

### Rating Hold

Asia China

Resources

Metals & Mining

## Guoxuan High-Tech

Reuters Bloomberg E 002074.SZ 002074 CS S

Exchange Ticker SHZ 002074

### Date 3 July 2018

### **Forecast Change**

Price at 2 Jul 2018 (CNY)	13.67
Price target - 12mth (CNY)	15.58
52-week range (CNY)	35.99 - 13.07
HANG SENG INDEX	28,955

# Uncertainties on future transition but negatives priced in; Hold

Aggressive expansion target but uncertainty looms over NCM; maintaining Hold As the third-largest Chinese battery player, Guoxuan positions itself to more than double its capacity from 7.5GWh in 2017 to c.18GWh by end-2020, and targets to triple its market share to c.18% in three years. However, we believe there is still uncertainty regarding Guoxuan's endeavors in NCM (lithium nickel cobalt manganese oxide) batteries (c.22% of 2017 shipment) after the disappointments in the past 12 months. We set our target multiple at 15.4x 2019E P/E, in line with the industry average, and revise our target price to RMB15.6 while maintaining Hold.

### Targets to triple its Chinese battery market share to 18% in 2020

On top of the existing 7.5GWh capacity in 2017 (including 5.5GWh for LFP (lithium iron phosphate) and 2.0GWh for NCM), Guoxuan is adding 2GWh LFP capacity and c.4GWh NCM capacity in 2018. Total capacity is expected to reach c.18GWh by end-2020 at a 3-year CAGR of 33%, but revised down from 20-25GWh previously. The company's mid-term strategic target is to triple market share from 6% in 2017 to c.18% in 2020, to become a formidable competitor against the current industry leader CATL.

### Meaningful progress on NCM batteries in 2H18 remains to be seen

The company is upgrading its NCM lines in Hefei and Qingdao for all NCM622 production starting in 2H18, and expects its NCM battery shipment to reach 1.3GWh in 2018, or +92% YoY. Guoxuan supplied it batteries to 45k units of NEV in 2017, and aims to reach 100k units in 2018 with orders by domestic brands including BAIC, Geely, Zotye, Chery, SAIC, and JAC. However, it remains to be seen whether Guoxuan, a previously LFP-focused battery manufacturer (c.78% of 2017 shipment), can have a meaningful presence in NCM batteries.

### Cutting target price to RMB15.6; concerns factored in; risks

We believe the c.40% share price decline in the past three months has reflected investors' concerns such as a) ASP/margin pressure in the medium term and b) the uncertainty regarding its transition to NCM batteries. Factoring the 19% YoY ASP decline and shipment disappointment in 2017, we cut our 2018/2019 NPAT forecasts by -27%/-50%. We set the target multiple at 15.4x 2019E P/E, in line with the industry average, and revise our TP accordingly. Risks: quicker/slower-than-expected ASP cut or cost drop.

### Valuation & Risks

### Neil Sun

Research Analyst +852-2203 6136

#### James Kan

Research Analyst +852-2203 6146

#### Vincent Ha. CFA

Research Analyst +852-2203 6247

Key changes			
TP	31.30 to 15.58	$\downarrow$	-50.2%
Sales (FYE)	11,624 to 6,970	$\downarrow$	-40.0%
Op prof margin (FYE)	13.6 to 16.5	$\uparrow$	21.5%
Net profit (FYE)	1,363.4 to 989.6	$\downarrow$	-27.4%
Source: Deutsche Bank			

### Price/price relative



Performance (%)	1m	3m	12m
Absolute	-14.6	-38.7	-56.7
HANG SENG INDEX	-5.0	-3.8	12.4
Source: Deutsche Bank			

### Deutsche Bank AG/Hong Kong

Deutsche Bank does and seeks to do business with companies covered in its res/Distributed on: 03/07/2018 14:15:08 GMT aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision. DISCLOSURES AND ANALYST CERTIFICATIONS ARE LOCATED IN APPENDIX 1. MCI (P) 091/04/2018. THE CONTENT MAY NOT BE DISTRIBUTED IN THE PEOPLE 'S REPUBLIC OF CHINA ("THE PRC") (EXCEPT IN COMPLIANCE WITH THE APPLICABLE LAWS AND REGULATIONS OF PRC), EXCLUDING SPECIAL ADMINISTRATIVE REGIONS OF HONG KONG AND MACAU



Forecasts and ratios					
Year End Dec 31	2016A	2017A	2018E	2019E	2020E
Sales (CNYm)	4,757.9	4,838.1	6,969.8	9,479.8	10,547.0
EBITDA (CNYm)	1,367.6	923.0	1,521.8	1,930.1	2,128.2
Reported EPS FD(CNY)	1.18	0.74	0.87	0.98	1.14
Reported NPAT (CNYm)	1,030.9	838.0	989.6	1,118.1	1,297.4
DB EPS growth (%)	76.4	-37.3	18.1	13.0	16.0
PER (x)	29.3	41.3	15.7	13.9	12.0
EV/EBITDA (x)	22.2	36.0	10.7	8.6	7.5
Source: Deutsche Bank estimates, company data					

Key indicators (FY1)	
ROE (%)	11.4
Net debt/equity (%)	7.6
Book value/share (CNY)	7.99
Price/book (x)	1.7
Net interest cover (x)	-
Operating profit margin (%)	16.5
Source: Deutsche Bank	



# Aggressive capacity expansion

### Adding 6GWh battery capacity to reach 13.5GWh in 2018

Guoxuan had 7.5GWh battery capacity at the end of 2017, of which 5.5GWh was for LFP batteries and 2.0GWh for NCM batteries. On top of the existing capacity, the company sets an aggressive target to add additional 2GWh capacity for LFP and c.4GWh NCM capacity this year in Hefei and Qingdao, reaching c.13.5GWh at the end of 2018.

### Expects to see NCM battery demand picking up

While Guoxuan is one of the top battery suppliers in LFP batteries (mostly adopted by EV buses), the company expects to see EV battery demand from passenger vehicles pick up, where NCM batteries consist of over 80% share. Guoxuan thus gradually shifts its focus to NCM batteries production, expanding its NCM capacity more than five-fold from 2GWh in 2017 to 10.4GWh at end-2020. We have outlined Guoxuan's capacity breakdown in Figure 1 below, where the additional NCM production lines are mainly planned in Hefei's fourth factory (total c.5GWh) and Qingdao Laixi factory (c.4GWh).

