

# Zhongji InnoLight (300308 CH)

 Target price: **n.a.**

 Share price (1 Jul): **CNY36.00** | Up/downside: -

5 4 3 2 1

## No Rating

### A photonic innovator for optical communication

- InnoLight expects datacentre demand to recover soon
- Sees bandwidth upgrades as a secular demand driver
- 1Q19 likely to mark a revenue trough; 400G the next focus

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**Background:** Founded in 2008 with a capital injection by prestigious US venture-capital firms such as Capital G, InnoLight Technology (Suzhou) (ITS) supplied high-speed optical transceivers, with datacentres (DC) its key application market. Listed on the Shenzhen Stock Exchange in 2012 focusing on industrial machinery, Shandong Zhongji Electrical Equipment acquired ITS in 2017 and restructured the 2 firms into a consolidated entity, Zhongji InnoLight (中際旭創), keeping the same stock ticker. After spinning off its machinery business into a new subsidiary, Shandong Zhongji Intelligent Equipment (SZIE), Zhongji InnoLight became a holding company for ITS and SZIE. In 2018, InnoLight generated USD770m in revenue where c.90% was for DC (breakdown by bandwidth shown on next page).

**Highlights: DC demand to recover soon.** InnoLight's DC customers cover most of the leading hyper-scale public/private operators in the world. Orders from some of its customers seem to have been muted since 2H18 due to inventory adjustments, but management expects business to recover in 2H19, with revenue upside from bandwidth migration to 400G. Our market research suggests meaningful price premiums for 400G optical transceivers over 100G counterparts in the DC market, making the 400G likely a margin-accretive solution.

**Bandwidth upgrades a secular driver.** InnoLight sees bandwidth upgrades as a multi-year trend on surged data flows, especially in the datacom market where bandwidth migration is faster than telecom. This echoes our bandwidth theme in the [BigData/IoT demand cycle](#). Global DCs have witnessed bandwidth upgrades to 100G from 40G. Management expects the next 400G cycle to begin soon, where InnoLight believes it holds a leading position to benefit given its vertical-disintegration model offering better time-to-market than an IDM. As for the 5G cellular migration, it sees intense competition in base-station interconnectivity, thus only focusing on mid-haul and backhaul data transmissions where bandwidth requirements are higher (50/100/200G+) than the front-haul (25G).

**Financial update.** Despite DC inventory correction, InnoLight sees a revenue trough in 1Q19, followed by a nice uptick QoQ in 2Q19, with negative YoY growth likely to reverse in 2H19; the bottom line could potentially grow this year thanks to frugal opex control and reduced interest expenses associated with refinancing.

**Valuation:** The stock is trading at a 4.7x 2019E PBR and 37x 4-quarter forward PER, based on the consensus forecasts, roughly at the low-/mid-bounds of its historical ranges post the business restructuring in 2017.

### Share price performance



12-month range	26.96-44.41
Market cap (USDbn)	3.75
3m avg daily turnover (USDm)	26.54

