

## Xinyi Glass

### Raising PT to HK\$15 - Hard as glass to build new plants

Xinyi Glass (XYG) is one of China's largest and most diversified glass producers. We highlight some feedback from investor meetings following the release of FY17 results. We raise our PT to HK\$15 (prev. HK\$13).

- **Float glass environment tighter than we thought.** We are increasing our long-term margins assumptions and DCF valuation to reflect a tighter market in 2018 for float glass and a longer period of time of high margins as expansion of new float glass lines seems to have become more difficult than we previously expected. Despite near record high margins, XYG does not have any new lines of traditional float glass being built in China and is expanding in Malaysia and also possibly in Canada. We are more comfortable lifting GPM in 2018 (mostly due to strong Jan to Feb prices and falling cost of soda ash) and we are also keeping margins higher for longer because of the lack of new approvals in China, which should push out significant increase in supply well past 2019.
- **New expansion into high-end glass production in Guangxi.** XYG is planning to add as much as 3200 tons per day (equivalent to 3 to 4 lines or 20-25% of existing production) in Beihai, Guangxi province. We expect XYG to commence construction in mid-2018 for production by mid-to end-2019. XYG will also add production of windshields (~3m pieces annually) at this new site. The key to note is that the expansion is not in traditional float glass lines but in high tech (tinted, thin, ultra-clear and other non-standard float glass) production. The importance of this fact is that the government seems to be still very reluctant to approve traditional float glass lines.
- **Our revised Dec18 PT implies CY19 PE of 11.8x.** The key downside risks are falling demand for construction glass that could result from a cooling property market in China, and further weakness in PV glass demand from Europe.

## Overweight

**0868.HK, 868 HK**

Price: HK\$13.40

▲ **Price Target: HK\$15.00**  
 Previous: HK\$13.00

### China

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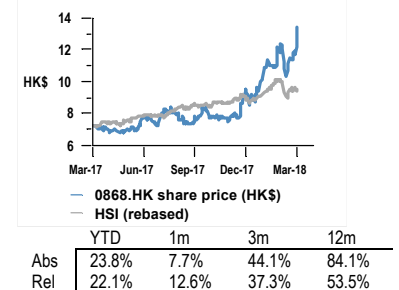
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#### Price Performance



#### Xinyi Glass (Reuters: 0868.HK, Bloomberg: 868 HK)

HK\$ in mn, year-end Dec	FY16A	FY17A	FY18E	FY19E	FY20E
Revenue (HK\$ mn)	12,848	14,728	16,814	19,368	22,964
Net Profit (HK\$ mn)	3,216	4,014	4,808	5,098	5,722
EPS (HK\$)	0.80	1.00	1.20	1.27	1.42
DPS (HK\$)	0.40	0.45	0.60	0.63	0.71
Revenue growth (%)	12.1%	14.6%	14.2%	15.2%	18.6%
EPS growth (%)	48.3%	24.8%	19.8%	6.0%	12.2%
ROCE	13.5%	13.6%	13.9%	13.2%	14.0%
ROE	24.8%	25.6%	23.4%	21.1%	21.3%
P/E (x)	16.7	13.4	11.2	10.6	9.4
P/BV (x)	4.1	3.0	2.3	2.1	1.9
EV/EBITDA (x)	12.2	10.5	8.4	7.8	6.8
Dividend Yield	3.0%	3.4%	4.5%	4.7%	5.3%

Source: Company data, Bloomberg, J.P. Morgan estimates.

#### Company Data

Shares O/S (mn)	3,687
Market Cap (HK\$ mn)	49,403
Market Cap (\$ mn)	6,313
Price (HK\$)	13.40
Date Of Price	01 Mar 18
Free Float(%)	45.8%
3M - Avg daily vol (mn)	15.33
3M - Avg daily val (HK\$ mn)	163.12
3M - Avg daily val (\$ mn)	20.8
HSI	3,0844.72
Exchange Rate	7.83
Price Target End Date	31-Dec-18
Price Target (HK\$)	15.00

#### See page 11 for analyst certification and important disclosures, including non-US analyst disclosures.

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Key catalysts for the stock price:	Upside risks to our view:	Downside risks to our view:
<ul style="list-style-type: none"> <li>Price of float glass improving after the slack 1Q season</li> <li>More information on new electric (LCD) glass business to indicate sales and profit contribution</li> <li>Finalization of new downstream solar projects</li> </ul>	<ul style="list-style-type: none"> <li>A rise in float glass price higher than our expectations driven by strong construction demand</li> <li>New customers for the electric glass business is of a better quality than what we expect</li> <li>Faster completion of new electric glass lines to boost sales</li> </ul>	<ul style="list-style-type: none"> <li>Further weakness in PV glass demand from Europe</li> <li>Falling demand for construction and float glass that may result from a cooling property market in China</li> </ul>

