

Xinyi Glass



Timothy Lee, CFA

timothy.lee@clsa.com +852 2600 8461

Alec So, CFA +852 2600 8742

27 February 2018

China

Materials

Reuters0868.HKBloomberg868 HK

Priced on 26 February 2018

HS CEI @ 12,834.1

12M hi/lo HK\$	12.44/6.83
12M price target ±% potential	HK\$14.70 +23%
Shares in issue Free float (est.)	4,018.0m 43.9%
Market cap	US\$6,132m
3M ADV	US\$21.1m
Foreign s'holding	52.5%

Major shareholders Lee Yin Yee 21.6% Tung Ching Sai 9.9%

Stock performance (%)



Source: Bloomberg

Well rounded growth

Short-term margin expansion and long-term capacity growth

XYG's 2017 core profit, up 21.0% YoY, was in-line with CLSA and consensus. In particular, float glass saw HoH GPM expansion amid price hikes offsetting higher costs. We expect further improvement here in 2018 thanks to the favourable supply outlook, amid a likely reduction in supply, coupled with steady demand plus falling costs to benefit all segments. Its new float and auto capacity expansion will fuel long-term growth & consolidate its industry-leading position. We maintain our BUY rating and lift our target from HK\$13.10 to HK\$14.70.

In-line 2017

XYG's 2017 core profit (HK\$3,697m) was up 21.0% YoY, in-line with our forecast as well as consensus. Revenue, up 14.6% YoY (in-line), with higher than expected auto and construction glass sales offsetting some of the miss in float glass sales. Its GPM (37.0% overall) was slightly above of CLSA with a slight beat on GPM for its float and construction glass business, especially in 2H17, despite higher costs, offsetting higher than expected Opex, depreciation, interest and tax.

Positive outlook for float glass remains

We remain positive on float glass in 2018 with the stable demand and supply as our base case and potential positive surprise on supply. After the c.3% supply cut since November, we see a potential for further reductions in 2018 and 2019 from those which started operations in 2009 to 2011 (34.2% of national operating capacity). Demand will be supported by likely rising property completions and the new rental policy despite slower sales and new starts for GFA growth since 2H17. We estimate XYG's current float glass price is c.14%/9% above average 1H17/2017 levels. The soda ash price dropped sharply by c.31% from its peak or is c.15% below the average 2017 level, which bodes well for XYG's GPM gain. We forecast a float glass GPM of 37.4% for 18CL, up from 31.7% in 2017.

Expansion underway

XYG maintains its float glass capacity expansion target of 50% by end-2020 (vs 2017) from its Malaysia & Canada plans. This could take place even faster with its newly announced specialty glass capacity in Guangxi. The latter will also support its new auto glass plant & fuel faster float/auto glass capacity growth post 2018.

Maintain BUY

We lift our 18/19CL core profit 1.8%/8.9% on a better float/construction glass ASP resulting in a higher GPM and higher volume for float/auto glass given the new capacity plans. Our new HK\$14.70 target is based on a blend of PE & PB.

Year to 31 December	16A	17A	18CL	19CL	20CL
Revenue (HK\$m)	12,848	14,728	16,492	19,159	22,354
Rev forecast change (%)	-	-	1.3	9.2	-
Adjusted net profit (HK\$m)	3,055	3,697	4,679	5,704	7,015
NP forecast change (%)	-	-	1.8	8.8	-
Adjusted EPS (HK¢)	76.5	91.9	115.9	141.3	173.7
CL/consensus (8) (EPS%)	-	-	100	108	-
Adj EPS growth (% YoY)	77.8	20.1	26.2	21.9	23.0
Adjusted PE (x)	15.6	13.0	10.3	8.5	6.9
Dividend yield (%)	3.4	4.0	4.6	5.6	6.9
ROE (%)	24.8	25.6	24.0	25.7	27.5
Net debt/equity (%)	37.0	29.6	24.4	13.5	2.3

Change in target price

Find CLSA research on Bloomberg, Thomson Reuters, Factset and CapitalIQ - and profit from our evalu@tor proprietary database at clsa.com For important disclosures please refer to page 14.

XYG's 2017 core profit was up 21.0% YoY, in-line with CLSA consensus

In-line 2017

XYG's 2017 core profit (HK\$3,697m) was up 21.0% YoY, in line with our forecast as well as consensus. Revenue (+14.6% YoY) was in line, with higher than expected auto / construction glass sales offsetting some miss in float glass sales. GPM (37.0% overall) was slightly above us amid slight beat in GPM for float / construction glass especially in 2H17 despite higher costs, offsetting higher than expected expenses like OPEX, depreciation, interest and tax.

Highlights:

