



Rating  
**Buy**

Asia  
China

Health Care  
Pharmaceuticals /  
Biotechnology

Company  
**Fudan-Zhangjiang**

Reuters 1349.HK    Bloomberg 1349 HK    Exchange HSI    Ticker 1349

Date  
30 March 2015

## Forecast Change

Price at 27 Mar 2015 (HKD)	7.51
Price target - 12mth (HKD)	9.00
52-week range (HKD)	7.80 - 5.45
HANG SENG INDEX	24,486

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## Multiple catalysts ahead

### 2H14 beats; growth recovery on track

Fudan Zhangjiang (FDZJ) reported RMB318m/82m for revenue and net profit respectively, largely in line with our estimates of RMB321m/84m, respectively. These represent 23% and 43% YoY growth for 2H14, vs. -2% and 19% for 1H14 respectively. The company did not give guidance for 2015 but indicated that the growth recovery for ALA and Libod is on track, while the Hemoporfin launch should be expected in 2H15. We increase our 2015E revenue and EPS by 1% and 2%, respectively.

### In-line product growth recovery on track

While ALA growth was nearly flat in 2H14 vs. 1% growth in 1H14, the sequential growth was 39%, strongly suggesting the business was back on track after the temporary sales force adjustment had been concluded. For Libod, management indicated that NT Pharma is targeting more than 30% volume growth in 2015, while the 5% increase in ex-manufacturing prices has been adopted. On pricing pressure, management expects minimal pricing erosion for ALA as it is an exclusive product, while modest pricing pressure for Libod is expected but should not affect ex-manufacturing prices.

### Pipeline progressing well; targeting US filing of Libod in 2H15

FDZJ is planning to finish the current bioequivalence study by 3Q15 and file for US FDA approval in 4Q15. In addition, management indicated that FDZJ had been approached by multiple global pharmaceutical companies for the US marketing rights of Libod. The royalty agreement is likely to be structured as full reimbursement of the clinical programs, milestone payment and royalties as a percentage of revenue. Interestingly, FDZJ's Avastin is likely to enter the clinical stage in 2H15 or 1H16 after extensive preclinical bio-similar studies.

### Increasing price target (PT) to HKD9 from HKD8; risks

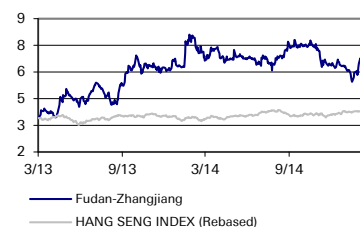
We increase our PT to HKD9 based on 30x 2016E EPS of HKD0.297 compared with the 36x multiple and 2015E EPS we used previously. We believe the 30x multiple is justified as the HK traded peers are trading at 17.9x 2016 EPS with 19% growth vs. the 34.2% we model for FDZJ. As one of the most innovative companies in China with a potential US drug launch ahead, we expect significant upside for this name. Key risks: delays in clinical studies and regulatory approvals, price erosion, potential uncertainties in the sales model.

### Key changes

Price target	8.00 to 9.00	↑	12.5%
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Source: Deutsche Bank

### Price/price relative



Performance (%)	1m	3m	12m
Absolute	16.1	16.1	13.3
HANG SENG INDEX	-1.4	4.9	12.1

Source: Deutsche Bank

### Forecasts And Ratios

Year End Dec 31	2013A	2014A	2015E	2016E	2017E
Sales (CNYm)	415.9	470.9	610.6	799.1	1,055.6
EBITDA (CNYm)	124.8	155.9	219.5	292.7	414.1
Reported NPAT (CNYm)	87.9	118.4	159.0	214.7	309.4
DB EPS FD(CNY)	0.10	0.13	0.17	0.23	0.34
DB EPS growth (%)	25.7	26.5	34.2	35.0	44.1
PER (x)	35.2	43.0	34.9	25.9	18.0

Source: Deutsche Bank estimates, company data

<sup>1</sup> DB EPS is fully diluted and excludes non-recurring items

<sup>2</sup> Multiples and yields calculations use average historical prices for past years and spot prices for current and future years, except P/B which uses the year end close

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Model updated: 28 March 2015

### Running the numbers

Asia  
China  
Pharmaceuticals / Biotechnology

### Fudan-Zhangjiang

Reuters: 1349.HK Bloomberg: 1349.HK

### Buy

Price (27 Mar 15) HKD 7.51  
Target Price HKD 9.00  
52 Week range HKD 5.45 - 7.80  
Market Cap (m) HKDm 6,932  
USDm 894