Key financial metrics	FY17	FY18E	FY19E	FY20E
Revenues (LC)	14,728	16,814	19,368	22,964
Revenue growth (%)	14.6%	14.2%	15.2%	18.6%
EBITDA (LC)	4,699	5,848	6,239	7,052
EBITDA margin (%)	31.9%	34.8%	32.2%	30.7%
Tax rate (%)	15%	15%	15%	15%
Net profit (LC)	4,014	4,808	5,098	5,722
EPS (LC)	1.00	1.20	1.27	1.42
EPS growth (%)	24.8%	19.8%	6.0%	12.2%
DPS (LC)	0.45	0.60	0.63	0.71
BVPS (LC)	4.54	5.70	6.34	7.05
Operating cash flow (LC mn)	6,396	4,764	4,935	5,500
Free cash flow (LC mn)	1,785	1,795	2,831	3,217
Interest cover (x)	49	82	83	117
Net margin (%)	27.3%	28.6%	26.3%	24.9%
Sales/assets (X)	0.54	0.51	0.52	0.56
Debt/equity (%)	46.2%	36.8%	33.1%	29.8%
Net debt/equity (%)	29.6%	24.3%	19.8%	14.8%
ROE (%)	26%	23%	21%	21%

Key model assumptions	FY17E	FY18E	FY19E	FY20E
Auto glass capacity (m)	16.4	17.0	18.0	18.9
Float glass capacity (mn tonnes)	6.5	6.7	7.6	9.0
Float glass price (HK\$/ton)	1,808	2,025	2,127	2,233

Source: Company and J.P. Morgan estimates.

Sensitivity analysis	EBITDA		EPS	
Sensitivity to	FY17E	FY18E	FY17E	FY18E
5% chg in float glass price	9%	9%	8%	8%
5% chg in fuel cost	-2%	-2%	-2%	-2%
5% chg in wage	-3%	-3%	-2%	-2%
1% chg in GM	4%	4%	3%	3%

Source: J.P. Morgan estimates.

### Peer valuation comparison

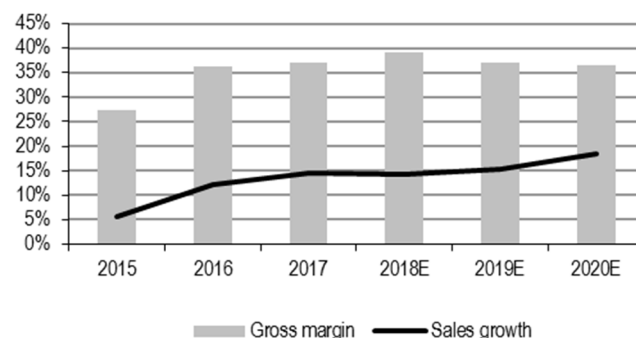
Company Name	Code	Price (TP)	MCAP US\$MM	Vol US\$mn	3M Chg	P/E 17e (x)	PE 18e (x)	ROE (%)	P/B (x)	Yld (%)
CHINA STATE CONS	3311 HK	10.6	6,861.7	10.9	1.7	7.8	6.6	22.0	1.4	3.1
ND PAPER	2689 HK	13.9	8,288.9	45.2	3.0	9.4	6.8	22.0	1.4	0.7
LM PAPER	2314 HK	9.0	5,185.8	13.5	(3.5)	8.1	6.6	13.4	1.8	2.3
<b>XINYI GLASS HOLD</b>	<b>868 HK</b>	<b>13.3</b>	<b>6,851.2</b>	<b>26.2</b>	<b>43.0</b>	<b>13.4</b>	<b>11.1</b>	<b>24.8</b>	<b>2.3</b>	<b>3.0</b>
HAITIAN	1882 HK	23.6	4,818.7	5.9	3.5	15.4	12.2	18.1	2.5	1.9
KINGBOARD CHEM	148 HK	39.7	5,428.0	9.9	(8.5)	7.5	6.2	13.5	0.9	3.3
CHINA LESSO	2128 HK	5.3	2,088.2	3.7	5.4	6.3	6.0	18.3	1.0	3.5
KB LAM	1888 HK	13.7	5,427.3	9.7	7.8	9.6	9.2	31.5	2.0	8.2
<b>Average</b>						<b>9.3</b>	<b>7.9</b>	<b>18.9</b>	<b>1.6</b>	<b>4.1</b>

Source: Company data, Bloomberg, J.P. Morgan estimates. Share prices are as of close price of 1 Mar 2018

### Valuation and price target basis

Our PT is derived on a DCF based valuation with a WACC of 11.4% and a terminal growth rate of 2%

### Sales growth and GPM trends



Source: Bloomberg, Company and J.P. Morgan estimates.