- Revenue was up 14.6% YoY to HK\$14,728m, in line with our forecast. In particular:
 - Revenue from float glass segment surged 23.2% YoY, 2.5% below our forecast which we believe was due to slightly lower than expected sales volume. Meanwhile, strong YoY growth was mainly driven by the significant increase in float glass market prices since 2H16 which stayed high throughout 2017, resulting in significant YoY increase in ASP.
 - Revenue from auto glass was up 4.3% YoY, 1.8% above our forecast. The impact from change in accounting treatment (as the company started to take out the rebate from revenue in 2H16 but not in 1H17, which resulted in lower revenue growth in 1H17 but at the same time lower expenses as well) faded out for full-year 2017. Besides, FX movements and also spin-off of Xinyi Automobile Glass Hong Kong (8328.HK) also resulted in some revenue decline. The growth is also due to contributions from new products.
 - Revenue from construction glass was up 8.1% YoY, 5.1% above us amid stronger product demand in 2H17 with some ASP hike.
- Overall GPM was 37.0%, up 0.7ppt YoY, and higher than us by 0.7ppt. In particular:
 - GPM for float glass was 31.7% (up 4.2ppt YoY), 0.4ppt about us, thanks to further ASP increase in 2H17 to drive GPM to increase from 30.1% in 1H17 to 33.0% in 2H17, and offset higher soda ash/natural gas costs.
 - GPM for auto glass was 46.9% (down 2ppt YoY), in line with our estimate, with lower GPM in 2H17 amid higher float glass production costs.
 - GPM for construction glass was 38.0% (down 1.8ppt YoY), 2.2ppt above us, due to GPM improved in 2H17 from some ASP hike and better efficiency to offset higher float glass costs.
- Opex was up 9.9% YoY to HK\$1,970m, 1.9% above our forecast. Depreciation expense was up 6.1% YoY, 2.9% above our estimate.
- Other revenue was up 10.4% YoY to HK\$377m, 3.1% above our forecast as the company started to have wind farm electricity sales which was included in other income (instead of revenue).
- Net interest expense was up 25.7% YoY to HK\$97m, due to lower than expected interest income and higher than expected interest expenses.

Strong YoY float glass revenue was mainly driven by the significant increase in float glass market prices since 2H16

A higher GPM was supported by higher ASPs, offsetting higher raw materials & production costs



Core profit was in-line with

CLSA / market consensus

	owned by XYG)		The share of profit of associates was up 24.4% YoY to HK\$700m, 7.4% above		>	The share of profit of associates was up 24.4% YoY to HK\$700m, 7.4% above our estimate partly due to better-than-expected results of Xinyi Solar (29.5% owned by XYG)
--	---------------	--	--	--	---	--

- ▶ Income tax expense was up 12.4% YoY to HK\$682m, 7.8% above us.
- Reported profit was HK\$4,014m, up 24.9% YoY. Excluding non-core other gains of HK\$317m, core profit is calculated to be HK\$3,697m, up 21.0% YoY and in line with our forecast as well as Bloomberg consensus.
 - A final dividend of HK 28 cents was declared, implying a payout ratio of 47.5% (2016: 48%).

Figure 1							
XYG 2017 results highlights							
HK\$ m	2016	2017	YoY growth	2017CL	Forecast vs actual	1H17	2H17
Sales	12,848	14,728	14.6%	14,747	(0.1%)	6,677	8,051
COGS (excl depr)	(7,392)	(8,438)	14.1%	(8,572)	(1.6%)	(3,853)	(4,585
Operating expenses (ex D&A)	(1,793)	(1,970)	9.9%	(1,934)	1.9%	(893)	(1,077
Opex %	14.0%	13.4%	(4.1%)	13.1%	2.0%	13.4%	13.4%
Core EBITDA	3,664	4,320	17.9%	4,240	1.9%	1,931	2,389
Depreciation	(797)	(846)	6.1%	(822)	2.9%	(395)	(451
Amortisation	(30)	(75)	151.5%	(57)	31.9%	(27)	(48
Core EBIT	2,837	3,399	19.8%	3,361	1.1%	1,509	1,890
Ebit Margin	22.1%	23.1%		22.8%		22.6%	23.5%
Other revenue (ex interest exp)	342	377	10.4%	366	3.1%	141	236
Interest Income	51	55	7.3%	71	(23.7%)	23	31
Interest Expense	(128)	(151)	18.4%	(133)	13.8%	(73)	(78
Net Interest Expense	(77)	(97)	25.7%	(61)	57.4%	(50)	(47
Share of Associate Profit	563	700	24.4%	651	7.4%	368	332
Profit Before Tax	3,665	4,380	19.5%	4,318	1.4%	1,968	2,411
Tax Expense	(607)	(682)	12.4%	(633)	7.8%	(285)	(397
Minority Interest	(3)	0	(90.7%)	(3)	(90.7%)	(2)	2
Net Profit After Tax, pre Exceptionals	3,055	3,697	21.0%	3,682	0.4%	1,681	2,016
Exceptional gain/(loss)	159	317	99.4%	0	NA	(45)	362
Net Profit After Tax	3,213	4,014	24.9%	3,682	9.0%	1,636	2,378
NPM, pre exceptional	23.8%	25.1%		25.0%		25.2%	25.0%
Key operating statistics							
Sales (HK\$ m)							
Automobile glass products	3,748	3,910	4.3%	3,841	1.8%	1,871	2,039
Construction glass	2,590	2,801	8.1%	2,665	5.1%	1,186	1,614
Float glass	6,510	8,017	23.2%	8,221	(2.5%)	3,619	4,398
Wind farm			NA	19	(100.0%)		
Total	12,848	14,728	14.6%	14,747	(0.1%)	6,677	8,051
Gross profit (HK\$ m)							
Automobile glass products	1,836	1,836	0.0%	1,805	1.7%	894	941
Construction glass	1,032	1,065	3.2%	956	11.4%	445	621
Float glass	1,791	2,543	42.0%	2,578	(1.3%)	1,090	1,453
Wind farm			NA	13	(100.0%)	-	
Total	4,659	5,444	16.8%	5,352	1.7%	2,429	3,015
Gross margin							
Automobile glass products	49.0%	46.9%	-2 ppt	47.0%	0 ppt	47.8%	46.2%
Construction glass	39.9%	38.0%	-1.8 ppt	35.9%	2.2 ppt	37.5%	38.4%
Float glass	27.5%	31.7%	4.2 ppt	31.4%	0.4 ppt	30.1%	33.0%
Wind farm			NA	70.3%	NA		
Overall	36.3%	37.0%	0.7 ppt	36.3%	0.7 ppt	36.4%	37.4%