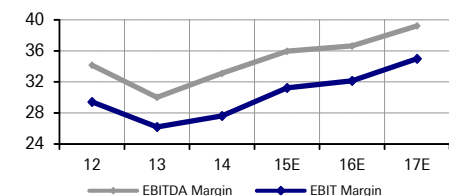
### Company Profile

Shanghai Fudan-Zhangjiang Bio-Pharmaceutical Co., Ltd. is a HK listed pharmaceutical company principally engaged in R&D and commercialization of drug products. The company, together with its subsidiaries, has focus on its self-developed biopharmaceutical drugs which were split under three platforms: genetic technical platform, photodynamic platform and nano technical platform.

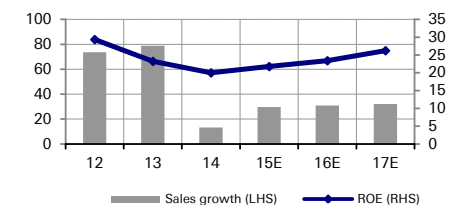
### Price Performance



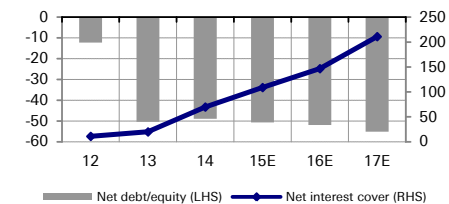
### Margin Trends



### Growth & Profitability



### Solvency



Fiscal year end 31-Dec

	2012	2013	2014	2015E	2016E	2017E
DB EPS (CNY)	0.08	0.10	0.13	0.17	0.23	0.34
Reported EPS (CNY)	0.08	0.10	0.13	0.17	0.23	0.34
DPS (CNY)	0.00	0.00	0.00	0.00	0.00	0.00
BVPS (CNY)	0.3	0.6	0.7	0.9	1.1	1.4
Weighted average shares (m)	710	864	923	923	923	923
Average market cap (CNYm)	1,089	3,091	5,097	5,555	5,555	5,555
Enterprise value (CNYm)	1,094	2,840	4,791	5,158	5,037	4,834

### Valuation Metrics

P/E (DB) (x)	19.0	35.2	43.0	34.9	25.9	18.0
P/E (Reported) (x)	18.9	35.2	43.0	34.9	25.9	18.0
P/BV (x)	5.95	7.99	7.32	6.86	5.42	4.16
FCF Yield (%)	nm	1.1	0.7	1.7	2.3	3.8
Dividend Yield (%)	0.0	0.0	0.0	0.0	0.0	0.0
EV/Sales (x)	4.7	6.8	10.2	8.4	6.3	4.6
EV/EBITDA (x)	13.8	22.7	30.7	23.5	17.2	11.7
EV/EBIT (x)	16.0	26.1	36.8	27.0	19.6	13.1

### Income Statement (CNYm)

Sales revenue	233	416	471	611	799	1,056
Gross profit	209	384	434	562	735	975
EBITDA	79	125	156	220	293	414
Depreciation	10	15	23	29	36	45
Amortisation	1	1	2	0	0	0
EBIT	68	109	130	191	257	369
Net interest income/(expense)	-6	-5	-2	-2	-2	-2
Associates/affiliates	0	0	0	0	0	0
Exceptionals/extraordinaries	0	-4	0	0	0	0
Other pre-tax income/(expense)	0	0	0	0	0	0
Profit before tax	62	100	128	189	255	368
Income tax expense	5	15	18	28	38	55
Minorities	-1	-4	-8	2	2	3
Other post-tax income/(expense)	0	0	0	0	0	0
Net profit	58	88	118	159	215	309
DB adjustments (including dilution)	0	0	0	0	0	0
DB Net profit	57	88	119	159	215	309

### Cash Flow (CNYm)

Cash flow from operations	110	89	98	179	234	347
Net Capex	-115	-56	-64	-83	-109	-138
Free cash flow	-4	33	34	95	126	209
Equity raised/(bought back)	0	222	0	0	0	0
Dividends paid	0	0	0	0	0	0
Net inc/(dec) in borrowings	50	-86	0	0	0	0
Other investing/financing cash flows	3	-2	-5	-5	-5	-5
Net cash flow	48	167	29	91	121	204
Change in working capital	45	-11	-37	-13	-21	-14

