Deutsche Bank Markets Research

Rating Hold

<mark>Asia</mark> China

Health Care Pharmaceuticals / Biotechnology

Company Hualan	Biolo	dical
Enginee		
	59	

ReutersBloomberg002007.SZ002007 CH

Exchange Ticker SHZ 002007

Lackluster quarter amid policy headwinds; downgrading to Hold

Downgrade due to near-term pricing and volume pressure

We downgrade Hualan to Hold due to anticipated ex-manufacturing price cuts for albumin, volume growth deceleration and accompanying margin erosion. While we stay constructive on PDT (plasma derived therapeutics) growth prospects in the mid/long term, Hualan faces slightly higher risks vs. peers due to the lack of new product launches, higher inventory and less exposure in direct sales. As the 2Q17 results were below our revised expectations, we reduce our rev/ net profit estimates by 5%/10% for 2017, and 11%/18% for 2018, respectively.

Expect 4-6% ex-manufacturing price cuts for albumin due to supply relief

While low single-digit price erosion has already occurred across the PDT industry, this was mainly due to mix changes. Based on albumin approval data, MNCs had 29%/18% growth in 2Q17/1Q17 respectively, vs. -2%/30% YoY for domestic companies. We believe none of the major players has pulled the trigger on the delicate balance of sacrificing price for volume growth. However, we expect this to happen soon as long as MNC dumping continues. Additionally, a zero mark-up policy might have created another layer of pressure on pricing.

Most volume growth pressure derived from reform initiatives

Healthcare reform initiatives have rubbed salt into the wound, creating volume growth pressure for PDTs. These policies include controlling drug sales' contribution to hospital revenue, zero mark-up policies and two invoices. For example, Hualan sales were impacted in 2Q17 due to inventory destocking at the distributor level, while accelerated plasma collection since 2H15 has created higher inventory. With the highest inventory/sales ratio (of 114%) among major PDT players, Hualan management may have more incentive to cut prices in 2H17. That said, we believe most of the pressure from reform should be temporary.

Lowering price target to RMB26.0 from RMB38.0; risks

We base our target price on 28x 2018E EPS, compared to 34x used previously, as we cut 2018E EPS by 18%. We believe 28x is justified, as A-share peers are trading at 29x with 19% growth in 2018E (vs. 16% for Hualan). Upside risk: smaller-than-expected ASP cuts; downside risks: cost inflation/ higher-than-expected ASP cuts.

Forecasts and ratios					
Year End Dec 31	2015A	2016A	2017E	2018E	2019E
Sales (CNYm)	1,471.8	1,934.7	2,237.4	2,566.8	2,899.3
DB EPS FD(CNY)	0.54	0.73	0.79	0.92	1.03
Source: Deutsche Bank estimates, company data					

Deutsche Bank AG/Hong Kong

Deutsche Bank does and seeks to do business with companies covered in its research reports. Thus, investors should be 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) 083/04/2017.

Date 22 August 2017

Recommendation Change

Price at 21 Aug 2017 (CNY)	28.18
Price target - 12mth (CNY)	26.00
52-week range (CNY)	39.49 - 28.04
Shenzhen Index	1,989

Valuation & Risks

Jack Hu, PhD

Research Analyst +852-2203 6208

Key changes		
TP	38.00 to 26.00	\downarrow
Rating Eng	Buy to Hold	\downarrow
Sales (FYE)	2,343 to 2,237	\downarrow

Op prof margin (FYE) 41.9 to 40.0 ↓ -4.5% Net profit (FYE) 915.5 to 815.9 ↓ -10.9% Source: Deutsche Bank

Price/price relative



- Hualan Biological En - Shenzhen Index (Rebased)

Performance (%)	1m	3m	12m
Absolute	-0.6	-19.3	-24.9
Shenzhen Index	3.1	2.6	-7.0
Source: Deutsche Bank			

Distributed on: 21/08/2017 23:06:07 GMT



-31.6%

-4.5%

Growth outlook

Downgrade due to limited earnings visibility

Hualan reported sales/ core profit of RMB475m/ RMB163m in 2Q17, with YoY growth of 7%/ -3% respectively. This represents significant growth deceleration vs. 31%/ 35% growth in 1Q17 and 31%/ 34% in FY16 for revenue and core profit. In addition, the company released guidance for 3Q for the first time during 1H reporting, which we view as a signal of continued downward guidance revision on the back of growth deceleration and policy headwinds.