Source: Company, CLSA

Upside potential on the supply side for float glass

The positive outlook for float glass remains

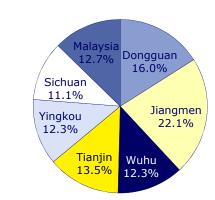
We reiterate our positive view on the float glass industry in China in 2018, with a stable demand/supply as our base case and potential positive surprise on the supply side. For supply, after the c.3% cut in national operating capacity since Nov 17, we continue to see potential limited number of brand new capacity coming to the market, plus the possibility of an increasing number of production lines which entered into operation in 2009-11 (amid approvals given under the Rmb4tn stimulus) going into overhaul, given normal float glass production lines are subject to the need to overhaul after approximately eight years of operation. We estimate that those commenced operation between 2009-11 (or even earlier) amounted to 52,610t/d, or about 34.2% of total operating capacity in China at present, although the currently healthy market with high profitability could make producers defer their overhaul schedule. In particular, eastern (about 56.3%) and southern (about 41.4%) regions saw a higher proportion of capacity commenced during that period of time. XYG is set to benefit given some 50% of capacity located in these two regions in 18CL (considering they could have one to two lines suspending production for overhaul as well).

Figure 2										
Float glass capacity commenced from 2009 to 2011 (or earlier)										
Region	Capacity commenced in 2009-11 (or earlier) (t/d)	Current operating capacity (t/d)	As % of current operating capacity							
Northeast	600	10,800	5.6%							
North	12,800	41,100	31.1%							
East	16,850	30,430	55.4%							
Central	4,910	24,060	20.4%							
South	10,300	24,900	41.4%							
Southwest	5,100	15,500	32.9%							
Northwest	2,050	6,850	29.9%							
Total	52,610	153,640	34.2%							

XYG's estimated 18CL float glass capacity breakdown by region

Source: glassinfo.com.cn, CLSA

XYG's float glass capacity in the eastern (Wuhu) and southern (Dongguan, Jiangmen) regions accounts for c.50% of its total 18CL capacity

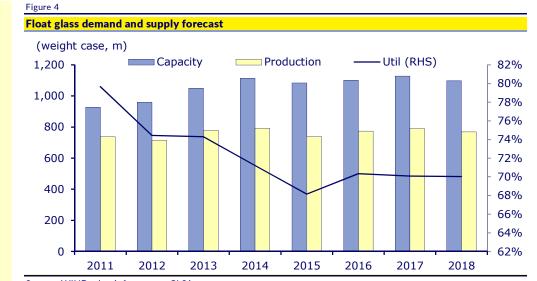


Source: CLSA, company

Figure 3

For demand, despite slowing property sales / new starts construction GFA since 2H17, we see support from previous strong sales on property completion, and the new rental policy from Beijing would also be a factor to support construction growth from rental housing.





Our base case is for balanced demand and supply

Source: WIND, glassinfo.com.cn, CLSA

We estimate that XYG's current float glass price is c.14%/9% above average 1H17/2017 levels, respectively.

Stable float glass prices with falling costs

Besides, on top of a stable float glass prices in Dec-Feb despite under traditional slow season (although some discounts made during CNY), the soda ash price (about 25% of cost of float glass) retreated about 31% from the peak in Nov, and the spot price is about 15% lower than the average 2017 level already, partly helped by the ability to import lower-priced soda ash from the US. This will support margin improvement for XYG's all 3 key segments. We forecast float/auto/construction glass GPM of 37.4%/47.1%/40.0% in 18CL, vs. 31.7%/46.9%/38.0% in 2017.



Source: WIND, CLSA



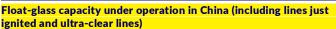


YTD property sales; new starts started have to slow



Source: NBS, CLSA

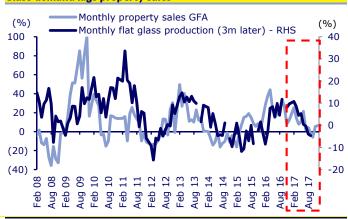
Figure 9



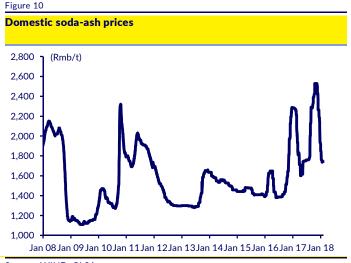


Source: WIND, CLSA

Figure 8 Glass demand lags property sales



Source: NBS, CLSA



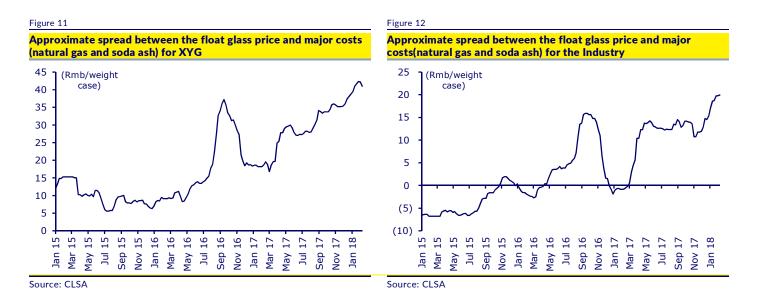
Source: WIND, CLSA

Adding float glass capacity

... as well as specialty glass

capacity in China

overseas...



