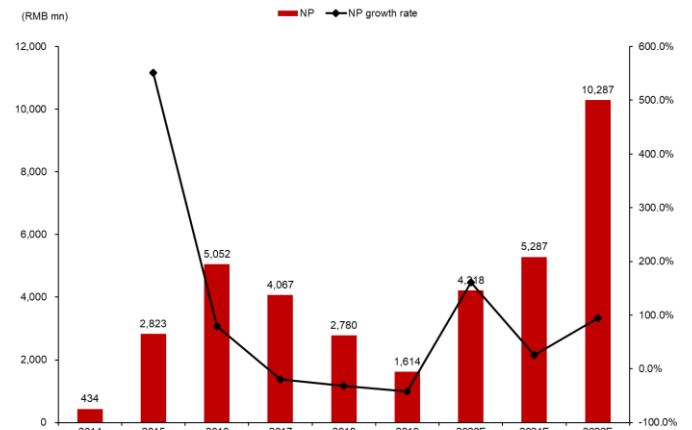
Focus chart

Figure 1: NEV Sales volume forecast: BYD



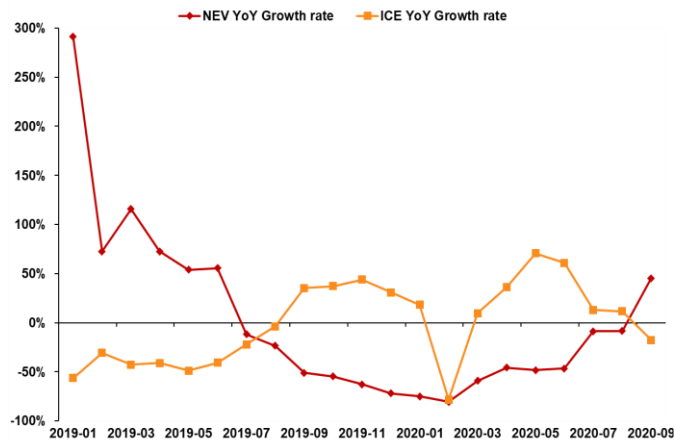
Source: Company data, CMBIS estimates

Figure 2: Bottom-line forecast



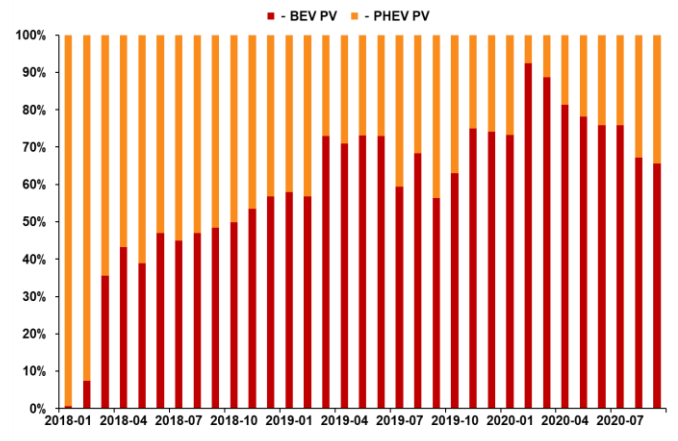
Source: Company data, CMBIS estimates

Figure 3: Monthly sales review: by NEV/ICE



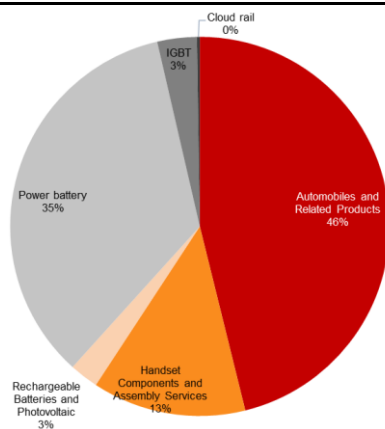
Source: Company data

Figure 4: Monthly sales review: NEPV



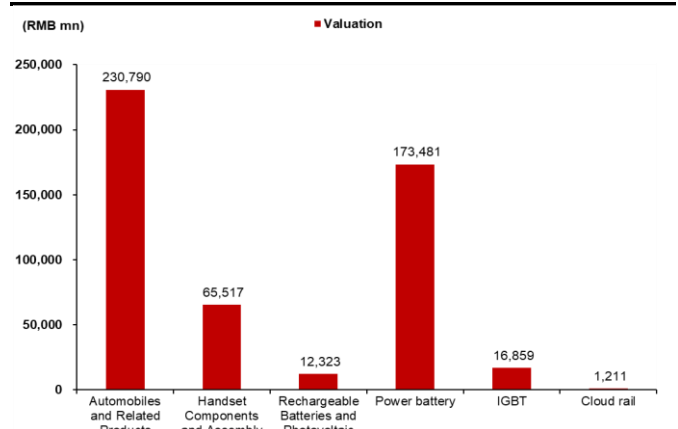
Source: Company data

Figure 5: Valuation proportion in 2021E



Source: Company data, CMBIS estimates

Figure 6: Valuation by segment in 2021E



Source: Company data, CMBIS estimates

Earnings Revision

Figure 7: Earnings revision

(RMB mn)	New		Old		Change (%)	
	FY20E	FY21E	FY20E	FY21E	FY20E	FY21E
Revenue	156,971	201,032	161,455	207,824	-3%	-3%
Gross profit	26,647	32,923	26,780	32,738	0%	1%
Operating profit	5,911	7,704	5,502	6,719	7%	15%
Net profit	4,218	5,287	3,950	4,638	7%	14%
EPS (RMB)	1.45	1.84	1.35	1.6	7%	15%
GPM	16.98%	16.38%	16.59%	15.75%	0.4 ppt	0.6 ppt
OPM	3.77%	3.83%	3.41%	3.23%	0.4 ppt	0.6 ppt