ASP decline is likely to continue

Due to the growth acceleration of imported albumin, as well as plasma collection growth acceleration, ASPs for albumin have already declined by c.4-6% for major players due to mix changes from 5mg (RMB210) to 10mg (RMB378, tender price). We expect ex-manufacturing price decline on single dosing level to emerge in 2H17, by c.2-3% with a further 2-3% erosion on mix changes.

Hualan suggested that ex-manufacturing prices remained stable in 1H17, while ASP in drug tenders recorded low single-digit declines for PDTs. The company estimated albumin and IVIG ASP eroded by 5% and 3%, respectively, during 1H17.

Domestic players losing market shares while MNCs thrived

During 1H17, the market share of global plasma companies increased to 64% as at 1H17, compared to 58% as at YE16. Global companies also delivered superior growth according to albumin approval, with 23% YoY in 1H17, compared to 12% for domestic names.

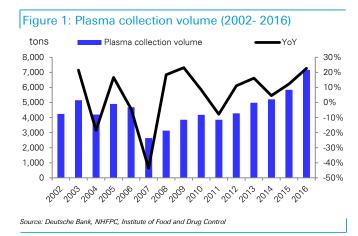
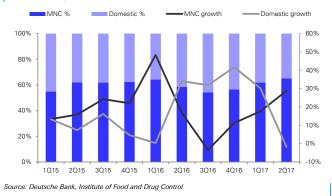
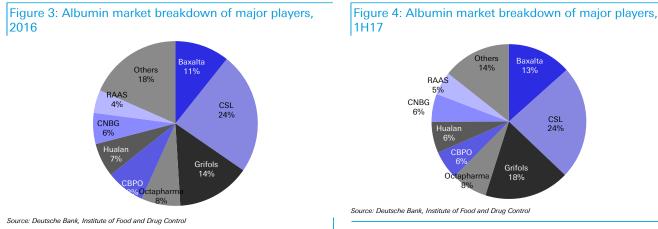


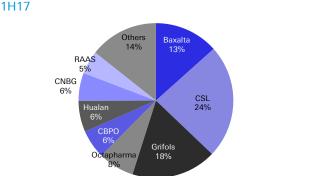
Figure 2: Market share comparison for domestic and MNC companies



We summarize the albumin market breakdown based on approval data as follows. Notably, Hualan registered market share erosion during the first six months of 2017, from 7% to 6%, based on provincial approval batches. In the meantime, top MNCs increased their shares of the PDT market. The market shares of CSL, Grifols and Baxalta reached 24%/ 18%/ 13% in 1H17, compared to 24%/ 14%/ 11% in YE16.







Source: Deutsche Bank. Institute of Food and Drug Control

Volume growth impacted by reform initiatives

We expect to see more near-term uncertainties arising from Hualan's sales model restructuring, as the company gradually converts its IDS into DS revenue. Recall that as of 1H17, 30% of total revenue came from direct sales, with 10% from hospital customers and 20% from pharmacies. The remaining 70% was contributed by the distributor channel - management estimated that the top five distributors accounted for 50-60% of total revenue. Going forward, Hualan intends to increase its sales force thereby converting IDS into DS coverage. The company expects longer AR days, and increased selling/ promotion costs as a result of the sales model transition.

Hualan believes recent policies, including the two-invoice system, are having larger-than-expected impacts on plasma distributors, resulting in lower purchases from downstream customers. Management recently realized that sales growth is no longer correlated to plasma collection/ utilization, hence it lowered its guidance for future periods. The company is also facing pressure on the regulated drug sales contribution front, due to the high ASPs of plasma products.

That being said, we believe most of the pressure on volume growth should be temporary. For example, while inventory destocking at the distributor level should have an instant impact on sales, we expect gradual inventory build-up as Hualan signs up new distributors in the near future.