### JPM vs. consensus, change in estimates

EPS (LC)	FY18E	FY19E
JPM old	1.11	1.23
JPM new	1.20	1.27
% chg	8%	3%
Consensus	1.11	1.26

Source: Bloomberg, J.P. Morgan estimates.

## Feedback from Investor meetings

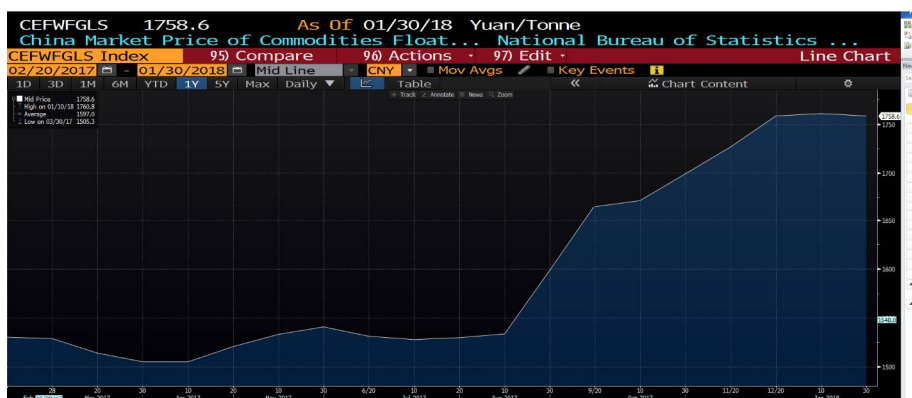
**New expansion in Guangxi.** XYG is planning to add as much as 3200 tons per day (equivalent to 3 to 4 lines or 20-25% of existing production) in Beihai, Guangxi province. We expect XYG to commence construction in mid-2018 for production by mid-to end-2019. XYG will also add production of windshields (~3m pieces annually) at this new site. Guangxi has the advantage of being relatively close to the high demand market of Guangdong and this particular site has good access to barge transportation to supply glass along the coast of China. Low cost land and high tech related reduced taxation (15%) are some key advantages.

**Licenses are not being given out.** XYG has not been able to procure any new license of approvals to build new float glass lines in China. The government has been reluctant to provide approvals for high energy consumption industry since 2015 and this stance has not changed despite many signs that there is a shortage of float glass in many parts of China. We had previously thought that some provinces such as Guangxi or Sichuan that are not in coastal areas may grant approvals for float glass lines but this apparently is not the case. The strong pricing power in float glass that we have seen for the past 18 months looks set to continue for another 2 years, which is positive for large incumbents like XYG.

## Glass price remains high during seasonally weakest Jan / Feb period

We have seen a very high glass price being maintained during the seasonally weak period of demand. This shows that the glass market is very tight and the supply shortage could push prices up further when demand increases from seasonal factors after May.

Figure 1: China Market Price of Commodities Float Glass



Source: Bloomberg

## Lifting capacity and PT

We have adjusted our estimates to factor in the expansion into high tech glass in Guangxi with sales commencing mid-2019. We also factored in a longer period of

healthy float glass GPM above 35%. Our Dec 18 DCF based PT is lifted to HK\$15 (prev. HK\$12).

Table 1: Earnings Revisions

Year to Dec (HKDm)	----- New -----		----- Old -----		----- Change -----	
	FY18E	FY19E	FY18E	FY19E	FY18E	FY19E
Turnover	16,814	19,368	16,813	19,038	0.0%	1.7%
Gross profit	6,573	7,158	6,167	6,962	6.6%	2.8%
EBIT	4,724	5,041	4,319	4,883	9.4%	3.2%
Net profit	4,808	5,098	4,462	4,956	7.8%	2.9%
EPS (HKD)	1.20	1.27	1.11	1.23	7.8%	2.9%
<b>Assumptions</b>						
Gross margin	39.1%	37.0%	36.7%	36.6%	2.4%	0.4%

Source: J.P. Morgan estimates

## 2017 results review

- **Sales mostly in line.** FY17 sales were 3% below our expectations due mainly to 5% lower-than-expected float glass sales. GPM of 37% implied 2HFY17 GPM of 38%.
- **Gains on property revaluation.** XYG achieved HK\$316m revelation gains on property, which resulted in EBIT higher than our expectations. Income from associate XYS was lower than expected resulting in overall FY17 net profit being 6% below our expectations
- **Operations fairly in line.** While the results for FY17 were lower than our expectations, we note that our FY17 EPS was about 13% higher than consensus. Excluding the gain on revaluation, the results was likely similar (within 3% of consensus). We believe the strong price for float glass (see chart below) even during the seasonally low Jan – Feb period should offer support to sentiment for XYG.