Figure 1: Battery capacity breakdown for Guoxuan

Capacity breakdown by factory					Capacit	y (mnAh)			
Battery factories		2013	2014	2015	2016	2017	2018E	2019E	2020E
Hefei original	LFP		150	150	150	150	150	150	150
Hefei 1st	LFP		100	100	100	100	100	100	100
Hefei 2nd	LFP			100	100	100	100	100	100
Hefei 3rd	LFP				250	300	350	350	350
Hefei 3rd	NMC 111/622				250	250	250	250	250
Hefei 4th	NMC 622						1050	1050	1050
Lujiang	LFP					300	300	300	300
Kunshan	LFP			150	150	150	0	0	0
Nanjing	LFP			300	300	300	300	300	300
Nanjing 2nd	LFP					330	350	350	350
Qingdao Laixi	NMC 622				250	300	300	900	1500
Qingdao Laixi 2nd	LFP						400	400	400
Tangshan	LFP						300	300	300

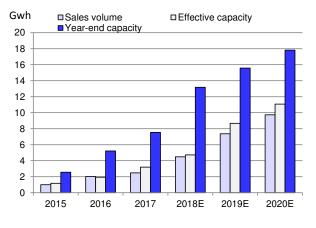
Source: Company data, Deutsche Bank estimates



### Targets to triple its Chinese battery market share to 18% in 2020

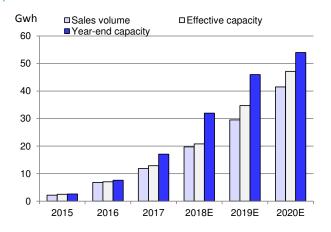
Guoxuan's total capacity is expected to reach c.18GWh by end-2020, expanding at a 3-year CAGR of 33%. However, this target has been revised down from 20-25GWh by end-2020 as the company's previous expectations on a) capacity ramp up time, and b) market demand were too optimistic. The company's midterm strategic target is to triple its market share from 6% in 2017 to c.18% in 2020, which implies that it will become a formidable competitor against the current industry leader CATL. Regarding the timing for production lines addition in a year, we expect to see Guoxuan's capacity commencement to mostly fall in the second half in each year, per the company's schedule. Therefore, the capacity commencement schedule creates a larger gap between its effective capacity and year-end capacity for Guoxuan, compared to a smaller gap for CATL as the latter's capacity commencement schedule is more evenly distributed throughout the year. Please see Figure 2 and Figure 3 below for Guoxuan and CATL's sales volume, effective capacity and year-end capacity estimates.

Figure 2: Guoxuan's sales volume and capacity estimates



Source: Company data, Deutsche Bank

Figure 3: CATL's sales volume and capacity estimates



Source: Company data, Deutsche Bank



# Uncertainty over NCM endeavor

### Meaningful progress on NCM batteries remains to be seen

The company is upgrading its NCM lines in Hefei and Qingdao for all NCM622 production starting in 2H18 (see Figure 1), and expects its NCM battery shipment to reach 1.3GWh in 2018, or +92% YoY. As NCM batteries are mainly installed on EV passenger vehicles, Guoxuan has supplied 45k units of these in 2017, and aims to reach 100k units in 2018.

The company has a positive 2H18 outlook of NCM batteries owing to: a) orders by domestic brands including BAIC, Geely, Zotye, Chery, JAC, b) a larger battery pack per vehicle to meet the longer driving range requirement, and c) market share gain from cylindrical batteries, as Guoxuan believes the prismatic packaging format is more cost effective when the vehicle carries over 30kWh.

### A mixed picture between LFP and NCM market shares

However, we believe it is still too early to tell whether Guoxuan can repeat its success in LFP batteries in the NCM field. We present the top 10 EV battery installation analysis in 2017 and 5M18 in Figure 4 and Figure 5, where Guoxuan YTD has gained market share in LFP batteries (from 10.0% in 2017 to 14.6% in 5M18) but barely had NCM batteries installation (from 2.3% in 2017 to 0.8% in 5M18). We believe the main reason behind the fall is linked to the different timings of auto OEMs model launch schedules, but it requires additional orders from EV passenger vehicles if the company wants to have a meaningful presence in NCM batteries, judging from the market share analysis YTD.

Figure 4: 2017 Chinese EV battery installation analysis

EV battery Installation	analysis					Total Installation	Market
2017 Name	名称	LFP	share (%)	NCM	share (%)	(Gwh)	share
1 CATL	宁德时代	5.4	33.2%	4.6	30.4%	10.0	29.7%
2 BYD	比亚迪	4.4	27.1%	0.9	6.2%	5.4	16.0%
3 OptimumNano	沃特玛	2.0	12.5%			2.0	6.1%
4 Guoxuan	国轩高科	1.6	10.0%	0.3	2.3%	2.0	5.9%
5 Farasis	孚能科技			1.1	7.3%	1.1	3.3%
6 BAK	比克	0.0	0.0%	1.0	7.0%	1.0	3.1%
7 Guoneng	北京国能	0.6	3.4%	0.1	0.8%	0.7	2.0%
8 First	福斯特			0.7	4.5%	0.7	2.0%
9 Phylion	苏州星恒			0.0	0.3%	0.6	1.7%
10 Lishen	力神	0.2	1.1%	0.4	2.4%	0.5	1.6%
Subtotal		14.2	87.3%	9.2	61.3%	24.0	71.5%
Total		16.3	48.7%	15.0	44.7%	33.5	100.0%

Note: Batteries with other kinds of cathode materials include LMO (Lithium Maganese Oxide), LTO (Lithium Titanium Oxide) and NCA (Lithium Nickel Cobalt Aluminum Oxide) Source: RealLi Research, Deutsche Bank