Expansion underway

XYG believe their target of expanding float glass production capacity by 50% by end-2020 (vs 17,100t/d by 2017) is achievable, and could be even faster amid the newly announced plan to add specialty float glass capacity in Guangxi. Despite slower float glass capacity growth in 2018 at c.2.1% to 5.4mt/y (vs 8% YoY in 2017) given the new Malaysia plants being offset by planned overhauls, management expects the float glass capacity will see strong double-digit growth in 2019. Here are the key capacities under construction / planning:

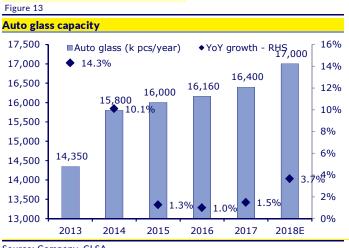
- □ Guangxi specialty float glass lines (3,200t/d): under construction, will commence production in end-2018 to 2019.
- □ Malaysia second phase float glass lines (2,000t/d): under construction, will commence production in 2H18.
- □ Malaysia third phase float glass lines (3,600-4,000t/d): under planning, target to commence production starting 2Q19
- □ Southern Ontario of Canada (1,800-2,000t/d): under planning, target to commence production in 2019-20.

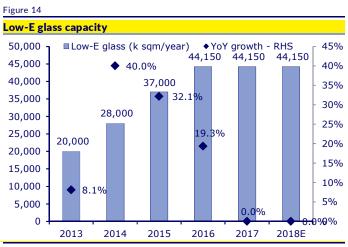
Despite the limitation of new float-glass approvals, according to the Catalogue of Priority Industries for Foreign Investment in the Central and Western Regions (2017 Revision) (中西部地区外商投资优势产业目录(2017 年修订 announced in February 2017), some provinces classify high-end float-glass production (including ultra-clear float glass, ultra-thick float glass) as priority industries supported for foreign investments, like Guangxi, Wuhu/Sichuan Provinces. Higher-end ultra-clear float glass contributes c.38% of XYG's overall production, and GP can be 15% higher than normal float glass. That's why XYG got the plan to build new capacity in Guangxi.

Management believes peers have limited ability to do this given they are one of the only 2 players out of the 60+ float glass producers as foreign invested entities. The market could question about new float-glass capacity in the market, but given the policy is targeted for foreign investments, and the products would mainly be for the high-end market, the risk of creating pressure of additional overcapacity appears relatively limited.

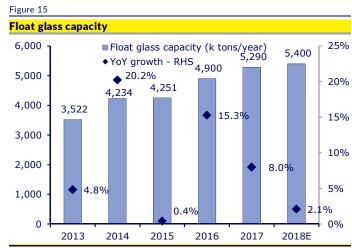
And adding more auto glass capacity

At the same time, XYG is also adding the aftermarket auto glass capacity by c.5m pieces, which is partly supported by the new Guangxi float glass capacity, coming likely by 2020 as well. Thus management is also expecting 10%+ growth for auto glass segment after 2018 as well, faster than the average growth in the past years.





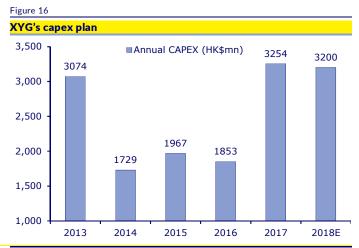
Source: Company, CLSA



Source: Company, CLSA

Lift forecast and target price

Source: Company, CLSA



Source: Company, CLSA

Maintain BUY

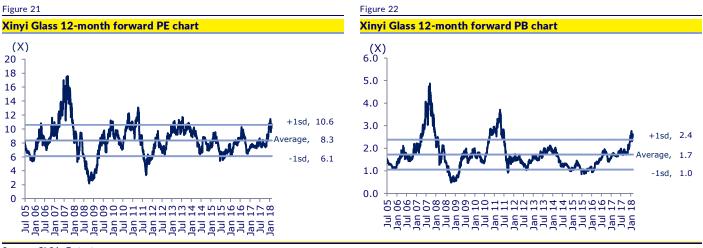
We lift our 18/19CL core profits by 1.8%/8.9% on higher sales from all segments, with better ASP for float/construction glass which also resulted in higher GPMs, and higher volumes for float/auto glass amid new capacity addition plans. We thus lift our target from HK\$13.10 to HK\$14.70 based on a blended PE/PB approach: for PE, we apply the same 12x on 19CL EPS; for PB we use same 2.4x on 18CL BVPS. Maintain BUY on XYG for its improving float glass business to continue, with capacity expansion to fuel its long-term growth.