### Balance Sheet (CNYm)

Cash and other liquid assets	158	325	356	449	572	778
Tangible fixed assets	221	265	286	340	414	507
Goodwill/intangible assets	2	2	3	3	3	3
Associates/investments	0	0	0	0	0	0
Other assets	156	157	180	227	274	332
Total assets	537	749	824	1,019	1,262	1,620
Interest bearing debt	126	40	25	25	25	25
Other liabilities	151	143	123	155	179	222
Total liabilities	277	183	148	180	204	247
Shareholders' equity	223	533	651	810	1,025	1,334
Minorities	37	33	25	27	29	32
Total shareholders' equity	260	566	676	837	1,054	1,366
Net debt	-32	-285	-331	-424	-547	-753

### Key Company Metrics

Sales growth (%)	73.7	78.9	13.2	29.7	30.9	32.1
DB EPS growth (%)	84.0	25.7	26.5	34.2	35.0	44.1
EBITDA Margin (%)	34.2	30.0	33.1	36.0	36.6	39.2
EBIT Margin (%)	29.4	26.2	27.6	31.2	32.2	35.0
Payout ratio (%)	0.0	0.0	0.0	0.0	0.0	0.0
ROE (%)	29.4	23.2	20.0	21.8	23.4	26.2
Capex/sales (%)	49.3	13.8	13.6	13.6	13.6	13.1
Capex/depreciation (x)	10.4	3.6	2.5	2.9	3.0	3.1
Net debt/equity (%)	-12.2	-50.3	-48.9	-50.6	-51.9	-55.1
Net interest cover (x)	11.1	20.0	69.9	109.0	146.8	211.1

Source: Company data, Deutsche Bank estimates



# Growth outlook

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## 2015 guidance appears conservative

Management did not give guidance for 2015 but expects 25-30% growth for ALA and approximately 30% growth for Libod in 2015. For Hemoporfin, the company expects the product launch in 2H15, but revenue contribution should be quite limited as FDZJ plans an intensive pre-launch academic promotion.

For ALA, the sequential growth in 2H14 was 39%, strongly suggesting the business was back on track after the temporary sales force adjustment was concluded. Management expects growth momentum to continue, but the size of the sales force is not going to increase. For the additional sales force required for growth, FDZJ is planning a flexible approach. Importantly, the company estimates that the indication expansion to CIN prevention is likely to harvest billion-dollar market opportunities if county-level hospital opportunities can be captured. We concur with management on this front.

For Libod, FDZJ indicated that the contract with NT Pharma, its CSO (contract sales organization), had been renewed for another four years. The volume target for NT Pharma is 100K vs. 70K in 2014. Despite price erosion from drug tender, the ex-manufacturing price increased by 5%. For pricing pressure, FDZJ expects mid- to high-single-digit price erosion, which is consistent with CSPC faces. We think this is manageable. Additionally, we believe that the volume growth opportunity will significantly outweigh the impact from price cuts upon inclusion in RLSDs. For example, Libod was recently included in the RLSD for Zhejiang province. While the price cut is 15%, the expected volume is approximately 10,000 vials vs. 3,000 vials at present, translating into a three-fold opportunity in the next 12 months in Zhejiang province.

For the imminent launch of Hemoporfin, management indicated that pre-launch academic promotion is critical, and the market introduction may last for at least four to six quarters. Despite the cautious tone, the first 50 teaching hospitals, which FDZJ had already targeted in 2014, has an average of approximately 80-100 patients registered on the waiting list for this drug. This translates into a pent-dup demand pool of 4,000-5,000 patients, representing a RMB168-210m market opportunity. We remain optimistic on the Hemoporfin launch.

### Pipeline progress

On the Libod US filing, FDZJ is planning to finish the current bioequivalence study by 3Q15 and file for US FDA approval in 4Q15. In addition, FDZJ is actively talking with potential marketing partners in US. By industry standards, the other party would reimburse all clinical expenses and pay milestones upon regulatory and sales milestones, as well as royalties as a percentage of revenue. However, management refused to offer a timeline for the sign-off of the collaboration.

Interestingly, FDZJ's Avastin is likely to enter the clinical stage in 2H15 or 1H16 after extensive preclinical bio-similar studies. According to management, CFDA recently passed the regulation for biosimilars in China, and FDZJ's



Avastin is likely to fit all the criteria. As such, we believe it is likely FDZJ will not have to conduct multi-year clinical studies to gain regulatory approval.