Figure 5: 5M18 Chinese EV battery installation analysis

EV battery Installation	V battery Installation analysis											
5M18						Installation	Market	2017	5M18 vs.			
rank Name	名称	LFP	share (%)	NCM	share (%)	(Gwh)	share	rank	2017			
1 CATL	宁德时代	2.5	48.6%	3.0	41.8%	5.5	42.9%	1	=			
2 BYD	比亚迪	0.8	16.1%	1.7	23.9%	2.5	20.0%	2	=			
3 Guoxuan	国轩高科	0.8	14.6%	0.1	0.8%	0.8	6.3%	4	+1			
4 Farasis	孚能科技			0.6	8.3%	0.6	4.6%	5	+1			
5 EVE	亿纬锂能	0.4	8.6%	0.0	0.7%	0.5	3.9%	14	+9			
6 BAK	比克			0.4	5.3%	0.4	3.0%	6	=			
7 Lishen	力神	0.1	1.4%	0.1	2.0%	0.2	1.8%	10	+3			
8 Wanxiang A123	万向	0.1	1.2%	0.2	2.2%	0.2	1.7%	NA	NA			
9 Guoneng	北京国能	0.2	3.5%	0.0	0.2%	0.2	1.5%	7	-2			
10 Zhihang	江苏智航			0.2	2.3%	0.2	1.3%	11	+1			
Subtotal		4.9	94.0%	6.2	87.5%	11.1	87.0%					
Total		5.2	40.8%	7.1	56.0%	12.7	100.0%					

Note: Batteries with other kinds of cathode materials include LMO (Lithium Maganese Oxide), LTO (Lithium Titanium Oxide) and NCA (Lithium Nickel Cobalt Aluminum Oxide). Source: RealLi Research, Deutsche Bank



# Earnings and target price revisions

### Factoring in 2017 results; cutting target price to RMB15.6

Guoxuan's 2017 battery ASP and shipment were below our original expectations due to intense competition and battery shipment adjustments at year-end. We have revised our numbers after factoring the 2017 financial results, battery volume, unit pricing and margin trajectory. Since changes in the battery industry happened faster than our previous expectation, we cut our 2018/2019 net profit forecast by 27%/50%.

Please see Figure 6 below for our detailed sales volume and unit margin assumptions. For our forecast changes and consensus comparison for Guoxuan, please refer to Figure 7 and Figure 8:

- For our 2018E earnings revision: we believe the battery's pricing pressure (-16% YoY) will be somewhat offset by cost decline (-10% YoY), but the main factor to have a negative impact on earnings estimate should be volume assumption (-37% vs. previous estimate).
- For our 2019E earnings revision: we expect the cumulative effect from pricing pressure (-13% YoY), coupled with volume assumption revision (-36% vs. previous estimate), to comprise most of the negative impact on our earnings estimate.

Figure 6: Sales volume and unit margin assumptions for Guoxuan

Battery operation								
		2014	2015	2016	2017	2018E	2019E	2020E
Sales volume								
New	Gwh	0.42	1.00	2.01	2.48	4.49	7.37	9.74
Old	Gwh	0.42	1.00	2.01	4.11	7.15	11.50	
% change					-40%	-37%	-36%	
ASP								
New	RMB/Ah	7.52	6.85	6.58	5.41	4.56	3.96	3.38
Old	RMB/Ah	7.58	6.85	6.58	5.96	5.20	4.78	
% change					-9%	-12%	-17%	
COGS								
New	RMB/Ah	3.69	3.51	3.38	3.26	2.94	2.68	2.37
Old	RMB/Ah	3.69	3.56	3.38	3.52	3.31	2.94	
% change					-8%	-11%	-9%	
Margin								
New	RMB/Ah	3.84	3.34	3.21	2.15	1.62	1.27	1.01
Old	RMB/Ah	3.84	3.34	3.21	2.44	1.88	1.84	
% change					-12%	-14%	-31%	

Source: Company data, Deutsche Bank estimates



Figure 7: Forecast changes for Guoxuan

		2018E			2019E		2020E			
	DBe New	DBe Old	Change	DBe New	DBe Old	Change	DBe New	DBe Old	Change	
Revenue (RMB m)	6,970	11,624	-40%	9,480	16,890	-44%	10,547		NA	
OP (RMB m)	1,149	1,578	-27%	1,349	2,703	-50%	1,557		NA	
NP (RMB m)	990	1,363	-27%	1,150	2,297	-50%	1,329		NA	
EPS	0.87	1.37	-37%	1.01	2.32	-56%	1.17		NA	
ROE	11%	15%	-3%	12%	21%	-9%	12%		NA	

Source: Deutsche Bank estimates

Figure 8: Deutsche Bank earnings estimates vs. consensus for Guoxuan

		2018E			2019E		2020E			
	DBe	Consensus	Dbe/Con.	DBe	Consensus	Dbe/Con.	DBe	Consensus	Dbe/Con.	
Revenue	6,970	6,862	102%	9,480	8,969	106%	10,547	10,088	105%	
Gross profit	2,422	2,336	104%	3,010	2,915	103%	3,142	3,242	97%	
Operating income	1,149	1,104	104%	1,349	1,389	97%	1,557	1,589	98%	
NPAT	990	1,001	99%	1,150	1,193	96%	1,329	1,389	96%	

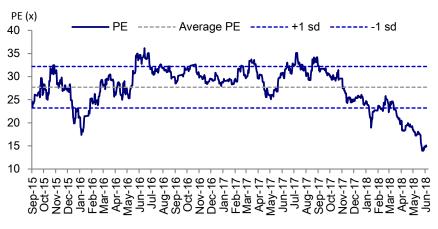
Source: Deutsche Bank estimates, Bloomberg Finance LP



### Concerns largely factored in with c.40% correction in 3 months

Guoxuan's share price has corrected by c.40% in the past three months (Figure 9), which has mainly reflected investors' concern related to: a) ASP and margin pressure in the medium term and b) the uncertainty regarding the transition to NCM batteries. We believe the entire battery sector has encountered similar issues, except for the market leader CATL, and several battery players are also looking into a transition similar to that of Guoxuan.