Table 2: FY17 results review

FY results (HK\$ mn)	FY16A	FY17A	Y/Y	FY17E	Var.
Turnover*	12,848	14,728	14.6%	15,177	-3%
Gross profit	4,659	5,444	16.9%	5,743	-5%
GPM*	36.3%	37.0%		37.8%	
EBIT	3,337	4,093	22.7%	3,994	2%
EBITM	26.0%	27.8%		26.3%	
Net profit	3,213	4,014	24.9%	4,261	-6%
NP Margin	25.0%	27.3%		28.1%	
EPS	0.82	1.00	21.8%	1.06	-6%

Source: J.P. Morgan estimates; company data.

## Valuation and share price analysis

### DCF valuation

Our Dec-18 PT is based on a DCF valuation that assumes a market risk premium of 6.0% and a risk free rate of 4.2% (yield on 10-year government notes in China). We have assumed a beta of 1.3 (Bloomberg Beta is 1.3). Accordingly, WACC is assumed at 11.4%. We have estimated free cash flow for XYG until 2025 and assume a terminal growth rate of 2%. The terminal growth is based on the annual growth rate expected in 2025 (the final year of the estimate period) subject to a minimum of 2% and a maximum of 6% depending on the nature of the industry and the level of maturity in China.

We also analyzed the DCF price sensitivity to WACC, and the terminal multiple.

Table 3: XYG – base-case DCF analysis

HK\$ in millions, year-end Dec	2018E	2019E	2020E	2021E	2022E	2023E	2024E	Terminal
<b>Cash flow estimates</b>								
Sales	16,814	19,368	22,964	26,566	30,490	33,654	36,614	39,607
EBIT	4,724	5,041	5,807	6,695	7,710	8,564	9,371	10,196
NOPAT	4,942	4,397	5,166	6,178	6,862	7,724	8,573	9,493
Capex, net	(2,729)	(1,851)	(2,004)	(1,969)	(2,022)	(2,074)	(2,128)	(2,347)
Depreciation	1,124	1,199	1,245	1,292	1,337	1,383	1,428	1,474
Change in working capital	(402)	(484)	(681)	(647)	(675)	(481)	(405)	(375)
<b>Free operating CF (FoCF)</b>	<b>2,935</b>	<b>3,262</b>	<b>3,728</b>	<b>4,858</b>	<b>5,507</b>	<b>6,556</b>	<b>7,475</b>	<b>8,252</b>
<b>DCF Parameters</b>								
Liabilities as a % of EV	10%	<b>Assumptions</b>			Terminal growth			
WACC	11.4%	Risk-free rate			2.0%			
		Market risk			4.2%			
		Beta			6.0%			
		Cost of debt			1.30			
		Implied exit P/E multiple (x)			9x			
<b>Enterprise NPV (10-16E)</b>	<b>65,402</b>							
+ Net cash (debt), 14E	(5,581)							
- Minorities (Market value)	(8)							
+/- Other items	0							
<b>= Equity value</b>	<b>59,812</b>							
/ Number of shares	3,915							
<b>= Equity value per share (HK\$)</b>	<b>15.0</b>							

Source: Company data, J.P. Morgan estimates

Table 4: XYG – Sensitivity analysis

		Terminal growth rate						
		0.5%	1%	1.5%	2.0%	2.5%	3.0%	3.5%
WACC	9.8%	16.8	17.5	18.2	19.1	20.1	21.3	22.6
	10.3%	15.7	16.3	17	17.8	18.6	19.6	20.7
	10.8%	14.8	15.3	15.9	16.5	17.3	18.1	19.1
	11.3%	13.9	14.4	14.9	15.5	16.1	16.8	17.6
	11.8%	13.1	13.5	14	14.5	15.1	15.7	16.4
	12.3%	12.4	12.8	13.2	13.6	14.1	14.7	15.3
	12.8%	11.8	12.1	12.5	12.8	13.3	13.8	14.3

Source: J.P. Morgan estimates.

Table 5: XYG – Revenue mix

HK\$ MM, year-end 31Dec	2015	2016	2017	2018E	2019E	2020E
Automobile glass	3,786	3,748	3,910	3,917	4,161	4,465
YoY	5.4%	-1.0%	4.3%	0.2%	6.2%	7.3%
% of total	33.0%	29.2%	26.5%	23.3%	21.5%	19.4%
Construction glass	2,652	2,590	2,801	3,338	3,603	3,882
YoY	3.8%	-2.3%	8.1%	19.2%	7.9%	7.8%
% of total	23.1%	20.2%	19.0%	19.9%	18.6%	16.9%
Float glass	4,730	6,146	7,558	8,849	10,581	13,215
YoY	10.8%	29.9%	23.0%	17.1%	19.6%	24.9%
% of total	41.3%	47.9%	51.3%	52.6%	54.6%	57.5%
PV glass	0	0	0	0	0	0
YoY	41.3%	47.9%	51.3%	52.6%	54.6%	57.5%
% of total	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Electronic glass	293	339	459	709	1023	1401
YoY	-34.0%	16.0%	35.4%	54.3%	44.3%	37.0%
% of total	2.6%	2.6%	3.1%	4.2%	5.3%	6.1%
<b>Total revenue</b>	<b>11,460</b>	<b>12,824</b>	<b>14,728</b>	<b>16,814</b>	<b>19,368</b>	<b>22,964</b>