	Drivers	One-time impact?	Impact on Hualan?	Impact on CBPO?
	1) Sufficient supply of albumin	no	yes	yes
Drivers of pricing pressure	2) 15% mark-up removal	yes	yes	yes
	3) Inventory de-stocking	yes	more than peers	yes
	1) Competition	no	yes	yes
Drivers of volume pressure	2) Regulated drug sales (30%)	mostly yes	more than peers	less than peers
	3) Two-invoice policy	yes	more than peers	less than peers
Source: Deutsche Bank, Company data				

Figure 5: Drivers of pricing/ volume pressure

Hualan is more exposed vs. other PDT major players

We believe the following elements are likely to prompt Hualan management to make a decision to lower prices to clear its inventory in order to resume growth. We compare the operating efficiency matrices including inventory days and inventory level of the three reported plasma players. Notably, Hualan stood out with the highest inventory as a percentage of total sales among the three names, at 114% as of June 17, vs. 101% for CBPO and 75% for Boya.

We highlight that Hualan currently has the longest AR days (524 days) among all three domestic players; while AR days for CBPO and Boya were 493 days and 329 days, respectively.

RMBmn	Hualan	CBPO	Boya
Inventory level			
1H17	1,150	1,268	403
2H16	921	1,062	289
1H16	797	895	262
2H15	598	803	214
1H15	574	788	147
Inventory as a % of sales			
1H17	114%	101%	75%
2H16	85%	95%	54%
1H16	93%	77%	66%
2H15	73%	86%	68%
1H15	87%	85%	66%
Inventory days			
1H17	524	493	329
2H16	343	458	263
1H16	409	366	280
2H15	199	415	320
1H15	384	385	282

22 August 2017 Pharmaceuticals / Biotechnology Hualan Biological Engineering Inc

Challenging near-term guidance; limited visibility on near-term growth

Hualan reported sales/ core profit of RMB475m/ RMN163m in 2Q17, with YoY growth of 7%/ -3%, respectively. This represents significant growth deceleration vs. 31%/ 35% growth in 1Q17 and 31%/ 34% in FY16 for revenue and core profit. Due to the aforementioned reasons, Hualan gave 9M17 guidance for the first time post the 2Q results, suggesting -5% and 10% profit growth for high/ low ends respectively.

Due to limited growth visibility of major products and lingering policy headwinds, we reduce our 3Q17 estimates and model 6% YoY growth (RMB208m) to reflect the latest guidance as well as the change in underlying fundamentals. We summarize the updated 9M17 guidance and our forecasts as follows:

RMB mn	9M17	3Q17	1H17	9M16	3Q16	1H16
Net income (low end)	577	146	431	607	197	410
YoY	-5%	-26%	5%	32%	32%	32%
Net income (high end)	668	237	431			
YoY	10%	20%	5%			
Net income (mid-point)	622	191	431			
YoY	2%	-3%	5%			
DB estimates	639	208	431			
ΥοΥ	5%	6%	5%			

Valuation and estimates

Lowering target price to RMB 26.0; downgrading to Hold

We base our target price on 28x 2018E EPS. We believe 28x is justified, as its Ashare peers are trading at 29x with 19% growth in 2018E (vs. the 16% we model for Hualan). We believe Hualan deserves a slight discount due to its lower earnings visibility, ASP pressure and growth deceleration of major products. Upside risks include smaller-than-expected ASP cuts; downside risks include cost inflation, higher-than-expected ASP cuts.

Model changes

We reduce our FY2017 revenue and core net profit estimates by 5% and 10%, respectively, on the back of lowered 9M17 guidance and the weak 1H17 results. As for 2018, we cut our sales and net profit estimates by 11%/18%, respectively, driven by anticipated ASP erosion, policy headwinds and PDT supply relief.