Figure 9: Guoxuan 12-month forward P/E chart



Source: Deutsche Bank estimates, Bloomberg Finance LP

### Target multiple at 15.4x 2019E P/E, in line with battery peer average

After a 19%/23% share price correction in the battery sector (Figure 10), the peers are currently trading at 19.0x/15.4x 2018E/2019E P/E on average. We believe P/E methodology is still the most suitable to value the company, and we roll forward a year to set our target multiple at 15.4x 2019E EPS, which is in line with the average of battery manufacturers. Therefore, we adjust our target price to RMB15.6.

Figure 10: Valuation comparison of battery peers

•																
						3m avg. daiily traded										
Company	Bbg Ticker	Rating	Price local	Target Price	M. cap (US\$m)	value (US\$m)	PE (	x)	PB (x)	EPS Grov	vth %	ROE	%	Share p	rice perform	ance
Company	209 1101101	· · · · · · · · · · · · · · · · · · ·	7/2/18		7/2/18	(000,)	2018	2019	2018	2018	2019	2018	2019		3 month	YTD
Battery - A-shares																
CATL*	300750 CH Equity	Buy	70.0	72.2	22,829	312	43.7	34.6	4.5	12.1	31.3	11.9	12.3	178	NA	NA
Guoxuan High-tech	002074 CH Equity	Hold	13.7	15.6	2,333	29	15.7	13.5	1.7	(6.7)	16.2	11.4	12.0	(15)	(39)	(39)
BYD - A	002594 CH Equity	Hold	46.0	44.5	18,059	54	35.7	30.1	2.2	(13.5)	18.3	6.2	6.9	(10)	(17)	(29)
Sunwoda Electronic	300207 CH Equity	Buy	8.9	14.5	2,057	4	16.8	14.0	3.3	21.2	20.3	21.6	21.5	(18)	(23)	(9)
EVE Energy	300014 CH Equity	NR	16.9	NA	2,169	44	27.2	20.7	8.2	31.9	31.6	15.1	16.9	(1)	(5)	(14)
Camel Group	601311 CH Equity	NR	11.1	NA	1,409	4	14.2	12.3	4.1	36.5	15.2	10.7	11.5	(6)	(15)	(17)
Shaanxi J&R Optimum Energy	300116 CH Equity	NR	2.8	NA	1,037	34	4.1	3.3	6.0	NM	23.2	NA	NA	(15)	(59)	(63)
Sichuan Chengfei Integration	002190 CH Equity	NR	16.8	NA	903	18	NA	NA	8.9	NA	NA	NA	NA	(19)	(31)	(23)
Shenzhen Desay Battery	000049 CH Equity	NR	27.6	NA	849	16	16.0	12.5	12.5	17.9	27.6	22.1	21.6	(12)	(19)	(30)
Guangzhou Great Power	300438 CH Equity	NR	18.7	NA	787	12	14.3	11.5	12.6	41.3	24.6	15.4	16.3	(15)	(20)	(37)
Battery - international																
Panasonic	6752 JP Equity	Hold	1,476	1,700	32,672	102	15.3	13.1	2.2	58.0	11.0	6.2	6.9	(2)	(3)	(11)
LG Chem	051910 KS Equity	Buy	317,500	460,000	20,020	85	11.9	10.6	0.0	3.8	12.0	21.6	21.5	(6)	(18)	(22)
SK Innovation	096770 KS Equity	NR	188,000	NA	15,528	47	8.0	7.5	0.9	4.2	6.6	11.6	11.4	(8)	(12)	(8)
Samsung SDI	006400 KS Equity	Buy	214,000	259,000	13,145	65	24.3	16.5	1.3	(7.7)	46.7	6.2	6.9	2	7	5
Average							19.0	15.4	4.9	16.6	21.9	13.3	13.8	4	(19)	(23)

\*EPS growth calculation excludes one-off gains/expenses and government subsidies Source: Deutsche Bank estimates, Bloomberg Finance LP

Deutsche Bank AG/Hong Kong



### Investment thesis

### Outlook

Guoxuan is the third-largest EV lithium battery player in China, with c.6% EV lithium battery market share in terms of installation this year. We believe Guoxuan's aggressive capacity expansion and competitive advantages should help it to grow market share and make it one of the beneficiaries of the Chinese government's target to put 5mn EV units on the road by end-2020. However, battery unit pricing decline and EV subsidy policy change may put pressure on its margin outlook. Hold.

### Valuation

As Guoxuan has listed on the A-share market through a reverse IPO in 2015, we believe its historical P/E band may not reflect its future outlook. We adopt a 2019E P/E multiple of 15.4x for the company, which we believe has factored in its growth trajectory and is in line with battery manufacturers' average.

### Risks

Key Industry up/downside risks: 1) Significant changes in the Chinese government's EV subsidy policy 2) Weaker/stronger-than-expected volume growth in the next three years 3) Quicker/slower-than-expected ASP drop or slower-than-expected cost cuts.



Model updated: 03 July 2018
Running the numbers
Asia
China
Metals & Mining

### Guoxuan High-Tech

Reuters: 002074.SZ Bloomberg: 002074 CS

Hold	
Price (2 Jul 18)	CNY 13.67
Target Price	CNY 15.58
52 Week range	CNY 13.07 - 35.99

CNYm 15,538 USDm 2,334.1

### Company Profile

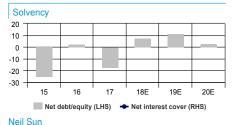
Market cap (m)

Guoxuan High-Tech Co., Ltd develops, manufactures and sells lithium battery materials and lithium batteries. Its major products are lithium battery cells and lithium battery packs for electrical automotives.