Source: Company data, J.P. Morgan estimates

Table 6: XYG – P&L statement

Year-end 31Dec (HK\$MM)	2015	2016	2017	2018E	2019E	2020E
<b>Total Revenues</b>	<b>11,460</b>	<b>12,848</b>	<b>14,728</b>	<b>16,814</b>	<b>19,368</b>	<b>22,964</b>
YoY change (%)	5.5%	12.1%	14.6%	14.2%	15.2%	18.6%
Cost of Goods Sold	(8,328)	(8,189)	(9,283)	(10,241)	(12,210)	(14,574)
YoY change (%)	2.5%	-1.7%	13.4%	10.3%	19.2%	19.4%
Gross Profit	3,132	4,659	5,444	6,573	7,158	8,390
YoY change (%)	14.6%	48.7%	16.9%	20.7%	8.9%	17.2%
Gross Margin	27.3%	36.3%	37.0%	39.1%	37.0%	36.5%
SGA	(1,615)	(1,822)	(2,045)	(2,296)	(2,603)	(3,039)
YoY change (%)	-1.4%	12.9%	12.2%	12.3%	13.4%	16.7%
Other Income/(Expenses)	215	342	377	448	485	456
Operating profit	1,733	3,178	3,776	4,724	5,041	5,807
<b>EBITDA</b>	<b>2,313</b>	<b>3,991</b>	<b>4,699</b>	<b>5,848</b>	<b>6,239</b>	<b>7,052</b>
EBITDA margin	20.2%	31.1%	31.9%	34.8%	32.2%	30.7%
Depreciation & Amortization	(580)	(812)	(922)	(1,124)	(1,199)	(1,245)
YoY change (%)	-5.2%	40.0%	13.6%	21.9%	6.6%	3.9%
<b>EBIT</b>	<b>1,733</b>	<b>3,178</b>	<b>3,776</b>	<b>4,724</b>	<b>5,041</b>	<b>5,807</b>
EBIT margin	15.1%	24.7%	25.6%	28.1%	26.0%	25.3%
Net Interest Expense	(50)	(77)	(97)	(72)	(75)	(60)
Exceptional item	379	159	317	250	200	140
Associates	317	563	700	726	802	813
Gains/losses	0	0	0	0	0	0
Net Income Before Taxes	2,379	3,823	4,696	5,629	5,968	6,699
YoY change (%)	49.3%	60.7%	22.8%	19.9%	6.0%	12.2%
Tax	(266)	(607)	(682)	(821)	(870)	(977)
Effective Tax rate	13.3%	16.6%	15.6%	14.6%	14.6%	14.6%
Minority Interests	0	0	0	0	0	0
<b>Net Income</b>	<b>2,113</b>	<b>3,216</b>	<b>4,014</b>	<b>4,808</b>	<b>5,098</b>	<b>5,722</b>
YoY change (%)	54.8%	52.2%	24.8%	19.8%	6.0%	12.2%
Net margin	18.4%	25.0%	27.3%	28.6%	26.3%	24.9%

Source: Company data, J.P. Morgan estimates

Table 7: Interim estimates

Year to Dec (HK\$ MM)	1H17	2H17	1H18E	2H18E	1H19E	2H19E
Total Revenues	6,677	8,051	7,623	9,191	8780	10,587
Gross Profit	2,429	3,015	2,933	3,640	3194	3,964
EBIT	1,605	2,171	2,008	2,716	2142	2,898
Net Income Before Taxes	1,923	2,773	2,392	3,237	2536	3,432
Net Income	1,636	2,378	2,043	2,765	2167	2,931
Diluted EPS (HK\$)	0.41	0.58	0.51	0.69	0.54	0.73
<b>Ratios</b>						
Revenue split	45.3%	54.7%	45.3%	54.7%	45.3%	54.7%
GPM	36.4%	37.5%	38.5%	39.6%	36.4%	37.4%
EBIT margin	24.0%	27.0%	26.3%	29.6%	24.4%	27.4%
NPM	24.5%	29.5%	26.8%	30.1%	24.7%	27.7%
<b>YoY</b>						
Revenue	13.5%	15.6%	14.2%	14.2%	15.2%	15.2%
GP	19.0%	15.2%	20.7%	20.7%	8.9%	8.9%
EBIT	23.1%	15.8%	25.1%	25.1%	6.7%	6.7%
NP	19.5%	28.8%	24.9%	16.3%	6.0%	6.0%

Source: Company data, J.P. Morgan estimates.