Figure 17

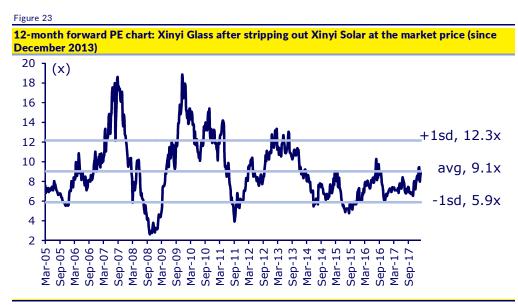
		New		Old			Change			
	18CL	19CL	20CL	18CL	19CL	20CL	18CL	19CL	20CL	
Revenue										
Automobile glass products	4,096	4,500	4,876	4,005	4,169	na	2.3%	7.9%	na	
Construction glass	2,953	3,091	3,159	2,876	2,941	na	2.7%	5.1%	na	
Float glass (including electronic glass)	9,443	11,569	14,318	9,320	10,357	na	1.3%	11.7%	na	
Total	16,492	19,159	22,354	16,276	17,541	na	1.3%	9.2%	na	
Gross margin						na			na	
Automobile glass products	47.1%	47.2%	47.8%	47.0%	46.8%	na	0.1 ppt	0.4 ppt	na	
Construction glass	40.0%	40.7%	41.4%	37.8%	38.3%	na	2.2 ppt	2.4 ppt	na	
Float glass (including electronic glass)	37.4%	39.4%	41.6%	36.8%	38.5%	na	0.7 ppt	0.9 ppt	na	
Total	40.3%	41.5%	42.9%	39.6%	40.5%	na	0.7 ppt	0.9 ppt	na	
Core profit	4,679	5,704	7,015	4,595	5,240	na	1.8%	8.9%	na	

Source: CLSA

	Figure 18						
Glass maker earnings are	Earnings sensitivity analysis						
more sensitive to prices		Change in 18CL core	e profit				
than costs	1% increase in float glass price	+1.3%	-				
	1% increase in auto glass price	+0.6%					
	1% increase in soda ash price	-0.3%					
	1% increase in fuel cost	-0.5%					
	Source: CLSA						
	Figure 19						
Our target price is based on	Valuation of Xinyi Glass						
a blended PE and PB	PE basis						
approach	19CL EPS (HK\$)			1.41			
	Target multiple (x)			12			
	Fair value (HK\$)	17.0					
	PB basis	F 4					
	18CL BVPS (HK\$)	5.					
	Target multiple (x) 2.4						
	Fair value (HK\$)12.						
	Average (HK\$) 14.70						
	Implying 18/19CL PE		12	.7x/10.4x			
Its current market-cap	Source: CLSA Figure 20 Valuation of Xinyi Glass's non-solar business						
implies 10.3x/8.4x for its	Source: CLSA Figure 20 Valuation of Xinyi Glass's non-solar business HK\$m		FY18CL	FY19CL			
implies 10.3x/8.4x for its non-solar business earnings	Source: CLSA Figure 20 Valuation of Xinyi Glass's non-solar business HK\$m Net profit of Xinyi Glass		FY18CL 4,679	FY19CL 5,704			
implies 10.3x/8.4x for its	Source: CLSA Figure 20 Valuation of Xinyi Glass's non-solar business HK\$m Net profit of Xinyi Glass Less: after-tax share of profits of Xinyi Solar		FY18CL 4,679 (741)	FY19CL 5,704 (881)			
implies 10.3x/8.4x for its non-solar business earnings	Source: CLSA Figure 20 Valuation of Xinyi Glass's non-solar business HK\$m Net profit of Xinyi Glass Less: after-tax share of profits of Xinyi Solar Non-solar profit	(a)	FY18CL 4,679 (741) 3,938	FY19CL 5,704 (881) 4,823			
implies 10.3x/8.4x for its non-solar business earnings	Source: CLSA Figure 20 Valuation of Xinyi Glass's non-solar business HK\$m Net profit of Xinyi Glass Less: after-tax share of profits of Xinyi Solar Non-solar profit Current market cap of Xinyi Glass	(b)	FY18CL 4,679 (741) 3,938 47,975	FY19CL 5,704 (881) 4,823 47,975			
implies 10.3x/8.4x for its non-solar business earnings	Source: CLSA Figure 20 Valuation of Xinyi Glass's non-solar business HK\$m Net profit of Xinyi Glass Less: after-tax share of profits of Xinyi Solar Non-solar profit Current market cap of Xinyi Glass Current market cap of Xinyi Solar	(b) (c)	FY18CL 4,679 (741) 3,938 47,975 24,576	FY19CL 5,704 (881) 4,823 47,975 24,576			
implies 10.3x/8.4x for its non-solar business earnings	Source: CLSA Figure 20 Valuation of Xinyi Glass's non-solar business HK\$m Net profit of Xinyi Glass Less: after-tax share of profits of Xinyi Solar Non-solar profit Current market cap of Xinyi Glass	(b)	FY18CL 4,679 (741) 3,938 47,975	FY19CL 5,704 (881) 4,823 47,975			