+852 2203 6136 neil.sun@db.com

Fiscal year end 31-Dec	2015	2016	2017	2018E	2019E	2020
Financial Summary						
OB EPS (CNY)	0.67	1.18	0.74	0.87	0.98	1.1
Reported EPS (CNY)	0.67	1.18	0.74	0.87	0.98	1.1
DPS (CNY) BVPS (CNY)	0.15 3.4	0.15 4.5	0.10 7.2	0.12 8.0	0.13 8.8	0.1 9
Veighted average shares (m) Average market cap (CNYm)	876 25,156	876 30,216	1,137 34,601	1,137 15,538	1,137 15,538	1,13 15,53
Enterprise value (CNYm)	24,419	30,343	33,182	16,257	16,690	15,90
Valuation Metrics						
P/E (DB) (x)	43.0	29.3	41.3	15.7	13.9	12
P/E (Reported) (x)	43.0	29.3	41.3	15.7	13.9	12
/BV (x)	10.78	6.90	3.07	1.71	1.55	1.3
CF Yield (%)	nm	nm	nm	nm	nm	5
ividend Yield (%)	0.5	0.4	0.3	0.9	1.0	1
V/Sales (x)	8.9	6.4	6.9	2.3	1.8	1
V/EBITDA (x)	31.7	22.2	36.0	10.7	8.6	7
V/EBIT (x)	34.8	24.5	49.9	14.1	12.4	10
Income Statement (CNYm)						
ales revenue	2,745	4,758	4,838	6,970	9,480	10,5
cross profit	1,220	2,202	1,843	2,422	3,010	3,1
BITDA epreciation	769 67	1,368 128	923 258	1,522 372	1,930 580	2,1 5
mortisation	0	0	230	0	0	5
BIT	702	1,239	665	1,150	1,350	1,5
et interest income(expense)	0	0	0	0	0	
ssociates/affiliates	0	0	0	0	0	
exceptionals/extraordinaries	0 -22	0 -42	0 330	0 24	0 -23	
Other pre-tax income/(expense) Profit before tax	680	1,197	994	1,174	1,327	1,5
ncome tax expense	93	165	154	182	206	2
/inorities	3	2	2	3	3	
Other post-tax income/(expense)  let profit	0 585	0 1,031	0 838	0 990	0 1,118	1,2
DB adjustments (including dilution)	0	0	0	0	0	1.0
DB Net profit	585	1,031	838	990	1,118	1,2
Cash Flow (CNYm)						
Cash flow from operations	520	1,275	-100	791	1,215	1,7
let Capex	-558	-1,307	-1,357	-2,814	-1,555	-8
Free cash flow Equity raised/(bought back)	-38 1,493	-33 205	-1,457 3,536	-2,023 0	-340 0	9
Dividends paid	-37	-195	-223	-134	-152	-1
Net inc/(dec) in borrowings	-396	743	840	100	-100	-6
Other investing/financing cash flows	109	-176	-226	0	0	
let cash flow	1,132	544	2,471	-2,057	-592	1
Change in working capital	-193	40	-1,393	-363	-331	-
Balance Sheet (CNYm)						
Cash and other liquid assets	2,011	2,306	4,799	2,219	1,628	1,7
angible fixed assets	1,550	2,817	4,004	6,445	7,420	7,7
Goodwill/intangible assets	307	529	562	562	562	5
Associates/investments Other assets	0 2,846	0 4,563	0 7,732	0 10,623	0 14,026	15,5
otal assets	6,713	10,215	17,097	19,849	23,635	25,5
nterest bearing debt	1,248	2,408	3,355	2,911	2,749	2,1
Other liabilities	2,424	3,846	5,487	7,825	10,803	12,2
otal liabilities	3,671	6,255	8,842	10,736	13,553	14,3
Shareholders' equity	3,016	3,936	8,230	9,086	10,052	11,1
/linorities Total shareholders' equity	26 3,042	24 3,960	25 8,255	27 9,113	30 10,082	11,2
let debt	-763	102	-1,444	691	1,122	3
Key Company Metrics						
Sales growth (%)	nm	73.3	1.7	44.1	36.0	11
OB EPS growth (%)	na	76.4	-37.3	18.1	13.0	16
EBITDA Margin (%)	28.0	28.7	19.1	21.8	20.4	20
EBIT Margin (%)	25.6	26.0	13.7	16.5	14.2	14
Payout ratio (%)	22.5	12.8	13.6	13.6	13.6	13
ROE (%) Capex/sales (%)	24.6 20.3	29.7 27.5	13.8 28.1	11.4 40.4	11.7 16.4	12
Capex/depreciation (x)	8.3	10.2	5.3	7.6	2.7	1
Net debt/equity (%)	-25.1	2.6	-17.5	7.6	11.1	3

Source: Company data, Deutsche Bank estimates



### Appendix 1

### Important Disclosures

### \*Other information available upon request

Disclosure checklist	,		
Company	Ticker	Recent price*	Disclosure
Guoxuan High-Tech	002074.SZ	13.67 (CNY) 2 Jul 2018	NA

<sup>\*</sup>Prices are current as of the end of the previous trading session unless otherwise indicated and are sourced from local exchanges via Reuters, Bloomberg and other vendors. Other information is sourced from Deutsche Bank, subject companies, and other sources. For disclosures pertaining to recommendations or estimates made on securities other than the primary subject of this research, please see the most recently published company report or visit our global disclosure look-up page on our website at <a href="https://research.db.com/Research/Disclosures/CompanySearch">https://research.db.com/Research/Disclosures/CompanySearch</a>. Aside from within this report, important risk and conflict disclosures can also be found at <a href="https://research.db.com/Research/Topics/Equities?topics/Equiti

### **Analyst Certification**

The views expressed in this report accurately reflect the personal views of the undersigned lead analyst(s) about the subject issuer and the securities of the issuer. In addition, the undersigned lead analyst(s) has not and will not receive any compensation for providing a specific recommendation or view in this report. Neil Sun





### **Equity Rating Key**

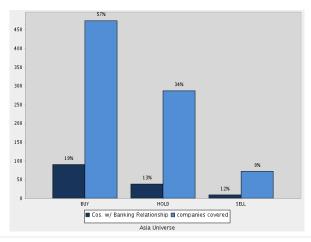
Buy: Based on a current 12- month view of total share-holder return (TSR = percentage change in share price from current price to projected target price plus pro-jected dividend yield), we recommend that investors buy the stock.

Sell: Based on a current 12-month view of total share-holder return, we recommend that investors sell the stock.

Hold: We take a neutral view on the stock 12-months out and, based on this time horizon, do not recommend either a Buy or Sell.

Newly issued research recommendations and target prices supersede previously published research.