NPM	2.69%	2.63%	2.45%	2.23%	0.2 ppt	0.4 ppt

Source: CMBIS estimates

Figure 8: CMBIS estimates vs consensus

(RMB mn)	CMBIS		Consensus		Diff (%)	
	FY20E	FY21E	FY20E	FY21E	FY20E	FY21E
Revenue	156,971	201,032	143,899	169,097	9%	19%
Gross profit	26,647	32,923	22,812	26,015	17%	27%
Operating profit	5,911	7,704	8,579	9,361	-31%	-18%
Net profit	4,218	5,287	3,748	3,971	13%	33%
EPS (RMB)	1.45	1.84	1.37	1.47	6%	25%
GPM	16.98%	16.38%	15.85%	15.38%	1.1 ppt	1.0 ppt
OPM	3.77%	3.83%	5.96%	5.54%	-2.2 ppt	-1.7 ppt
NPM	2.69%	2.63%	2.60%	2.35%	0.1 ppt	0.3 ppt

Source: Bloomberg, CMBIS estimates

Figure 9: Revenue breakdown

(RMB mn)	FY18A	FY19A	FY20E	FY21E	FY22E
Automobiles and Related Products	76,007	63,266	62,154	82,268	119,504
...YoY	34%	-17%	-2%	32%	45%
Handset Components and Assembly Services	42,230	53,380	81,565	101,466	117,092
...YoY	4%	26%	53%	24%	15%
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	156,971	199,040	253,803
...YoY	23%	-2%	23%	27%	28%
Power battery				1,614	15,085
...YoY					835%
IGBT				378	815
...YoY					115%
Total	130,055	127,739	156,971	201,032	269,702
...YoY	23%	-2%	23%	28%	34%