Source: CLSA, Datastream



Source: CLSA, Datastream

Figure 24

Figure 24		_																	
Valuation comp - Xinyi	Glass																		
Stock	Ticker	Price	Mkt Cap	ADTV		CLSA		PE			luations		EPS Cagr	PEG	Gearing		rforma		• •
Xinyi Glass	868 HK	(local) 11.94	(USD,m) 6,132	(USD,m) 21.1	Rec BUY	Target 14.70	23%	10.0	PB 2.3	4.8	EV/Ebitda 8.6	24.3	FY1-FY3 22.4	0.4	(%) 30	1m (2)	3m 36	6m 62	12m
Xinyi Solar	968 HK	3.31	3,141	9.4	BUY	4.10	24%	9.5	2.1	4.8	8.7	23.3	17.5	0.5	56	(8)	19	28	22
Fuyao Glass - H	3606 HK	32.20	10,751	7.0	BUY	39.00	24%	16.7	3.1	3.6	10.7	19.7	23.7	0.7	0		3	28	38
					BUT	39.00	2170			5.0	10.7					(5)			
Flat Glass	6865 HK	2.50	575	1.0				5.9	0.7			13.9	35.6	0.2	(14)	(7)	67	88	52
China Glass	3300 HK	0.81	187	0.9											55	(4)	13	19	(12)
Luoyang Glass	1108 HK	3.95	891	0.6											106	(12)	(2)	(16)	(33)
CSG Holding	000012 CH	8.06	2,586	41.6				18.9					18.5	1.0	73	(12)	(14)	(6)	(23)
Fuyao Glass - A	600660 CH	27.30	10,750	51.3				17.4	3.2	3.4	10.7	18.5	17.3	1.0	0	(2)	0	16	41
Yaohua Pilkington	600819 CH	4.85	685	2.0											48	(15)	(19)	(31)	(47)
Shandong Jinjing	600586 CH	4.06	939	5.8				9.4					114.0	0.1	57	(9)	(8)	(22)	(17)
AVIC Sanxin	002163 CH	7.64	973												287	0	0	(6)	(29)
Xiuqiang Glasswork	300160 CH	6.05	573	5.1				15.9	2.4	1.4	12.7	14.1	23.4	0.7	11	(20)	(19)	(32)	(52)
Changzhou Almaden	002623 CH	18.31	464	3.5				47.8							39	(18)	(27)	(26)	(53)
Zhuzhou Kibing	601636 CH	7.21	3,078	91.7				11.9	2.3	3.1	8.5	19.5	26.3	0.5	56	(7)	28	42	59
Taiwan Glass	1802 TT	18.20	1,810	5.7											44	(9)	9	11	4
Asahi Glass	5201 JP	4,555.00	10,043	38.9				13.3	0.9	2.3	5.8	6.4	12.4	1.1	28	(5)	(3)	8	(2)
Nippon Sheet Glass	5202 JP	875.00	742	11.4				8.4	0.7	0.8	7.0	12.5	127.1	0.1	233	(13)	(7)	6	5
Central Glass	4044 JP	2,441.00	984	4.1				15.9	0.6	2.0	7.1	3.8	30.7	0.5	24	0	4	8	(5)
Hankuk Glass Industries	002000 KS	34,950.00	329	0.1											(21)	0	1	17	27
Cie de St-Gobain	SGO FP	45.62	31,160	99.9				13.2	1.2	3.0	6.8	9.4	13.6	1.0	32	(5)	(6)	(1)	3
PPG Industries Inc	PPG US	117.46	29,351	168.9				17.4	6.1	1.6	11.7	32.5	11.5	1.5	47	(3)	1	13	14
Turkiye Sise	SISE TI	4.91	2,923	5.9				10.2	1.1	3.2	5.9	11.5	9.8	1.0	13	(5)	11	12	35
Trakya Cam Sanayii	TRKCM TI	4.67	1,396	2.3				9.2	1.5	3.9	6.7	14.0	8.9	1.0	32	(4)	11	28	90
Corning	GLW US	29.30	25,123	214.8				16.9	1.9	2.4	8.4	12.0	11.8	1.4	5	(15)	(8)	2	6
Average					•			14.9	2.0	2.9	8.5	15.7	30.9	0.7	51.8				

Source: Bloomberg (for the not-rated stocks), CLSA (for the rest)

Valuation details

We value XYG using a blended PE and PB approach. We apply a target multiple of 12x to 19CL EPS and a target multiple of 2.4x to 18CL BVPS, in line with the historical averages.

Investment risks

Key risks include: 1) Weakening of the property market or even the auto market. Demand for float glass and construction glass is highly dependent on the property market. Besides, despite being a stable business, the auto glass segment is correlated to the global number of vehicles in use, and any significant slowdown in the global auto industry may also affect the segment's performance. 2) Further tightening of credit. Tightening of credit also affects developers' cash flows and progress in construction of property projects. 3) Incremental production costs. A significant surge in natural gas, international crude oil prices and other raw material costs may affect XYG's gross margin if it cannot pass on incremental costs by raising ASP. 4) More capacity additions in the market.