Source: FactSet, Daiwa forecasts

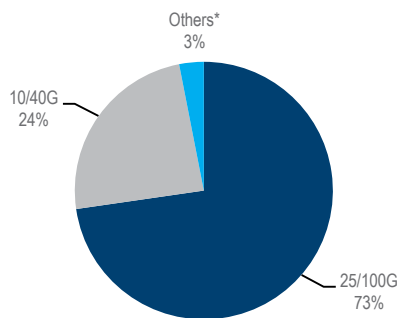
**InnoLight: quarterly P&L**

CNYm	1Q17	2Q17	3Q17*	4Q17	1Q18	2Q18	3Q18	4Q18	1Q19	2015	2016	2017	2018
Revenue	15	56	1,069	1,218	1,399	1,427	1,377	953	876	121	132	2,357	5,156
COGS	-10	-37	-782	-897	-1,059	-1,057	-993	-641	-630	-88	-91	-1,726	-3,750
Gross profit	5	19	287	320	340	370	384	312	246	33	40	632	1,406
Opex	-11	-12	-117	-145	-152	-159	-167	-155	-123	-37	-47	-284	-633
Operating profit	-6	7	171	176	188	211	218	157	123	-4	-7	347	773
Pretax profit	-4	9	145	57	169	198	183	145	117	6	11	206	695
Income taxes	0	0	-22	-21	-21	-29	-19	-3	-18	-1	-1	-44	-72
Net profit	-4	8	122	35	148	169	165	142	100	6	10	162	623
EPS (USD, basic)	-0.02	0.04	0.26	0.07	0.31	0.36	0.35	0.30	0.20	0.03	0.05	0.34	1.31
EPS (USD, fully diluted)	-0.01	0.03	0.18	0.05	0.22	0.25	0.25	0.21	0.15	0.02	0.03	0.24	0.94
<b>Margin</b>													
Gross	32%	35%	27%	26%	24%	26%	28%	33%	28%	27%	31%	27%	27%
Operating	-43%	13%	16%	14%	13%	15%	16%	16%	14%	-3%	-5%	15%	15%
Net	-30%	15%	11%	3%	11%	12%	12%	15%	11%	5%	8%	7%	12%
<b>Growth (QoQ)</b>													
Revenue	-70%	285%	nm	14%	15%	2%	-3%	-31%	-8%				
Gross profit	-73%	321%	nm	11%	6%	9%	4%	-19%	-21%				
Operating profit	-258%	nm	nm	3%	7%	12%	3%	-28%	-22%				
Net profit	-174%	nm	nm	-71%	320%	14%	-3%	-14%	-30%				
EPS (basic)	-174%	nm	nm	-71%	320%	14%	-3%	-14%	-34%				
EPS (FD)	-174%	nm	nm	-77%	320%	14%	-3%	-14%	-26%				
<b>Growth (YoY)</b>													
Revenue	41%	21%	nm	nm	nm	nm	29%	-22%	-37%	2%	8%	nm	119%
Gross profit	36%	56%	nm	nm	nm	nm	34%	-2%	-28%	-14%	22%	nm	123%
Operating profit	nm	nm	nm	nm	nm	nm	28%	-11%	-34%	nm	nm	nm	123%
Net profit	nm	-29%	nm	496%	nm	nm	35%	302%	-33%	-32%	81%	nm	286%
EPS (basic)	nm	-29%	nm	172%	nm	nm	34%	301%	-37%	-32%	81%	nm	285%
EPS (FD)	nm	-29%	nm	172%	nm	nm	34%	301%	-33%	-32%	81%	nm	284%

Source: Company

Note: \* consolidation of business operations of InnoLight Technology (苏州旭创) and Shandong Zhongji Electrical Equipment (山东中际电气装备)

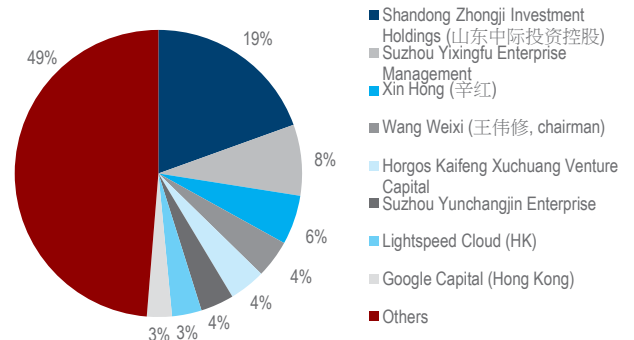
**InnoLight: 2018 revenue mix**



Source: Company

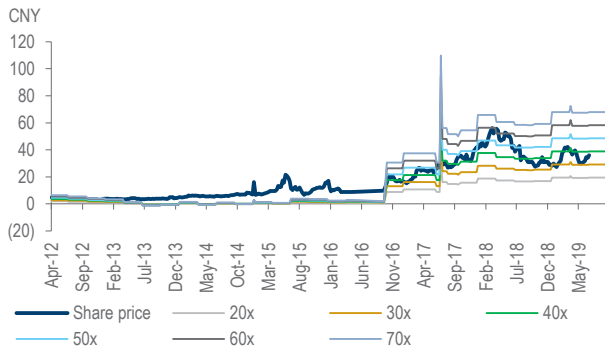
Note: Including machinery sales from SZIE (山东中际智能装备)