### Equity rating dispersion and banking relationships





### **Additional Information**

The information and opinions in this report were prepared by Deutsche Bank AG or one of its affiliates (collectively "Deutsche Bank"). Though the information herein is believed to be reliable and has been obtained from public sources believed to be reliable, Deutsche Bank makes no representation as to its accuracy or completeness. Hyperlinks to third-party websites in this report are provided for reader convenience only. Deutsche Bank neither endorses the content nor is responsible for the accuracy or security controls of those websites.

If you use the services of Deutsche Bank in connection with a purchase or sale of a security that is discussed in this report, or is included or discussed in another communication (oral or written) from a Deutsche Bank analyst, Deutsche Bank may act as principal for its own account or as agent for another person.

Deutsche Bank may consider this report in deciding to trade as principal. It may also engage in transactions, for its own account or with customers, in a manner inconsistent with the views taken in this research report. Others within Deutsche Bank, including strategists, sales staff and other analysts, may take views that are inconsistent with those taken in this research report. Deutsche Bank issues a variety of research products, including fundamental analysis, equity-linked analysis, quantitative analysis and trade ideas. Recommendations contained in one type of communication may differ from recommendations contained in others, whether as a result of differing time horizons, methodologies, perspectives or otherwise. Deutsche Bank and/or its affiliates may also be holding debt or equity securities of the issuers it writes on. Analysts are paid in part based on the profitability of Deutsche Bank AG and its affiliates, which includes investment banking, trading and principal trading revenues.

Opinions, estimates and projections constitute the current judgment of the author as of the date of this report. They do not necessarily reflect the opinions of Deutsche Bank and are subject to change without notice. Deutsche Bank provides liquidity for buyers and sellers of securities issued by the companies it covers. Deutsche Bank research analysts sometimes have shorter-term trade ideas that may be inconsistent with Deutsche Bank's existing longer-term ratings. Some trade ideas for equities are listed as Catalyst Calls on the Research Website ( https://research.db.com/Research/), and can be found on the general coverage list and also on the covered company 's page. A Catalyst Call represents a high-conviction belief by an analyst that a stock will outperform or underperform the market and/or a specified sector over a time frame of no less than two weeks and no more than three months. In addition to Catalyst Calls, analysts may occasionally discuss with our clients, and with Deutsche Bank salespersons and traders, trading strategies or ideas that reference catalysts or events that may have a near-term or medium-term impact on the market price of the securities discussed in this report, which impact may be directionally counter to the analysts' current 12-month view of total return or investment return as described herein. Deutsche Bank has no obligation to update, modify or amend this report or to otherwise notify a recipient thereof if an opinion, forecast or estimate changes or becomes inaccurate. Coverage and the frequency of changes in market conditions and in both general and company-specific economic prospects make it difficult to update research at defined intervals. Updates are at the sole discretion of the coverage analyst or of the Research Department Management, and the majority of reports are published at irregular intervals. This report is provided for informational purposes only and does not take into account the particular investment objectives, financial situations, or needs of individual clients. It is not an offer or a solicitation of an offer to buy or sell any financial instruments or to participate in any particular trading strategy. Target prices are inherently imprecise and a product of the analyst 's judgment. The financial instruments discussed in this report may not be suitable for all investors, and investors must make their own informed investment decisions. Prices and availability of financial instruments are subject to change without notice, and investment transactions can lead to losses as a result of price fluctuations and other factors. If a financial instrument is denominated in a currency other than an investor's currency, a change in exchange rates may adversely affect the investment. Past performance is not necessarily indicative of future results. Performance calculations exclude transaction costs, unless otherwise indicated. Unless otherwise indicated, prices are current as of the end of the previous trading session and are sourced from local exchanges via Reuters, Bloomberg and other vendors. Data is also sourced from Deutsche Bank, subject companies, and other parties.

The Deutsche Bank Research Department is independent of other business divisions of the Bank. Details regarding our organizational arrangements and information barriers we have to prevent and avoid conflicts of interest with respect to our research are available on our website ( <a href="https://research.db.com/Research/">https://research.db.com/Research/</a>) under Disclaimer.



Macroeconomic fluctuations often account for most of the risks associated with exposures to instruments that promise to pay fixed or variable interest rates. For an investor who is long fixed-rate instruments (thus receiving these cash flows), increases in interest rates naturally lift the discount factors applied to the expected cash flows and thus cause a loss. The longer the maturity of a certain cash flow and the higher the move in the discount factor, the higher will be the loss. Upside surprises in inflation, fiscal funding needs, and FX depreciation rates are among the most common adverse macroeconomic shocks to receivers. But counterparty exposure, issuer creditworthiness, client segmentation, regulation (including changes in assets holding limits for different types of investors), changes in tax policies, currency convertibility (which may constrain currency conversion, repatriation of profits and/or liquidation of positions), and settlement issues related to local clearing houses are also important risk factors. The sensitivity of fixedincome instruments to macroeconomic shocks may be mitigated by indexing the contracted cash flows to inflation, to FX depreciation, or to specified interest rates – these are common in emerging markets. The index fixings may – by construction - lag or mis-measure the actual move in the underlying variables they are intended to track. The choice of the proper fixing (or metric) is particularly important in swaps markets, where floating coupon rates (i.e., coupons indexed to a typically short-dated interest rate reference index) are exchanged for fixed coupons. Funding in a currency that differs from the currency in which coupons are denominated carries FX risk. Options on swaps (swaptions) the risks typical to options in addition to the risks related to rates movements.

Derivative transactions involve numerous risks including market, counterparty default and illiquidity risk. The appropriateness of these products for use by investors depends on the investors' own circumstances, including their tax position, their regulatory environment and the nature of their other assets and liabilities; as such, investors should take expert legal and financial advice before entering into any transaction similar to or inspired by the contents of this publication. The risk of loss in futures trading and options, foreign or domestic, can be substantial. As a result of the high degree of leverage obtainable in futures and options trading, losses may be incurred that are greater than the amount of funds initially deposited – up to theoretically unlimited losses. Trading in options involves risk and is not suitable for all investors. Prior to buying or selling an option, investors must review the "Characteristics and Risks of Standardized Options", at <a href="http://www.optionsclearing.com/about/publications/character-risks.jsp">http://www.optionsclearing.com/about/publications/character-risks.jsp</a>. If you are unable to access the website, please contact your Deutsche Bank representative for a copy of this important document.