Table 8: XYG – Balance sheet

Year-end 31Dec (HK\$MM)	2015	2016	2017	2018E	2019E	2020E
Cash and Cash Equivalents	1,298	2,763	3,049	2,885	3,419	4,251
Inventories	1,223	1,321	1,698	1,938	2,232	2,647
Accounts receivable	2,381	2,377	3,072	3,507	4,040	4,790
Other Current Assets	93	76	113	3,022	4,044	4,950
Total Current Assets	4,995	6,537	7,932	11,352	13,735	16,639
Intangible Assets	0	0	0	0	0	0
Property and Equipment, Net	13,177	12,952	16,356	17,962	18,614	19,373
Other Assets	3,249	4,534	6,017	6,318	6,634	6,966
Non-Current assets	16,426	17,486	22,373	24,280	25,248	26,339
<b>Total Assets</b>	<b>21,422</b>	<b>24,022</b>	<b>30,305</b>	<b>35,632</b>	<b>38,984</b>	<b>42,977</b>
Accounts Payable	740	789	923	1,053	1,213	1,439
Other Accrued Expenses	1,705	1,608	1,628	1,938	2,455	3,147
Taxes Payable	333	438	538	676	726	832
ST and current LT debts	2,514	3,165	2,068	2,068	2,068	2,068
Total Current Liabilities	4,959	6,000	5,157	5,736	6,462	7,486
Long-term Debt	3,514	4,509	6,399	6,399	6,399	6,399
Other Noncurrent Liability	223	266	443	506	583	691
Noncurrent liabilities	3,737	4,775	6,842	6,905	6,982	7,090
Total Liabilities	8,696	10,775	11,999	12,640	13,443	14,576
Share capital	3,217	3,217	3,217	3,217	3,217	3,217
Reserves and Surplus	9,501	11,431	17,301	19,705	22,254	25,115
Total Shareholders' Equity	12,718	13,181	18,237	22,922	25,471	28,332
Minority Interest	8	66	69	69	69	69
Total Shareholders' Equity	12,726	13,247	18,306	22,991	25,540	28,401
<b>Total Liabilities and Equity</b>	<b>21,422</b>	<b>24,022</b>	<b>30,305</b>	<b>35,632</b>	<b>38,984</b>	<b>42,977</b>

Source: Company data, J.P. Morgan estimates



Table 9: XYG – Cash flow statement

Year-end 31Dec (HK\$ MM)	2015	2016	2017	2018E	2019E	2020E
EBIT	1,733	3,178	3,776	4,724	5,041	5,807
Depreciation and Amortization	795	812	922	1,124	1,199	1,245
Working Capital Changes	539	17	2,304	(402)	(484)	(681)
Tax Paid	(228)	(266)	(607)	(682)	(821)	(870)
Cash Flow From Operations	2,838	3,742	6,396	4,764	4,935	5,500
Capital expenditures	(1,914)	(1,853)	(3,210)	(2,729)	(1,851)	(2,004)
Investments and others	243	(1,116)	(1,273)	(83)	(75)	(7)
Net interest	(50)	(77)	(97)	(72)	(75)	(60)
Cash Flow from Investing	(1,721)	(3,046)	(4,580)	(2,884)	(2,001)	(2,071)
<b>Free Cash Flow</b>	<b>1,117</b>	<b>696</b>	<b>1,816</b>	<b>1,880</b>	<b>2,933</b>	<b>3,429</b>
Dividends	(608)	(1,322)	(1,708)	(2,106)	(2,476)	(2,705)
Common issue	1	0	0	0	0	0
Other Financing	(18)	2,092	177	63	77	108
Contribution from owner	(25)	0	0	0	0	0
Cash Flow from financing	(650)	769	(1,530)	(2,043)	(2,400)	(2,597)
Change in cash	467	1,465	286	(163)	534	833
Cash beginning	831	1,298	2,763	3,049	2,885	3,419
Foreign exchange changes	0	0	0	0	0	0
<b>Cash at end</b>	<b>1,298</b>	<b>2,763</b>	<b>3,049</b>	<b>2,885</b>	<b>3,419</b>	<b>4,251</b>

Source: Company data, J.P. Morgan estimates

## Investment Thesis, Valuation and Risks

### Xinyi Glass (*Overweight; Price Target: HK\$15.00*)

#### Investment Thesis

We believe Xinyi is China's most diversified glass conglomerate. The defensive auto glass aftermarket business and the advanced low-emission construction glass business continued to do well, with stable growth and steady margins. The key driver for growth in the rest of this year is the recovery in margins for the float glass business. In the past, we have seen peak margins for float glass hit 40% when the market is in short supply. We could see margins recover when demand improves, as new supply has slowed to a trickle since the beginning of 2014.