Source: Company data, CMBIS estimates

Figure 10: P&L breakdown

(RMB mn)	FY18A	FY19A	FY20E	FY21E	FY22E
Revenue	130,055	127,739	156,971	201,032	269,702
...YoY	22.79%	-1.78%	22.88%	28.07%	34.16%
Cost of sales	(108,725)	(106,924)	(130,325)	(168,109)	(223,511)
Gross profit	21,330	20,814	26,647	32,923	46,192
GPM (%)	16.40%	16.29%	16.98%	16.38%	17.13%
...YoY	5.91%	-2.42%	28.02%	23.55%	40.30%
Selling Exp	(4,729)	(4,346)	(5,180)	(6,835)	(9,440)
...% of rev	-3.64%	-3.40%	-3.30%	-3.40%	-3.50%
Admin Exp	(4,989)	(5,629)	(6,279)	(7,639)	(8,900)
...% of rev	-3.84%	-4.41%	-4.00%	-3.80%	-3.30%
Operating profit	4,241	2,312	5,911	7,704	14,836
OPM (%)	3.26%	1.81%	3.77%	3.83%	5.50%
...YoY	-21.62%	-45.48%	155.63%	30.34%	92.57%
Net profit	2,780	1,614	4,218	5,287	10,287
NPM (%)	2.14%	1.26%	2.69%	2.63%	3.81%
...YoY	-31.64%	-41.93%	161.29%	25.33%	94.58%

Source: Company data, CMBIS estimates

Figure 11: Valuation comparison vs major NEV players

NEV Company	Ticker	Major model	NEV Sales in China				Market Cap (US\$, mn)	2021E Sales est. (US\$, mn)	P/S multiple FY21E
			Jul	Aug	Sep	9M20			
Tesla	TSLA US Equity	Model 3	11,014	11,811	11,329	79,908	416,192	43,094	9.7
Nio	NIO US	ES6, EC6, ES8	3,533	3,965	4,708	26,375	29,450	3,887	7.6
Li Auto	LI US	ONE	2,445	2,711	3,504	18,160	16,250	2,524	6.4
XPENG	XPEV US	G3, P7	2,451	2,649	3,478	14,077	14,430	1,952	7.4
WM Motor	N/A	EX5, EX6	2,036	2,057	2,107	35,920	N/A	N/A	N/A
BYD's NEV segment*	1211 HK/ 002594 CH	Han**	1,200	4,000	5,612	10,812	31,845	7,961	4.0
		Other EVs	13,900	11,283	14,269	39,452			

Source: Company data, Bloomberg, CMBIS estimates

Note: *BYD NEV segment's market cap and sales estimates are estimated by CMBIS;

**BYD Han's sales data is based on BYD's disclosure through its official Weibo;

Financial Summary

Income statement

YE 31 Dec (RMB mn)	FY18A	FY19A	FY20E	FY21E	FY22E
Revenue	130,055	127,739	156,971	201,032	269,702
Cost of sales	(108,725)	(106,924)	(130,325)	(168,109)	(223,511)
Gross profit	21,330	20,814	26,647	32,923	46,192
Taxes and levies	(2,146)	(1,561)	(1,884)	(2,412)	(3,236)
S&D exp	(4,729)	(4,346)	(5,180)	(6,835)	(9,440)
R&D exp	(3,760)	(4,141)	(4,521)	(5,770)	(7,687)
Admin exp	(4,989)	(5,629)	(6,279)	(7,639)	(8,900)
Finance costs	(2,997)	(3,014)	(3,659)	(4,234)	(4,144)
Impairment losses	(1,020)	(636)	(791)	(1,005)	(1,350)
Other income	2,328	1,724	2,259	3,068	3,879
Investment income	248	(809)	(549)	(302)	(270)
GL from changes in FV	(5)	10	(56)	4	(38)
GL on disposal	(19)	(100)	(76)	(93)	(170)
Operating profit/(loss)	4,241	2,312	5,911	7,704	14,836
Non-operating income	230	226	471	402	485
Non-operating expense	(86)	(107)	(118)	(151)	(214)
Profit before income tax	4,385	2,431	6,264	7,955	15,107
Income tax expense	(829)	(312)	(924)	(1,263)	(2,085)
Profit for the year	3,556	2,119	5,340	6,692	13,022
Non-controlling interests	776	504	1,121	1,405	2,735
NP	2,780	1,614	4,218	5,287	10,287