We summarize the pipeline of FDZJ in the following figure.

Figure 1: Pipeline summary

Technical platform	Project name	Indications	Progress
<b>Genetic engineering</b>	Recombinant tissue type plasminogen activator (r-tPA)	Heart infarction	Technology transferred, the transferee has obtained the letter of approval for drug registration
	Recombinant human lymphotoxin α-derivatives (LT)	Tumor	Clinical trial phase II completed, stopped moving forward; discuss new plan
	Recombinant human tumor necrosis recipient Fc fusion protein (Etanercept)	Arthritis	Domestic and overseas rights transferred respectively
	rhTNFR(m):Fc (High bio-activity recombinant human TNF receptor 2-Fc fusion protein mutant	Arthritis	Clinical trial phase I
	PTH	Osteoporosis	Clinical trial phase I completed
	CD30-MMAE	Tumor	Pre-clinical study
	Anti-sclerostin mab	Osteoporosis	Pre-clinical study
	PCSK9	Hypercholesterolemia	Pre-clinical study
	Avastin	Tumor	Pre-clinical study
	<b>Photodynamic technique</b>	Hemoporfin	Port wine stain
Deuteroporphyrin (class1.1)		Tumors	Clinical trial phase II
ALA (Aminolevulinic Acid)		Cervical diseases infected by HPV	Clinical trial phase II
ALA (Aminolevulinic Acid)		Acne	Clinical trial application has been submitted
ALA (Aminolevulinic Acid)		GBM (glioblastoma)	Pre-clinical study
ALA (Aminolevulinic Acid)		BCC(Basal cell carcinoma)	Pre-clinical study
<b>Nano technique</b>	Doxorubicin liposome	Tumors	Registered in USA, bioequivalency trial
	Vincristine sulphate liposome (LVCR)	Tumors	Clinical trial phase I completed, transferred to a third party pharmaceutical company
	Nanoparticle Albumin-bound Paclitaxel	Tumors	Pre-clinical study
	Xenon liposome	Stroke	Pre-clinical study
<b>Others</b>	Antenatal Screening Diagnostic Reagent	Down's Syndrome, etc.	Under research

Source: Deutsche Bank, Company data

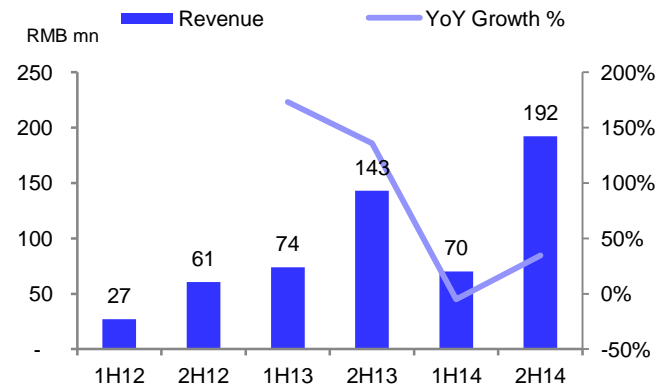


## 2H14 recap

### Stable performances of ALA and Libod

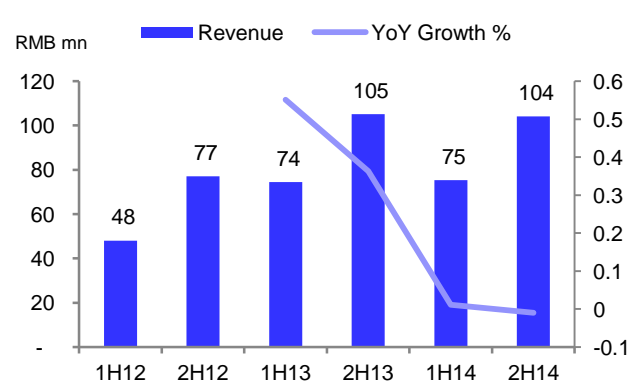
Libod delivered RMB192m revenue in 2H14, representing 34.5% YoY growth vs. -5% growth in 1H14, which was dampened by the supply shortage due to manufacturing disruption. For ALA, revenue in 2H14 was RMB104m, largely flat compared with 2H13. The sequential growth for ALA was 39%, which indicates the business is back on track.