#### Valuation

Our Dec-18 PT is based on a DCF valuation that assumes a market risk premium of 6.0% and a risk-free rate of 4.2% (the yield on 10-year government notes in China). We assume a beta of 1.3 (Bloomberg beta is 1.3). Accordingly, WACC is assumed at 11.4%. We estimate free cash flow for XYG until 2025 and assume a terminal growth rate of 2.0%. The terminal growth is based on the annual growth rate expected in 2025 (the final year of the estimate period), subject to a minimum of 2% and a maximum of 6%, depending on the nature of the industry and the level of maturity in China.

#### Risks to Rating and Price Target

Key downside risks include falling demand for construction glass, which may result from a cooling property market in China, and further weakness in PV glass demand from Europe.



## Xinyi Glass: Summary of Financials

Income Statement						Cash Flow Statement					
	FY16A	FY17A	FY18E	FY19E	FY20E	FY16A	FY17A	FY18E	FY19E	FY20E	
Revenue	12,848	14,728	16,814	19,368	22,964	Cash flow from operating activities	3,742	6,396	4,764	4,935	5,500
COGS	(8,189)	(9,283)	(10,241)	(12,210)	(14,574)	o/w Depreciation & amortization	812	922	1,124	1,199	1,245
Gross profit	4,659	5,444	6,573	7,158	8,390	o/w Changes in working capital	17	2,304	(402)	(484)	(681)
SG&A	(1,822)	(2,045)	(2,296)	(2,603)	(3,039)	Cash flow from investing activities	(2,969)	(4,483)	(2,812)	(1,927)	(2,010)
Adj. EBITDA	3,991	4,699	5,848	6,239	7,052	o/w Capital expenditure	(3,138)	(4,693)	(3,030)	(2,167)	(2,335)
D&A	(812)	(922)	(1,124)	(1,199)	(1,245)	as % of sales	24.4%	31.9%	18.0%	11.2%	10.2%
Adj. EBIT	3,178	3,776	4,724	5,041	5,807	Cash flow from financing activities	769	(1,530)	(2,043)	(2,400)	(2,597)
Net Interest	(77)	(97)	(72)	(75)	(60)	o/w Dividends paid	(1,322)	(1,708)	(2,106)	(2,476)	(2,705)
Adj. PBT	3,823	4,696	5,629	5,968	6,699	o/w Shares issued/(repurchased)	0	0	0	0	0
Tax	(607)	(682)	(821)	(870)	(977)	o/w Net debt issued/(repaid)	2,092	177	63	77	108
Minority Interest	0	0	0	0	0	Net change in cash	1,542	382	(92)	608	893
Adj. Net Income	3,216	4,014	4,808	5,098	5,722	Adj. Free cash flow to firm	668	1,785	1,795	2,831	3,217
Reported EPS	0.80	1.00	1.20	1.27	1.42	y/y Growth	(31.0%)	167.1%	0.5%	57.7%	13.6%
Adj. EPS	0.80	1.00	1.20	1.27	1.42						
DPS	0.40	0.45	0.60	0.63	0.71						
Payout ratio	50.0%	45.0%	50.0%	50.0%	50.0%						
Shares outstanding	4,018	4,018	4,018	4,018	4,018						
Balance Sheet						Ratio Analysis					
	FY16A	FY17A	FY18E	FY19E	FY20E	FY16A	FY17A	FY18E	FY19E	FY20E	
Cash and cash equivalents	2,763	3,049	2,885	3,419	4,251	Gross margin	36.3%	37.0%	39.1%	37.0%	36.5%
Accounts receivable	2,377	3,072	3,507	4,040	4,790	EBITDA margin	31.1%	31.9%	34.8%	32.2%	30.7%
Inventories	1,321	1,698	1,938	2,232	2,647	EBIT margin	24.7%	25.6%	28.1%	26.0%	25.3%
Other current assets	76	113	3,022	4,044	4,950	Net profit margin	25.0%	27.3%	28.6%	26.3%	24.9%
Current assets	6,537	7,932	11,352	13,735	16,639	ROE	24.8%	25.6%	23.4%	21.1%	21.3%
PP&E	12,952	16,356	17,962	18,614	19,373	ROA	14.2%	14.8%	14.6%	13.7%	14.0%
LT investments	4,534	6,017	6,318	6,634	6,966	ROCE	13.5%	13.6%	13.9%	13.2%	14.0%
Other non current assets	4,534	6,017	6,318	6,634	6,966	SG&A/Sales	14.2%	13.9%	13.7%	13.4%	13.2%
Total assets	24,022	30,305	35,632	38,984	42,977	Net debt/Equity	37.1%	29.6%	24.3%	19.8%	14.8%
Short term borrowings	3,165	2,068	2,068	2,068	2,068	Net debt/EBITDA	123.1%	115.3%	95.4%	80.9%	59.8%
Payables	789	923	1,053	1,213	1,439	Sales/Assets (x)	0.6	0.5	0.5	0.5	0.6
Other short term liabilities	2,046	2,166	2,614	3,180	3,979	Assets/Equity (x)	1.8	1.7	1.6	1.5	1.5
Current liabilities	6,000	5,157	5,736	6,462	7,486	Interest cover (x)	51.9	48.6	81.6	83.4	116.7
Long-term debt	4,509	6,399	6,399	6,399	6,399	Operating leverage	688.7%	128.6%	177.1%	44.1%	81.9%
Other long term liabilities	4,775	6,842	6,905	6,982	7,090	Tax rate	15.9%	14.5%	14.6%	14.6%	14.6%
Total liabilities	10,775	11,999	12,640	13,443	14,576	Revenue y/y Growth	12.1%	14.6%	14.2%	15.2%	18.6%
Shareholders' equity	13,181	18,237	22,922	25,471	28,332	EBITDA y/y Growth	57.9%	17.7%	24.5%	6.7%	13.0%
Minority interests	66	69	69	69	69	EPS y/y Growth	48.3%	24.8%	19.8%	6.0%	12.2%
Total liabilities & equity	24,022	30,305	35,632	38,984	42,977						
BVPS						Valuation					
	FY16A	FY17A	FY18E	FY19E	FY20E	FY16A	FY17A	FY18E	FY19E	FY20E	
y/y Growth	1.0%	38.4%	25.7%	11.1%	11.2%	P/E (x)	16.7	13.4	11.2	10.6	9.4
Net debt/(cash)	4,911	5,418	5,581	5,048	4,215	P/BV (x)	4.1	3.0	2.3	2.1	1.9
						EV/EBITDA (x)	12.2	10.5	8.4	7.8	6.8
						Dividend Yield	3.0%	3.4%	4.5%	4.7%	5.3%