Cash flow

YE 31 Dec (RMB mn)	FY18A	FY19A	FY20E	FY21E	FY22E
Net income	2,780	1,614	4,218	5,287	10,287
D&A	9,995	9,933	10,035	12,193	14,571
Change in working capital	(291)	3,233	3,975	6,361	1,213
Others	(543)	6,427	-	-	-
Net cash from operating	12,523	14,741	11,203	12,382	25,730
Capex & investments	(6,076)	(12,040)	(12,992)	(13,608)	(14,961)
Associated companies	(496)	(499)	(406)	(447)	(491)
Others	(7,659)	(8,342)	(4,151)	(5,136)	(6,470)
Net cash from investing	(14,231)	(20,881)	(17,549)	(19,191)	(21,923)
Equity raised	-	-	-	-	-
Change of Debts	5,076	10,535	14,025	13,392	5,066
Dividend paid	(557)	(164)	(422)	(529)	(1,029)
Others	(603)	(3,761)	6,853	6,244	9,910
Net cash from financing	3,917	6,610	9,021	7,566	(1,010)
Net change in cash	2,209	470	2,675	758	2,797
Cash at the beginning	9,903	13,052	12,650	15,325	16,083
Others	941	(872)	0	0	-
Cash at the end	13,052	12,650	15,325	16,083	18,879
Less: pledged cash	-	-	-	-	-

Balance sheet

YE 31 Dec (RMB mn)	FY18A	FY19A	FY20E	FY21E	FY22E
Non-current assets	79,361	88,675	101,789	115,591	131,074
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	24,483	27,515	31,805
Current assets	115,211	106,967	127,560	155,224	189,161
Cash	13,052	12,650	15,325	16,083	18,879
Account receivable	49,284	43,934	52,324	64,849	77,058
Inventory	26,330	25,572	31,632	40,026	49,669
Other current assets	26,545	24,811	28,279	34,267	43,555
Current liabilities	116,569	108,029	132,377	164,992	197,882
Borrowings	37,789	40,332	50,763	62,832	65,795
Account payables	46,283	36,168	43,442	54,229	69,847
Other payables	13,568	11,217	13,684	17,651	23,469
Tax payables	18,930	20,311	24,488	30,280	38,772
Non-current liabilities	17,308	25,011	29,589	32,063	35,984
Borrowings	13,924	21,916	25,511	26,834	28,937
Deferred income tax	66	103	74	101	167
Provisions	-	-	-	-	-
Others	3,317	2,992	4,004	5,128	6,880
Total equity	60,694	62,601	67,383	73,760	86,370
Minority Interest	5,496	5,839	5,986	6,704	7,761
Shareholders' equity	55,198	56,762	61,397	67,056	78,608

Key ratios

YE 31 Dec	FY18A	FY19A	FY20E	FY21E	FY22E
Sales mix (%)					
Automobiles	58%	50%	40%	41%	44%
Handset Components	32%	42%	52%	50%	43%
Rechargeable Batteries	7%	8%	8%	7%	6%
Other business	2%	0%	0%	0%	0%
Power battery	0%	0%	0%	1%	6%
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%	4%	6%
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	0.96	0.94	0.96
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%	240%	267%	271%
Net debt / equity ratio	64%	79%	88%	80%	75%
Returns (%)					
ROE	5%	3%	7%	8%	14%
ROA	4%	3%	5%	5%	7%
Per share					
EPS (RMB)	0.93	0.50	1.45	1.84	3.67
DPS (RMB)	0.20	0.06	0.15	0.19	0.38
BVPS (RMB)	20.23	20.81	22.51	24.58	28.81

Source: Company data, CMBIS estimates

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

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