**InnoLight: major shareholder structure**



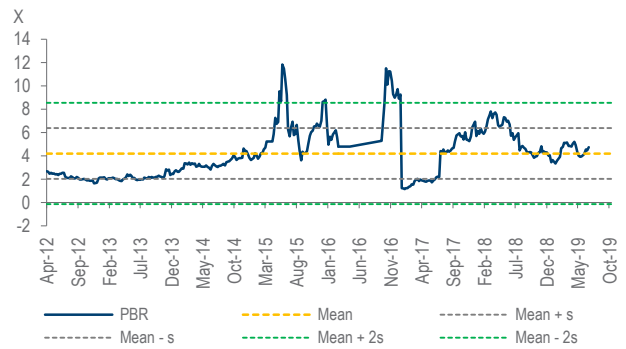
Source: Company

**InnoLight: 4-quarter forward PER bands**



Source: Company, Bloomberg

**InnoLight: PBR trend**



Source: Company, Bloomberg

## Financial summary

### Profit and loss (CNYm)

Year to 31 Dec	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Revenue	90	124	162	117	91	119	121	132	2,357	5,156
COGS	-45	-61	-81	-60	-54	-80	-88	-91	-1,726	-3,750
<b>Gross profit</b>	<b>45</b>	<b>63</b>	<b>81</b>	<b>57</b>	<b>37</b>	<b>39</b>	<b>33</b>	<b>40</b>	<b>632</b>	<b>1,406</b>
SG&A	-11	-13	-20	-27	-35	-41	-37	-47	-284	-481
R&D	0	0	0	0	0	0	0	0	0	-152
<b>Operating profit</b>	<b>34</b>	<b>50</b>	<b>61</b>	<b>30</b>	<b>1</b>	<b>-2</b>	<b>-4</b>	<b>-7</b>	<b>347</b>	<b>773</b>
Net interest income (expense)	-0	-1	-2	4	3	4	3	1	-37	-79
Other non-op gains (losses)	2	-0	1	-0	12	7	7	17	-104	1
<b>Pretax profit</b>	<b>35</b>	<b>49</b>	<b>60</b>	<b>34</b>	<b>16</b>	<b>9</b>	<b>6</b>	<b>11</b>	<b>206</b>	<b>695</b>
Income tax	-4	-7	-8	-5	-2	-1	-1	-1	-44	-72
Minority interest & others	0	0	0	0	0	0	0	0	0	0
<b>Net profit</b>	<b>31</b>	<b>42</b>	<b>51</b>	<b>29</b>	<b>14</b>	<b>8</b>	<b>6</b>	<b>10</b>	<b>162</b>	<b>623</b>
<b>EPS (basic)</b>	<b>3.00</b>	<b>0.84</b>	<b>1.02</b>	<b>0.43</b>	<b>0.12</b>	<b>0.04</b>	<b>0.03</b>	<b>0.05</b>	<b>0.34</b>	<b>1.31</b>
EPS (weighted average)	0.69	0.89	1.02	0.46	0.12	0.04	0.03	0.05	0.50	1.36
<b>EPS (fully diluted)</b>	<b>0.69</b>	<b>0.89</b>	<b>1.02</b>	<b>0.10</b>	<b>0.05</b>	<b>0.03</b>	<b>0.02</b>	<b>0.03</b>	<b>0.24</b>	<b>0.94</b>
DPS (CNY, against prev. year)	0.00	3.93	0.05	0.29	0.10	0.03	0.01	0.01	0.10	0.14
EBITDA	36	54	68	40	22	23	24	24	449	974

### Cash flow (CNYm)

Year to 31 Dec	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Pretax profit	35	49	60	34	16	9	6	11	206	695
Depreciation & amortization	2	4	7	10	20	25	27	31	101	201
Changes in working capital	2	-15	-28	-50	0	-20	-2	7	-393	-473
Other operating CF items	-6	-6	-6	-7	-1	-5	-5	-15	127	237
<b>Cash flow from operations</b>	<b>34</b>	<b>32</b>	<b>33</b>	<b>-13</b>	<b>36</b>	<b>9</b>	<b>27</b>	<b>34</b>	<b>41</b>	<b>660</b>
Capex	-13	-47	-50	-27	-96	-63	-53	-35	-421	-608
Net disposals (acquisitions)	0	0	0	0	0	-27	31	7	27	-70
Other investing CF items	0	0	0	-215	97	22	91	-52	248	5
<b>Cash flow from investing</b>	<b>-13</b>	<b>-47</b>	<b>-49</b>	<b>-242</b>	<b>1</b>	<b>-69</b>	<b>68</b>	<b>-81</b>	<b>-146</b>	<b>-673</b>
Changes in debts	0	20	20	-40	21	11	-30	0	260	151
Net share issues (purchases)	0	48	0	306	0	0	0	0	760	52
Dividends paid	0	-41	-2	-15	-7	-3	-3	-2	-21	-65
Other financing CF items	0	-1	-1	-6	-5	-0	0	0	-18	-1
<b>Cash flow from financing</b>	<b>0</b>	<b>26</b>	<b>17</b>	<b>245</b>	<b>9</b>	<b>7</b>	<b>-33</b>	<b>-2</b>	<b>981</b>	<b>137</b>
Forex effects & other adjustments	0	0	0	0	0	0	0	0	-7	15
Change in cash	22	11	0	-11	46	-52	62	-49	869	139
<b>Free cash flow</b>	<b>22</b>	<b>-15</b>	<b>-17</b>	<b>-40</b>	<b>-60</b>	<b>-54</b>	<b>-26</b>	<b>-2</b>	<b>-379</b>	<b>52</b>