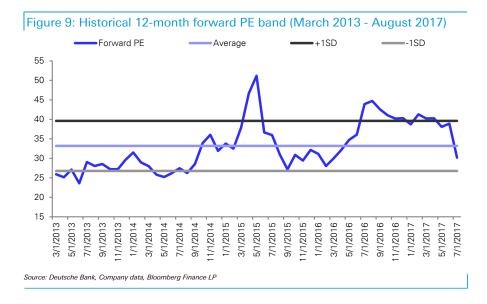
We summarize our estimate changes and comparison with BBG consensus in the following table:

Figure 8: Comparison of estimates change (2017-2018E)

RMB m	Previous	Dbe	Updated Dbe		Change of estin	nates (%)	Conser	isus	DBe vs. consensus		
	2017E	2018E	2017E	2018E	2017E	2018E	2017E	2018E	2017E	2018E	
Revenue	2,343	2,880	2,237	2,567	-5%	-11%	2,422	3,015	-8%	-15%	
Gross profit	1,414	1,748	1,353	1,553	-4%	-11%	1,467	1,825	-8%	-15%	
EBIT	981	1,223	895	1,025	-9%	-16%	1,058	1,329	-15%	-23%	
Core net Income	816	1,032	731	851	-10%	-18%	948	1,190	-23%	-28%	
Diluted EPS - core	0.88	1.11	0.79	0.92	-10%	-17%	1.02	1.28	-23%	-28%	
Source: Deutsche Bank, Compan	y data, Bloomberg Fi	nance LP								1	

22 August 2017 Pharmaceuticals / Biotechnology Hualan Biological Engineering Inc

We highlight that Hualan is currently trading at 30.2x 12m forward EPS, slightly below its five-year average of 33.2x and much lower than its two-year average of 36.0x PE multiple.



We summarize the A share pharma comps for Hualan as below:

Figure 10: A share pharma peers

BBG Ticker	Name	Price (LC)	High Low		Mkt cap (US\$m)		PE		Crncy	EPS	Growth %	Γ	E,	/EBITDA		EBIT	DA Growth	%
						2017E	2018E	2019E		2017E	2018E	2019E	2017E	2018E	2019E	2017E	2018E	2019
00276 CH Equity	JIANGSU HENGRU-A	54.8	55.0	35.5	23,136	48.3	39.4	32.3	CNY	18.9	22.8	21.8	39.1	32.1	26.6	8.5	10.4	10.0
00998 CH Equity	JOINTOWN PHARM-A	20.3	23.9	18.7	5,162	29.8	23.9	20.4	CNY	30.5	25.0	17.3	20.3	16.4	13.8	15.2	11.4	9.1
00518 CH Equity	KANGMEI PHARMA-A	21.1	22.0	15.7	15,622	25.2	20.6	16.5	CNY	21.9	22.5	25.1	15.1	12.9	NA	10.4	8.1	NA
000538 CH Equity	YUNNAN BAIYAO-A	NA	96.2	70.8	13,837	27.1	23.2	19.8	CNY	10.5	16.5	17.0	23.2	20.1	17.3	3.5	7.6	7.8
00423 CH Equity	DONG E-E-JIAO-A	64.1	72.0	51.1	6,279	19.6	17.0	14.8	CNY	17.9	15.3	14.5	15.5	13.6	12.1	9.8	7.0	6.1
00196 CH Equity	SHANGHAI FOSUN-A	30.3	33.0	21.3	10,912	22.1	18.7	16.4	CNY	13.3	18.0	14.4	27.5	22.8	19.6	9.3	9.9	8.0
000503 CH Equity	SEARAINBOW HLD-A	24.9	58.8	24.9	3,358	NA	NA	NA	CNY	NA	NA	NA	NA	NA	NA	NA	NA	NA
02252 CH Equity	SHANGHAI RAAS -A	20.2	23.4	19.3	15,078	71.0	62.3	81.0	CNY	(10.9)	14.0	(23.1)	NA	NA	60.6	NA	7.8	8.5
02007 CH Equity	HUALAN BIOLOGI-A	28.2	39.1	28.0	3,928	36.8	32.2	28.0	CNY	7.7	14.5	14.8	26.1	22.7	20.1	6.4	12.9	11.4
00535 CH Equity	TASLY PHARMAC-A	38.5	44.3	36.9	6,238	28.1	23.5	19.7	CNY	1.9	19.5	19.2	20.6	18.0	15.4	2.8	7.2	7.8
00867 CH Equity	TONGHUA DONGBA-A	18.8	19.9	16.5	4,803	37.7	29.7	23.0	CNY	34.2	27.1	28.9	26.6	21.9	18.3	16.3	10.3	9.2
00623 CH Equity	JILIN AODONG P-A	22.2	28.3	19.1	3,871	NA	NA	NA	CNY	NA	NA	NA	NA	NA	NA	NA	NA	NA
02030 CH Equity	DA AN GENE CO -A	19.9	29.1	18.2	2,162	NA	NA	NA	CNY	NA	NA	NA	NA	NA	NA	NA	NA	NA
00079 CH Equity	HUMANWELL HEAL-A	19.0	21.4	18.1	3,662	23.6	18.5	15.8	CNY	10.1	27.6	17.5	13.6	11.5	9.9	14.4	8.8	7.3
00963 CH Equity	HUADONG MEDICI-A	49.1	50.9	32.6	7,148	26.2	21.2	17.3	CNY	30.8	24.0	22.3	17.9	15.1	12.4	10.7	8.8	10.5
00252 CH Equity	GUANGXI WUZHOU-A	4.1	5.0	3.9	2,135	NA	NA	NA	CNY	NA	NA	NA	NA	NA	NA	NA	NA	NA
00085 CH Equity	BEIJING TONGRE-A	32.7	35.2	29.5	6,724	41.1	36.3	31.8	CNY	9.8	13.1	14.2	19.4	17.0	14.6	4.8	6.8	7.9
01607 CH Equity	SHANG PHARM -A	25.3	28.5	18.8	9,219	18.8	16.5	14.7	CNY	11.3	13.9	12.7	12.6	11.1	10.1	5.5	6.5	5.1
00201 CH Equity	JINYU BIO-TECH-A	34.3	35.6	29.2	3,302	25.6	20.7	16.7	CNY	31.0	23.9	23.5	19.1	15.9	14.6	13.6	9.5	4.4
02004 CH Equity	HUAPONT LIFE S-A	7.9	9.8	7.5	2,422	NA	NA	NA	CNY	NA	NA	NA	NA	NA	NA	NA	NA	NA
00332 CH Equity	GUANGZHOU BAIY-A	26.9	29.4	23.1	6,239	24.5	21.8	19.2	CNY	17.9	12.3	13.4	18.1	15.4	12.7	7.0	8.3	10.0
	A share Pharma					34.7	29.2	27.5		14.3	19.4	14.7	23.0	19.4	22.4	8.5	8.6	8.4