Financials at a glance

Year to 31 December	2016A	2017A	2018CL	(% YoY)	2019CL	2020CL
Profit & Loss (HK\$m)						
Revenue	12,848	14,728	16,492	12	19,159	22,354
Cogs (ex-D&A)	(7,392)	(8,438)	(8,888)	12	(10,133)	(11,578)
Gross Profit (ex-D&A)	5,456	6,290	7,604	20.9	9,027	10,776
SG&A and other expenses	(1,793)	(1,970)	(2,096)		(2,377)	(2,707)
Op Ebitda	3,664	4,320	5,508	27.5	6,649	8,069
Depreciation/amortisation	(827)	(921)	(1,032)		(1,158)	(1,255)
Op Ebit	2,837	3,399	4,476	31.7	5,491	6,815
Net interest inc/(exp)	(77)	(97)	(62)		(54)	(21)
Other non-Op items	1,063	1,394	1,157	(17)	1,355	1,568
Profit before tax	3,823	4,696	5,571	18.6	6,792	8,362
Taxation	(607)	(682)	(891)		(1,088)	(1,347)
Profit after tax	3,216	4,014	4,679	16.6	5,705	7,015
Minority interest	(3)	0	0		0	0
Net profit	3,213	4,014	4,679	16.6	5,704	7,015
Adjusted profit	3,055	3,697	4,679	26.6	5,704	7,015
Cashflow (HK\$m)	2016A	2017A	2018CL	(% YoY)	2019CL	2020CL
Operating profit	2,837	3,399	4,476	31.7	5,491	6,815
Depreciation/amortisation	827	921	1,032	12.1	1,158	1,255
Working capital changes	(426)	(1,409)	54		(303)	(359)
Other items	(784)	(834)	(1,013)		(1,209)	(1,445)
Net operating cashflow	2,453	2,077	4,548	119	5,138	6,265
Capital expenditure	(1,853)	(3,254)	(3,200)		(2,000)	(2,000)
Free cashflow	600	(1,177)	1,348	(4.4)	3,138	4,265
M&A/Others	1,112	1,448	1,217	(16)	1,422	1,646
Net investing cashflow	(741)	(1,806)	(1,983)		(578)	(354)
Increase in Ioans Dividends	1,646	792	(97)		(1,319)	(1,942)
	(1,622)	(1,926)	(2,221)		(2,707)	(3,329)
Net equity raised/other Net financing cashflow	(267) (244)	1,146 12	(2,318)		(4,026)	0 (5,272)
Incr/(decr) in net cash	1,468	283	247	(12.7)	533	639
Exch rate movements	-	-		(12.7)	-	
	2016A	2017A	2018CL	(% NoV)	2019CL	2020CL
Balance sheet (HK\$m) Cash & equivalents	2,768	3,051	3,298	<mark>(% YoY)</mark> 8.1	3,832	4,471
Accounts receivable	1,036	1,243	1,276	2.7	1,482	1,730
Other current assets	2,732	3,638	3,530	(3)	3,752	4,011
Fixed assets	11,831	12,929	15,172	17.3	16,088	16,905
Investments	3,258	4,416	4,416	0	4,416	4,416
Intangible assets	1,193	3,497	3,421	(2.2)	3,348	3,276
Other non-current assets	1,205	1,532	1,532	0	1,532	1,532
Total assets	24,022	30,305	32,645	7.7	34,450	36,339
Short-term debt	3,165	2,068	2,044	(1.1)	1,722	1,247
Accounts payable	789	923	902	(2.3)	1,028	1,175
Other current liabs	2,046	2,166	2,166	0	2,166	2,166
Long-term debt/CBs	4,509	6,399	6,325	(1.1)	5,328	3,860
Provisions/other LT liabs	266	443	443	0	443	443
Shareholder funds	13,181	18,237	20,696	13.5	23,693	27,378
Minorities/other equity	66	69	69	0	69	69
Total liabs & equity	24,022	30,305	32,645	7.7	34,450	36,339
Ratio analysis	2016A	2017A	2018CL	(% YoY)	2019CL	2020CL
Revenue growth (% YoY)	12.1	14.6	12.0		16.2	16.7
Ebitda margin (%)	28.5	29.3	33.4		34.7	36.1
Ebit margin (%)	22.1	23.1	27.1		28.7	30.5
Net profit growth (%)	52.1	24.9	16.6		21.9	23.0
Op cashflow growth (% YoY)	45.6	(15.4)	119.0		13.0	21.9
Capex/sales (%)	14.4	22.1	19.4		10.4	8.9
Net debt/equity (%)	37.0	29.6	24.4		13.5	2.3
Net debt/Ebitda (x)	1.3	1.3	0.9		0.5	0.1
	04.0	0E /	04.0		05 7	07 F
ROE (%) ROIC (%)	24.8 15.7	25.6 16.6	24.0 18.1		25.7 20.6	27.5 24.3

Source: www.clsa.com





Research subscriptions

To change your report distribution requirements, please contact your CLSA sales representative or email us at cib@clsa.com. You can also fine-tune your Research Alert email preferences at https://www.clsa.com/member/tools/email_alert/.

Companies mentioned

Xinyi Glass (868 HK - HK\$11.94 - BUY) Asahi Glass (N-R) AVIC Sanxin (N-R) Central Glass (N-R) Changzhou Almaden (N-R) China Glass (N-R) Cie de St-Gobain (N-R) Corning (N-R) CSG - A (N-R) Flat Glass Group (N-R) Fuyao Glass (3606 HK - HK\$32.20 - BUY) Hankuk Glass Industries (N-R) Jinjing (N-R) Kibing (N-R) Luoyang Glass (N-R) NSG (N-R) PPG (N-R) Sise Cam (N-R) SYP Glass - A (N-R) Taiwan Glass (N-R) Trakya Cam Sanayii (N-R) Xinyi Automobile Glass Hong Kong (N-R) Xinyi Solar (968 HK - HK\$3.31 - BUY) Xiuqiang Glasswork (N-R)

Analyst certification

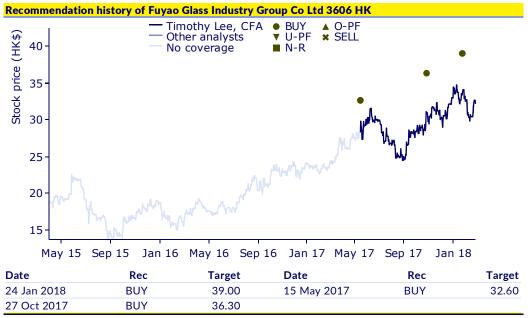
The analyst(s) of this report hereby certify that the views expressed in this research report accurately reflect my/our own personal views about the securities and/or the issuers and that no part of my/our compensation was, is, or will be directly or indirectly related to the specific recommendation or views contained in this research report.