Source: Company reports and J.P. Morgan estimates.

Note: HK\$ in millions (except per-share data). Fiscal year ends Dec. o/w - out of which

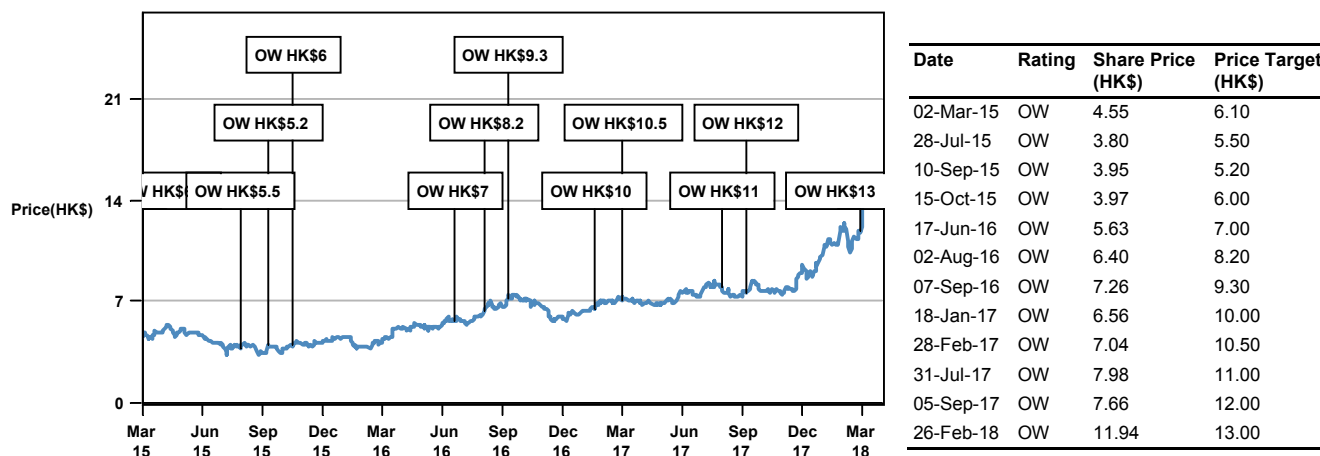
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Xinyi Glass (0868.HK, 868 HK) Price Chart



Source: Bloomberg and J.P. Morgan; price data adjusted for stock splits and dividends. Initiated coverage Nov 20, 2006.

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