We use BBG estimates for RAAS, Beijing Tiantan and Boya, and DBe for Hualan

Figure 11: Income statement

Income Statement (RMB millions)	2013	2014	2015	1H16	2H16A	2016	1H17	2H17E	2017E	2018E	2019E
Human Albumin	377	435	640	343	339	682	438	389	827	910	992
Human Immunoglobulin for Intravenous Injection	408	431	422	324	407	731	327	427	755	868	972
Vaccines	156	160	111	9	100	109	34	125	158	179	199
Other plasma derived therapeutics	175	204	292	174	228	402	207	279	486	598	723
Other segments	2	12	7	6	5	11	6	5	11	12	13
Revenue	1,118	1,243	1,472	857	1,078	1,935	1,013	1,225	2,237	2,567	2,899
COGS	(439)	(474)	(619)	(311)	(453)	(764)	(361)	(523)	(884)	(1,014)	(1,150)
Gross profit	679	769	853	546	625	1,171	652	701	1,353	1,553	1,750
Selling expenses	(26)	(47)	(20)	(15)	(53)	(68)	(58)	(63)	(121)	(131)	(155)
General and administrative expenses	(163)	(182)	(219)	(124)	(149)	(274)	(133)	(172)	(306)	(365)	(416)
Business Taxes and Surcharges	(10)	(9)	(9)	(6)	(12)	(18)	(12)	(21)	(32)	(32)	(33)
EBIT	481	531	605	400	411	811	449	445	895	1,025	1,145
Depreciation and amortization	102	113	144	69	75	144	74	47	121	126	133
EBITDA	583	644	749	469	486	955	524	492	1,016	1,152	1,278
Impairments	(19)	(22)	(31)	(6)	(26)	(32)	(15)	(17)	(32)	(32)	(32)
Other income	25	48	28	54	17	70	8	27	35	54	54
Other expenses	(2)	(4)	(4)	(3)	(2)	(5)	(2)		(2)		
Others / Investment income	49	55	46	20	23	43	54	(11)	43	43	43
Non-recurring items	(62)	(91)	(82)	(71)	(30)	(101)	(38)	(47)	(85)	(95)	(100)
Net interest income	28	20	47	17	(2)	16	8	12	19	26	42
Income before income taxes and minority interests - reported	561	628	693	483	421	904	502	456	958	1,116	1,252
Taxation as reported	(85)	(89)	(111)	(75)	(58)	(133)	(78)	(73)	(151)	(179)	(200)
Tax rate	15%	14%	16%	16%	14%	15%	16%	16%	16%	16%	16%
Net income after tax	476	539	582	408	363	771	424	383	807	937	1,052
Minority interests	(0)	(0)	7	2	7	9	7	2	9	9	9
Net income attributable to Equity holders	475	538	589	410	370	780	431	385	816	946	1,061
Core Net income attributable to Equity holders	414	447	507	339	340	679	393	338	731	851	961
Core EPS: Basic (RMB)	0.45	0.48	0.54	0.36	0.37	0.73	0.42	0.36	0.79	0.92	1.03
Core EPS: Diluted (RMB)	0.45	0.48	0.54	0.36	0.37	0.73	0.42	0.36	0.79	0.92	1.03
Weighted average no. of shares - Basic (millions)	922	929	930	930	930	930	930	930	930	930	930
Weighted average no. of shares - Diluted (millions)	922	929	930	930	930	930	930	930	930	930	930
Source: Deutsche Bank, Company data											

22 August 2017 Pharmaceuticals / Biotechnology Hualan Biological Engineering Inc

Model updated: 21 August 2017

Running the numbers

	1	-	
1	7		
_			

Asia					
China Pharmaceuticals / Biotechnology					
Reuters: 002007.SZ	Bloomberg: 002007 CH				
Hold					
Price (21 Aug 17)	CNY 28.18				
Target Price	CNY 26.00				
52 Week range	CNY 28.04 - 39.49				
Market cap (m)	CNYm 26,210				

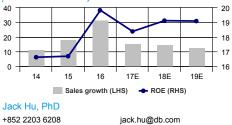
Company Profile

Established in 1992, Hualan Biological engages in the manufacture of plasma derived therapeutics and vaccines. The company also has strong R&D capabilities with multiple products under development including vaccines and monoclonal antibodies.