Participants in foreign exchange transactions may incur risks arising from several factors, including the following: (i) exchange rates can be volatile and are subject to large fluctuations; (ii) the value of currencies may be affected by numerous market factors, including world and national economic, political and regulatory events, events in equity and debt markets and changes in interest rates; and (iii) currencies may be subject to devaluation or government-imposed exchange controls, which could affect the value of the currency. Investors in securities such as ADRs, whose values are affected by the currency of an underlying security, effectively assume currency risk.

Unless governing law provides otherwise, all transactions should be executed through the Deutsche Bank entity in the investor's home jurisdiction. Aside from within this report, important conflict disclosures can also be found at <a href="https://research.db.com/Research/">https://research.db.com/Research/</a> on each company 's research page. Investors are strongly encouraged to review this information before investing.

Deutsche Bank (which includes Deutsche Bank AG, its branches and affiliated companies) is not acting as a financial adviser, consultant or fiduciary to you or any of your agents (collectively, "You" or "Your") with respect to any information provided in this report. Deutsche Bank does not provide investment, legal, tax or accounting advice, Deutsche Bank is not acting as your impartial adviser, and does not express any opinion or recommendation whatsoever as to any strategies, products or any other information presented in the materials. Information contained herein is being provided solely on the basis that the recipient will make an independent assessment of the merits of any investment decision, and it does not constitute a recommendation of, or express an opinion on, any product or service or any trading strategy.

The information presented is general in nature and is not directed to retirement accounts or any specific person or account type, and is therefore provided to You on the express basis that it is not advice, and You may not rely upon it in making Your decision. The information we provide is being directed only to persons we believe to be financially sophisticated, who are capable of evaluating investment risks independently, both in general and with regard to particular transactions and investment strategies, and who understand that Deutsche Bank has financial interests in the offering of its products



and services. If this is not the case, or if You are an IRA or other retail investor receiving this directly from us, we ask that you inform us immediately.

In July 2018, Deutsche Bank revised its rating system for short term ideas whereby the branding has been changed to Catalyst Calls ("CC") from SOLAR ideas; the rating categories for Catalyst Calls originated in the Americas region have been made consistent with the categories used by Analysts globally; and the effective time period for CCs has been reduced from a maximum of 180 days to 90 days.

**United States**: Approved and/or distributed by Deutsche Bank Securities Incorporated, a member of FINRA, NFA and SIPC. Analysts located outside of the United States are employed by non-US affiliates that are not subject to FINRA regulations.

**Germany**: Approved and/or distributed by Deutsche Bank AG, a joint stock corporation with limited liability incorporated in the Federal Republic of Germany with its principal office in Frankfurt am Main. Deutsche Bank AG is authorized under German Banking Law and is subject to supervision by the European Central Bank and by BaFin, Germany 's Federal Financial Supervisory Authority.

**United Kingdom**: Approved and/or distributed by Deutsche Bank AG acting through its London Branch at Winchester House, 1 Great Winchester Street, London EC2N 2DB. Deutsche Bank AG in the United Kingdom is authorised by the Prudential Regulation Authority and is subject to limited regulation by the Prudential Regulation Authority and Financial Conduct Authority. Details about the extent of our authorisation and regulation are available on request.

**Hong Kong**: Distributed by Deutsche Bank AG, Hong Kong Branch or Deutsche Securities Asia Limited (save that any research relating to futures contracts within the meaning of the Hong Kong Securities and Futures Ordinance Cap. 571 shall be distributed solely by Deutsche Securities Asia Limited). The provisions set out above in the "Additional Information" section shall apply to the fullest extent permissible by local laws and regulations, including without limitation the Code of Conduct for Persons Licensed or Registered with the Securities and Futures Commission.

India: Prepared by Deutsche Equities India Private Limited (DEIPL) having CIN: U65990MH2002PTC137431 and registered office at 14th Floor, The Capital, C-70, G Block, Bandra Kurla Complex Mumbai (India) 400051. Tel: + 91 22 7180 4444. It is registered by the Securities and Exchange Board of India (SEBI) as a Stock broker bearing registration nos.: NSE (Capital Market Segment) - INB231196834, NSE (F&O Segment) INF231196834, NSE (Currency Derivatives Segment) INE231196834, BSE (Capital Market Segment) INB011196830; Merchant Banker bearing SEBI Registration no.: INM000010833 and Research Analyst bearing SEBI Registration no.: INH000001741. DEIPL may have received administrative warnings from the SEBI for breaches of Indian regulations. The transmission of research through DEIPL is Deutsche Bank's determination and will not make a recipient a client of DEIPL. Deutsche Bank and/or its affiliate(s) may have debt holdings or positions in the subject company. With regard to information on associates, please refer to the "Shareholdings" section in the Annual Report at: https://www.db.com/ir/en/annual-reports.htm.

Japan: Approved and/or distributed by Deutsche Securities Inc.(DSI). Registration number - Registered as a financial instruments dealer by the Head of the Kanto Local Finance Bureau (Kinsho) No. 117. Member of associations: JSDA, Type II Financial Instruments Firms Association and The Financial Futures Association of Japan. Commissions and risks involved in stock transactions - for stock transactions, we charge stock commissions and consumption tax by multiplying the transaction amount by the commission rate agreed with each customer. Stock transactions can lead to losses as a result of share price fluctuations and other factors. Transactions in foreign stocks can lead to additional losses stemming from foreign exchange fluctuations. We may also charge commissions and fees for certain categories of investment advice, products and services. Recommended investment strategies, products and services carry the risk of losses to principal and other losses as a result of changes in market and/or economic trends, and/or fluctuations in market value. Before deciding on the purchase of financial products and/or services, customers should carefully read the relevant disclosures, prospectuses and other documentation. "Moody's", "Standard & Poor's", and "Fitch" mentioned in this report are not registered credit rating agencies in Japan unless Japan or "Nippon" is specifically designated in the name of the entity. Reports on Japanese listed companies not written by analysts of DSI are written by Deutsche Bank Group's analysts with the coverage companies specified by DSI. Some of the foreign securities stated on this report are not disclosed according to the Financial Instruments and Exchange Law of Japan. Target prices set by Deutsche Bank's equity analysts are based on a 12-month forecast period..