Figure 2: Libod sales growth (1H12-2H14)



Source: Deutsche Bank, Company data

Figure 3: ALA sales growth (1H12-2H14)

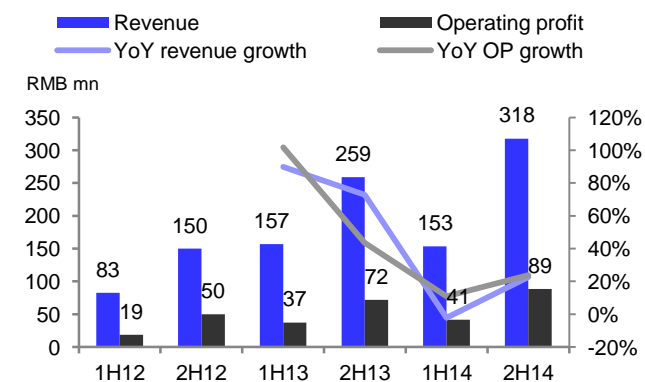


Source: Deutsche Bank, Company data

### Revenue and OP picked up in 2H14; stable margins

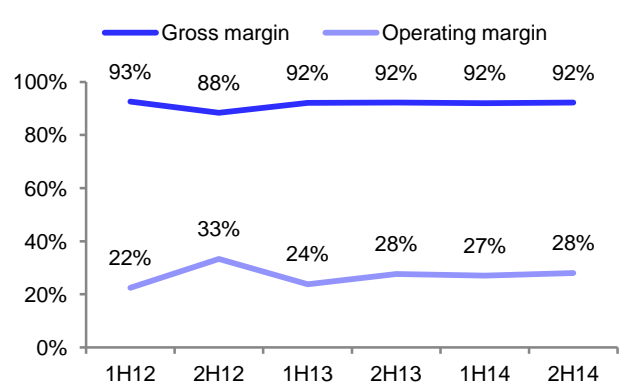
FDZJ reported revenue/operating profit of RMB318m/89m in 2H14, representing 23%/24% YoY growth. This demonstrated growth acceleration when compared with -2%/11% growth in 1H14 as it was affected by sales force organization and manufacturing disruption. GM and OPM were 92%/28% in 2H14, largely flat when compared with previous numbers.

Figure 4: Revenue and OP growth (1H12-2H14)



Source: Deutsche Bank, Company data

Figure 5: GM and OPM(1H12-2H14)