USDm 3,922.9







Fiscal year end 31-Dec	2014	2015	2016	2017E	2018E	2019E
Financial Summary	2014	2013	2010	2017	2010	2013
DB EPS (CNY)	0.48	0.54	0.73	0.79	0.92	1.03
Reported EPS (CNY)	0.58	0.63	0.84	0.88	1.02	1.14
DPS (CNY) BVPS (CNY)	0.38 3.7	0.25 3.9	0.40 4.5	0.39 5.0	0.46 5.6	0.00 6.3
Weighted average shares (m)	929	930	930	930	930	930
Average market cap (CNYm) Enterprise value (CNYm)	16,276 15,800	25,206 25,040	29,874 29,586	26,210 25,799	26,210 25,347	26,210 24,952
Valuation Metrics						
P/E (DB) (x) P/E (Reported) (x) P/BV (x)	36.4 30.2 5.59	49.7 42.8 6.94	44.0 38.3 7.88	35.9 32.1 5.62	30.8 27.7 5.00	27.3 24.7 4.46
FCF Yield (%) Dividend Yield (%)	2.2 2.1	1.3 0.9	0.4	1.9 1.4	3.1 1.6	3.1 0.0
EV/Sales (x)	12.7	17.0	15.3	11.5	9.9	8.6
EV/EBITDA (x) EV/EBIT (x)	24.5 29.8	33.4 41.4	31.0 36.5	25.4 28.8	22.0 24.7	19.5 21.8
Income Statement (CNYm)						
Sales revenue	1,243	1,472	1,935	2,237	2,567	2,899
Gross profit EBITDA	769 644	853 749	1,171 955	1,353 1,016	1,553 1,152	1,750 1,278
Depreciation	105 8	137 7	137 7	112 9	117 9	124 9
Amortisation EBIT	531	605	811	895	1,025	9 1,145
Net interest income(expense) Associates/affiliates	20 0	47 0	16 0	19 0	26 0	42 0
Exceptionals/extraordinaries	0	0	0	0	0	0
Other pre-tax income/(expense) Profit before tax	77 628	40 693	77 904	44 958	65 1,116	65 1,252
Income tax expense	89	111	133	151	179	200
Minorities Other post-tax income/(expense)	0 0	-7 0	-9 0	-9 0	-9 0	-9 0
Net profit	538	589	780	816	946	1,061
DB adjustments (including dilution) DB Net profit	-91 447	-82 507	-101 679	-85 731	-95 851	-100 961
Cash Flow (CNYm)						
Cash flow from operations Net Capex	497 -138	549 -229	330 -220	643 -157	988 -180	1,014 -203
Free cash flow	359	319	110	487	808	811
Equity raised/(bought back) Dividends paid	0 -236	0 -349	0 -233	0 -372	0 -365	0 -426
Net inc/(dec) in borrowings	-150	0	0	0	0	0
Other investing/financing cash flows Net cash flow	-660 -688	-571 -600	480 357	0 114	0 443	0 386
Change in working capital	-118	-138	-563	-285	-76	-171
Balance Sheet (CNYm)						
Cash and other liquid assets Tangible fixed assets	672 960	363 1,060	486 1,152	600 1,197	1,043 1,259	1,429 1,338
Goodwill/intangible assets	206	200	211	202	192	183
Associates/investments Other assets	37 1,894	29 2,369	19 2,783	19 3,084	19 3,183	19 3,356
Total assets	3,770	4,021	4,650 0	5,102	5,698	6,326
Interest bearing debt Other liabilities	0 134	0 137	215	0 232	0 255	0 257
Total liabilities Shareholders' equity	134 3.402	137 3,658	215 4,218	232 4,662	255 5,243	257 5,878
Minorities	234	226	217	209	200	191
Total shareholders' equity Net debt	3,636 -672	3,884 -363	4,435 -486	4,870 -600	5,442 -1,043	6,069 -1,429
Key Company Metrics						
Sales growth (%)	11.3	18.4	31.5	15.6	14.7 16.5	13.0
DB EPS growth (%) EBITDA Margin (%)	7.3 51.8	13.2 50.9	34.0 49.4	7.7 45.4	16.5 44.9	12.9 44.1
EBIT Margin (%)	42.7 64.8	41.1 39.5	41.9 47.7	40.0 44.8	39.9 45.0	39.5 0.0
Payout ratio (%) ROE (%)	16.6	16.7	19.8	18.4	19.1	19.1
Capex/sales (%) Capex/depreciation (x)	11.2 1.2	15.6 1.6	11.4 1.5	7.0 1.3	7.0 1.4	7.0 1.5
Net debt/equity (%)	-18.5	-9.4	-11.0	-12.3	-19.2	-23.6
Net interest cover (x)	nm	nm	nm	nm	nm	nm

Source: Company data, Deutsche Securities estimates

Appendix 1

Important Disclosures

*Other information available upon request

Disclosure checklist			
Company	Ticker	Recent price*	Disclosure
Hualan Biological Engineering Inc	002007.SZ	28.18 (CNY) 21 Aug 2017	NA

*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="http://gm.db.com/ger/disclosure/bisclo

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. Jack Hu



Historical recommendations and target price. Hualan Biological Engineering Inc (002007.SZ) (as of 08/21/2017)



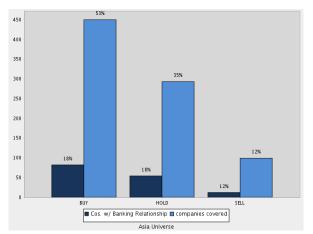
Buy: Based on a current 12- month view of total share-holder return (TSR = percentage change in share price from current price to projected target price plus pro-jected dividend yield), we recommend that investors buy the stock.