Source: Company

## Financial summary continued ...

### Balance sheet (CNYm)

As at 31 Dec	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Cash & ST investment	28	37	37	243	211	136	112	69	957	1,041
Inventory	41	49	62	61	84	75	82	72	1,969	2,119
Accounts receivable	29	43	50	73	72	88	93	81	1,101	880
Other current assets	1	13	7	6	2	4	7	82	281	117
<b>Total current assets</b>	<b>100</b>	<b>142</b>	<b>156</b>	<b>382</b>	<b>369</b>	<b>304</b>	<b>295</b>	<b>304</b>	<b>4,308</b>	<b>4,158</b>
Fixed assets	41	50	110	135	235	166	200	194	1,306	1,719
Goodwill & intangibles	12	29	28	28	137	123	112	97	2,171	2,101
Other non-current assets	0	0	0	0	0	63	35	37	25	103
<b>Total assets</b>	<b>152</b>	<b>221</b>	<b>293</b>	<b>545</b>	<b>740</b>	<b>656</b>	<b>641</b>	<b>632</b>	<b>7,810</b>	<b>8,080</b>
Short-term debt	0	20	40	0	19	30	0	0	434	390
Accounts payable	16	23	19	8	35	22	22	28	1,674	942
Other current liabilities	51	22	28	13	18	23	44	40	839	1,536
<b>Total current liabilities</b>	<b>67</b>	<b>65</b>	<b>87</b>	<b>21</b>	<b>72</b>	<b>75</b>	<b>66</b>	<b>67</b>	<b>2,947</b>	<b>2,868</b>
Long-term debt	0	0	0	0	0	0	0	0	241	270
Other non-current liabilities	0	0	0	3	139	36	27	9	616	167
<b>Total liabilities</b>	<b>67</b>	<b>65</b>	<b>87</b>	<b>24</b>	<b>211</b>	<b>111</b>	<b>93</b>	<b>76</b>	<b>3,804</b>	<b>3,304</b>
Share capital	10	50	50	67	120	216	216	216	474	475
Reserves, R/E and others	75	106	157	454	409	329	332	340	3,532	4,301
<b>Shareholders' equity</b>	<b>86</b>	<b>156</b>	<b>207</b>	<b>521</b>	<b>529</b>	<b>545</b>	<b>548</b>	<b>556</b>	<b>4,006</b>	<b>4,776</b>
Minority interest	0	0	0	0	0	0	0	0	0	0
<b>Total equity &amp; liabilities</b>	<b>152</b>	<b>221</b>	<b>293</b>	<b>545</b>	<b>740</b>	<b>656</b>	<b>641</b>	<b>632</b>	<b>7,810</b>	<b>8,080</b>
Net debt (cash)	-28	-17	3	-243	-191	-106	-112	-62	65	681
BVPS (CNY)	1.90	3.31	4.12	8.33	4.46	2.67	2.54	2.57	12.40	10.43

### Key ratios (%)

Year to 31 Dec	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
<b>Growth</b>										
Revenue	2%	37%	31%	-28%	-22%	31%	2%	8%	nm	119%
Operating profit	-6%	48%	22%	-51%	-95%	-260%	nm	nm	nm	123%
Net profit	3%	34%	22%	-44%	-51%	-43%	-32%	81%	nm	286%
EPS (fully diluted)	1%	29%	15%	-91%	-51%	-43%	-32%	81%	nm	284%
EBITDA	0%	52%	26%	-42%	-45%	3%	5%	1%	nm	117%
<b>Margin</b>										
Gross profit	49.8%	50.8%	50.2%	48.7%	40.5%	32.5%	27.1%	30.6%	26.8%	27.3%
Operating profit	37.2%	40.3%	37.7%	25.8%	1.6%	-2.0%	-3.0%	-5.4%	14.7%	15.0%
Net profit	34.6%	33.9%	31.6%	24.7%	15.7%	6.9%	4.6%	7.6%	6.9%	12.1%
EBITDA	39.5%	43.8%	42.0%	34.0%	24.1%	19.0%	19.5%	18.3%	19.0%	18.9%
<b>Profitability</b>										
ROA	21%	19%	17%	5%	2%	1%	1%	2%	2%	8%
ROE	36%	27%	25%	6%	3%	1%	1%	2%	4%	13%
ROCE	54%	30%	24%	10%	4%	2%	1%	2%	4%	11%
<b>Leverage</b>										
Debt to equity	77%	42%	42%	5%	40%	20%	17%	14%	95%	69%
Interest-bearing debt to equity	0%	13%	19%	0%	4%	6%	0%	1%	26%	36%
Net debt to equity	-33%	-11%	1%	-47%	-36%	-20%	-20%	-11%	2%	14%
<b>Efficiency</b>										
Days receivable	108	106	104	191	292	246	272	241	92	70
Days inventory	381	270	250	373	489	362	325	307	216	199
Days payable	95	116	95	82	144	129	91	99	180	127
Cash cycle	395	260	260	483	637	480	506	449	127	142

Source: Company

### Company profile

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Rating	Percentage of total
Buy*	67.79%
Hold**	22.37%
Sell***	9.84%

Source: Daiwa

Notes: data is for single-branded Daiwa research in Asia (ex Japan) and correct as of 31 March 2019.

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