Source: Deutsche Bank, Company data



Figure 6: Income statement

Income Statement (RMB m)	2010	2011	2012	2013	2014	2015E	2016E	2017E	2018E
Medical products	89	130	226	411	460	603	791	1,003	1,234
Exclusive rights	4	4	5	5	5	8	8	8	8
Technology transfer revenue	-	-	2	0	5	-	-	-	-
<b>Revenue - China</b>	<b>92</b>	<b>134</b>	<b>233</b>	<b>416</b>	<b>471</b>	<b>611</b>	<b>799</b>	<b>1,011</b>	<b>1,242</b>
Royalty revenue								45	64
<b>Total WW revenue</b>	<b>92</b>	<b>134</b>	<b>233</b>	<b>416</b>	<b>471</b>	<b>611</b>	<b>799</b>	<b>1,056</b>	<b>1,306</b>
Cost of sales	(19)	(23)	(24)	(32)	(37)	(49)	(64)	(81)	(99)
<b>Gross profit from China operations</b>	<b>74</b>	<b>111</b>	<b>209</b>	<b>384</b>	<b>434</b>	<b>562</b>	<b>735</b>	<b>930</b>	<b>1,143</b>
<b>Gross profit from WW operations</b>	<b>74</b>	<b>111</b>	<b>209</b>	<b>384</b>	<b>434</b>	<b>562</b>	<b>735</b>	<b>975</b>	<b>1,207</b>
Research and development costs	(24)	(33)	(45)	(68)	(105)	(106)	(140)	(182)	(211)
Distribution costs	(53)	(55)	(127)	(232)	(258)	(302)	(387)	(485)	(593)
Administrative expenses	(11)	(17)	(17)	(21)	(23)	(27)	(36)	(45)	(56)
Government grants	15	12	18	15	33	21	28	35	43
Other income/(loss)	7	25	31	32	49	43	57	72	88
<b>EBIT - GAAP</b>	<b>8</b>	<b>43</b>	<b>68</b>	<b>109</b>	<b>130</b>	<b>191</b>	<b>257</b>	<b>369</b>	<b>478</b>
Depreciation and amortization	8	7	11	16	26	29	36	45	45
Depreciation of PPE	5	5	10	15	23	29	36	45	55
Amortization	2	2	1	1	2	0	0	0	0
<b>EBITDA - GAAP</b>	<b>15</b>	<b>50</b>	<b>79</b>	<b>125</b>	<b>156</b>	<b>220</b>	<b>293</b>	<b>414</b>	<b>523</b>
Non-recurring income/(expenses)	(1)	(0)	(5)	(1)	(0)	-	-	-	-
Finance costs	(3)	(5)	(6)	(5)	(2)	(2)	(2)	(2)	(2)
Net foreign exchange losses on financing activities	-	-	-	(4)	-	-	-	-	-
<b>Profit before taxation - GAAP</b>	<b>4</b>	<b>38</b>	<b>58</b>	<b>99</b>	<b>128</b>	<b>189</b>	<b>255</b>	<b>368</b>	<b>476</b>
Taxation	(3)	(5)	(5)	(15)	(18)	(28)	(38)	(55)	(71)
Tax rate	70%	14%	9%	16%	14%	15%	15%	15%	15%
<b>Net profit - GAAP</b>	<b>1</b>	<b>32</b>	<b>52</b>	<b>84</b>	<b>110</b>	<b>161</b>	<b>217</b>	<b>313</b>	<b>405</b>
Non-controlling interests	2	(2)	1	4	8	(2)	(2)	(3)	(4)
<b>Net income attributable to Equity holders - GAAP</b>	<b>4</b>	<b>31</b>	<b>53</b>	<b>87</b>	<b>118</b>	<b>159</b>	<b>215</b>	<b>309</b>	<b>401</b>
<b>Net income attributable to Equity holders - non-GAAP</b>	<b>4</b>	<b>31</b>	<b>57</b>	<b>88</b>	<b>118</b>	<b>159</b>	<b>215</b>	<b>309</b>	<b>401</b>
<b>Common shares</b>									
EPS: Basic (RMB) - GAAP	0.005	0.043	0.075	0.101	0.128	0.172	0.233	0.335	0.434
EPS: Diluted (RMB) - GAAP	0.005	0.043	0.075	0.101	0.128	0.172	0.233	0.335	0.434
EPS: Basic (RMB) - non-GAAP	0.005	0.044	0.081	0.102	0.128	0.172	0.233	0.335	0.434
EPS: Diluted (RMB) - non-GAAP	0.005	0.044	0.081	0.102	0.128	0.172	0.233	0.335	0.434

Source: Deutsche Bank, Company data



# Appendix 1

## Important Disclosures

Additional information available upon request

### Disclosure checklist

Company	Ticker	Recent price*	Disclosure
Fudan-Zhangjiang	1349.HK	7.51 (HKD) 27 Mar 15	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. Data is sourced from Deutsche Bank and subject companies.

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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: Fudan-Zhangjiang (1349.HK)

(as of 3/27/2015)



#### Previous Recommendations

- Strong Buy
- Buy
- Market Perform
- Underperform
- Not Rated
- Suspended Rating

#### Current Recommendations

- Buy
- Hold
- Sell
- Not Rated
- Suspended Rating

\*New Recommendation Structure as of September 9,2002

1. 24/02/2015: Upgrade to Buy, Target Price Change HKD8.00



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 projected 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.

Notes:

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

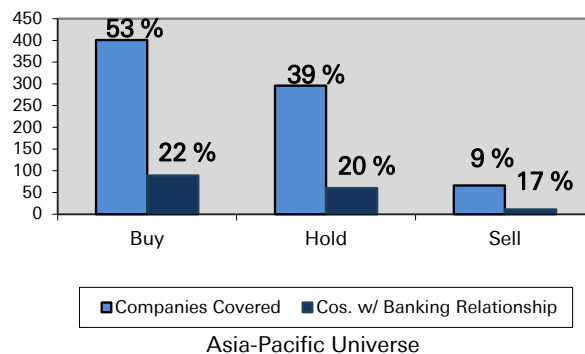
2. Ratings definitions prior to 27 January, 2007 were:

Buy: Expected total return (including dividends) of 10% or more over a 12-month period

Hold: Expected total return (including dividends) between -10% and 10% over a 12-month period

Sell: Expected total return (including dividends) of -10% or worse over a 12-month period

Equity rating dispersion and banking relationships







## Regulatory Disclosures

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