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 <u>or security controls</u> of these 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 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 are consistent or inconsistent with Deutsche Bank's existing longer term ratings. Trade ideas for equities can be found at the SOLAR link at http://gm.db.com. A SOLAR idea represents a high conviction belief by an analyst that a stock will outperform or underperform the market and/or sector delineated over a time frame of no less than two weeks. In addition to SOLAR ideas, the analysts named in this report may from time to time discuss with our clients, Deutsche Bank salespersons and Deutsche Bank 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 any opinion, forecast or estimate contained herein changes or subsequently 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 concerned or of the Research Department Management and as such 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. 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 sourced from Deutsche Bank, subject companies, and in some cases, other parties.

The Deutsche Bank Research Department is independent of other business areas 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 is available on our website under Disclaimer found on the Legal tab.



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 the liquidation of positions), and settlement issues related to local clearing houses are also important risk factors to be considered. The sensitivity of fixed income 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. It is important to note that 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. It is also important to acknowledge that funding in a currency that differs from the currency in which coupons are denominated carries FX risk. Naturally, options on swaps (swaptions) also bear the risks typical to options in addition to the risks related to rates movements.

Derivative transactions involve numerous risks including, among others, market, counterparty default and illiquidity risk. The appropriateness or otherwise of these products for use by investors is dependent on the investors' own circumstances including their tax position, their regulatory environment and the nature of their other assets and liabilities, and 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. 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 http://www.optionsclearing.com/about/publications/character-risks.jsp. 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 https://matcheduction.com/equities under the "Disclosures Lookup" and "Legal" tabs. Investors are strongly encouraged to review this information before investing.

Deutsche Bank (which includes Deutsche Bank AG, its branches and all affiliated companies) is not acting as a financial adviser, consultant or fiduciary to you, any of your agents (collectively, "You" or "Your") with respect to any information provided in the materials attached hereto. 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.

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.

India: Prepared by Deutsche Equities India Pvt Ltd, which is registered by the Securities and Exchange Board of India (SEBI) as a stock broker. Research Analyst SEBI Registration Number is INH000001741. DEIPL may have received administrative warnings from the SEBI for breaches of Indian regulations.

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: 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 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 only undertake the financial services activities that fall within the scope of its existing QFCRA license. 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 to Business Customers, as defined by the Qatar Financial Centre Regulatory Authority.

Russia: This 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 only undertake the financial services activities that fall within the scope of its existing CMA license. 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 only available to Professional Clients, as defined by the Dubai Financial Services Authority.

Australia: Retail clients should obtain a copy of a Product Disclosure Statement (PDS) relating to any financial product referred to in this report and consider the PDS before making any decision about whether to acquire the product. Please refer to Australian specific research disclosures and related information at https://australia.db.com/australia/content/research-information.html

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.

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 © 2017 Deutsche Bank AG



David Folkerts-Landau Group Chief Economist and Global Head of Research

Raj Hindocha Global Chief Operating Officer Research

Anthony Klarman Global Head of Debt Research Michael Spencer Head of APAC Research Global Head of Economics Steve Pollard Head of Americas Research Global Head of Equity Research

Deutsche Securities Inc.

Chiyoda-ku, Tokyo 100-6171

2-11-1 Nagatacho

Sanno Park Tower

Tel: (81) 3 5156 6770

Japan

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 locations

Deutsche Bank AG Deutsche Bank Place Level 16 Corner of Hunter & Phillip Streets Sydney, NSW 2000 Australia

Tel: (61) 2 8258 1234

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

Mainzer Landstrasse 11-17

60329 Frankfurt am Main

Deutsche Bank AG

Germany

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