Korea: Distributed by Deutsche Securities Korea Co.

**South Africa**: Deutsche Bank AG Johannesburg is incorporated in the Federal Republic of Germany (Branch Register Number in South Africa: 1998/003298/10).

**Singapore**: This report is issued by Deutsche Bank AG, Singapore Branch or Deutsche Securities Asia Limited, Singapore Branch (One Raffles Quay #18-00 South Tower Singapore 048583, +65 6423 8001), which may be contacted in respect of any matters arising from, or in connection with, this report. Where this report is issued or promulgated by Deutsche Bank in Singapore to a person who is not an accredited investor, expert investor or institutional investor (as defined in the applicable Singapore laws and regulations), they accept legal responsibility to such person for its contents.

**Taiwan**: Information on securities/investments that trade in Taiwan is for your reference only. Readers should independently evaluate investment risks and are solely responsible for their investment decisions. Deutsche Bank research may not be distributed to the Taiwan public media or quoted or used by the Taiwan public media without written consent. Information on securities/instruments that do not trade in Taiwan is for informational purposes only and is not to be construed as a recommendation to trade in such securities/instruments. Deutsche Securities Asia Limited, Taipei Branch may not execute transactions for clients in these securities/instruments.

**Qatar**: Deutsche Bank AG in the Qatar Financial Centre (registered no. 00032) is regulated by the Qatar Financial Centre Regulatory Authority. Deutsche Bank AG - QFC Branch may undertake only the financial services activities that fall within the scope of its existing QFCRA license. Its principal place of business in the QFC: Qatar Financial Centre, Tower, West Bay, Level 5, PO Box 14928, Doha, Qatar. This information has been distributed by Deutsche Bank AG. Related financial products or services are only available only to Business Customers, as defined by the Qatar Financial Centre Regulatory Authority.

**Russia**: The information, interpretation and opinions submitted herein are not in the context of, and do not constitute, any appraisal or evaluation activity requiring a license in the Russian Federation.

Kingdom of Saudi Arabia: Deutsche Securities Saudi Arabia LLC Company (registered no. 07073-37) is regulated by the Capital Market Authority. Deutsche Securities Saudi Arabia may undertake only the financial services activities that fall within the scope of its existing CMA license. Its principal place of business in Saudi Arabia: King Fahad Road, Al Olaya District, P.O. Box 301809, Faisaliah Tower - 17th Floor, 11372 Riyadh, Saudi Arabia.

**United Arab Emirates**: Deutsche Bank AG in the Dubai International Financial Centre (registered no. 00045) is regulated by the Dubai Financial Services Authority. Deutsche Bank AG - DIFC Branch may only undertake the financial services activities that fall within the scope of its existing DFSA license. Principal place of business in the DIFC: Dubai International Financial Centre, The Gate Village, Building 5, PO Box 504902, Dubai, U.A.E. This information has been distributed by Deutsche Bank AG. Related financial products or services are available only to Professional Clients, as defined by the Dubai Financial Services Authority.

Australia and New Zealand: This research is intended only for "wholesale clients" within the meaning of the Australian Corporations Act and New Zealand Financial Advisors Act, respectively. Please refer to Australia-specific research disclosures and related information at <a href="https://australia.db.com/australia/content/research-information.html">https://australia.db.com/australia/content/research-information.html</a> Where research refers to any particular financial product recipients of the research should consider any product disclosure statement, prospectus or other applicable disclosure document before making any decision about whether to acquire the product. In preparing this report, the primary analyst or an individual who assisted in the preparation of this report has likely been in contact with the company that is the subject of this research for confirmation/clarification of data, facts, statements, permission to use company-sourced material in the report, and/or site-visit attendance. Without prior approval from Research Management, analysts may not accept from current or potential Banking clients the costs of travel, accommodations, or other expenses incurred by analysts attending

site visits, conferences, social events, and the like. Similarly, without prior approval from Research Management and Anti-Bribery and Corruption ("ABC") team, analysts may not accept perks or other items of value for their personal use from issuers they cover.



Additional information relative to securities, other financial products or issuers discussed in this report is available upon request. This report may not be reproduced, distributed or published without Deutsche Bank's prior written consent. Copyright © 2018 Deutsche Bank AG



### David Folkerts-Landau

Group Chief Economist and Global Head of Research

Raj Hindocha Global Chief Operating Officer Research Michael Spencer Head of APAC Research Global Head of Economics Steve Pollard Head of Americas Research Global Head of Equity Research

Anthony Klarman Global Head of Debt Research Paul Reynolds Head of EMEA Equity Research Dave Clark Head of APAC Equity Research Pam Finelli Global Head of Equity Derivatives Research

Andreas Neubauer Head of Research - Germany Spyros Mesomeris Global Head of Quantitative and QIS Research

International Commerce Centre,

1 Austin Road West, Kowloon,

Deutsche Bank AG

Tel: (852) 2203 8888

Filiale Hongkong

Hong Kong

### **International Production Locations**

Deutsche Bank AG

Deutsche Bank Place

Level 16 Corner of Hunter & Phillip Streets

Sydney, NSW 2000

Australia

Tel: (61) 2 8258 1234

n Deutsche Bank Securities Inc.

Germany

Deutsche Bank AG

Deutsche Bank AG London 1 Great Winchester Street London EC2N 2EO United Kingdom Tel: (44) 20 7545 8000 Tel: (49) 69 910 00

Mainzer Landstrasse 11-17

60329 Frankfurt am Main

60 Wall Street New York, NY 10005 United States of America Tel: (1) 212 250 2500 Deutsche Securities Inc.

2-11-1 Nagatacho Sanno Park Tower Chiyoda-ku, Tokyo 100-6171 Japan

Tel: (81) 3 5156 6770