Important disclosures



Date	Rec	Target	Date	Rec	Target
LATEST	BUY	14.70	15 Jun 2016	O-PF	6.12*
24 Jan 2018	BUY	13.10	04 May 2016	O-PF	5.56*
14 Dec 2017	BUY	10.70	16 Mar 2016	O-PF	4.80*
31 Oct 2017	BUY	9.50	05 Feb 2016	O-PF	4.24*
17 Jul 2017	BUY	9.60	19 Nov 2015	O-PF	4.33*
14 Dec 2016	BUY	8.35	29 Jul 2015	O-PF	4.24*
08 Nov 2016	BUY	8.30	24 Apr 2015	O-PF	4.90*
08 Sep 2016	BUY	8.35	03 Mar 2015	O-PF	4.81*
03 Aug 2016	BUY	7.25			

Source: CLSA; * Adjusted for corporate action



Source: CLSA



May 15 Sep 15 Jan 16 May 16 Sep 16 Jan 17 May 17 Sep 17 Jan 18

Date	Rec	Target	Date	Rec	Target
24 Jan 2018	BUY	4.10	16 Mar 2016	BUY	3.97*
04 Jan 2018	BUY	3.80	05 Feb 2016	BUY	4.07*
31 Oct 2017	BUY	3.30	12 Jan 2016	BUY	4.57*
01 Aug 2017	BUY	3.10	19 Nov 2015	BUY	4.67*
17 Jul 2017	BUY	3.00	02 Nov 2015	BUY	4.57*
22 Apr 2017	BUY	2.98*	19 Oct 2015	BUY	4.67*
28 Feb 2017	BUY	3.38*	12 Jun 2015	BUY	4.55*
14 Dec 2016	BUY	3.48*	27 May 2015	BUY	4.07*
18 Oct 2016	BUY	3.87*	24 Apr 2015	BUY	3.56*
15 Jun 2016	BUY	4.17*	12 Mar 2015	BUY	3.11*

Source: CLSA; * Adjusted for corporate action

The policy of CLSA and CL Securities Taiwan Co., Ltd. ("CLST") is to only publish research that is impartial, independent, clear, fair, and not misleading. Regulations or market practice of some jurisdictions/markets prescribe certain disclosures to be made for certain actual, potential or perceived conflicts of interests relating to a research report as below. This research disclosure should be read in conjunction with the research disclaimer as set out at www.clsa.com/disclaimer.html and the applicable regulation of the concerned market where the analyst is stationed and hence subject to. Investors are strongly encouraged to review this disclaimer before investing.

Neither analysts nor their household members/associates/may have a financial interest in, or be an officer, director or advisory board member of companies covered by the analyst unless disclosed herein. In circumstances where an analyst has a pre-existing holding in any securities under coverage, those holdings are grandfathered and the analyst is prohibited from trading such securities.

Unless specified otherwise, CLSA/CLST or its respective affiliates, did not receive investment banking/non-investment banking income from, and did not manage/co-manage a public offering for, the listed company during the past 12 months, and it does not expect to receive investment banking compensation from the listed company within the coming three months. Unless mentioned otherwise, CLSA/CLST does not own 1% or more of any class of securities of the subject company, and does not make a market, in the securities.

The analysts included herein hereby confirm that they have not been placed under any undue influence, intervention or pressure by any person/s in compiling this research report. In addition, the analysts attest that they were not in possession of any material, non-public information regarding the subject company at the time of publication of the report. Save from the disclosure below (if any), the analyst(s) is/are not aware of any material conflict of interest.

As analyst(s) of this report, I/we hereby certify that the views expressed in this research report accurately reflect my/our own personal views about the securities and/or the issuers and that no part of my/our compensation was, is, or will be directly or indirectly related to the specific recommendation or views contained in this report or to any investment banking relationship with the subject company covered in this report (for the past one year) or otherwise any other relationship with such company which leads to receipt of fees from the company except in ordinary course of business of the company. The analyst/s also state/s and confirm/s that he/she/they has/have not been placed under any undue influence, intervention or pressure by any person/s in compiling this research report. In addition, the analysts included herein attest that they were not in possession of any material, nonpublic information regarding the subject company at the time of publication of the report. Save from the disclosure below (if any), the analyst(s) is/are not aware of any material conflict of interest.

Key to CLSA/CLST investment rankings: BUY: Total stock return (including dividends) expected to exceed 20%; O-PF: Total expected return below 20% but exceeding market return; U-PF: Total expected return positive but below market return; SELL: Total return expected to be negative. For relative performance, we benchmark the 12-month total forecast return (including dividends) for the stock against the 12-month forecast return (including dividends) for the market on which the stock trades.

We define as "Double Baggers" stocks we expect to yield 100% or more (including dividends) within three years at the time the stocks are introduced to our "Double Bagger" list. "High Conviction" Ideas are not necessarily stocks with the most upside/downside, but those where the Research Head/Strategist believes there is the highest likelihood of positive/negative returns. The list for each market is monitored weekly.

Overall rating distribution for CLSA/CLST only Universe: Overall rating distribution: BUY / Outperform - CLSA: 64.69%; CLST only: 61.43%, Underperform / SELL - CLSA: 35.31%; CLST only: 38.57%, Restricted - CLSA: 0.00%; CLST only: 0.00%. Data as of 31 December 2017. Investment banking clients as a % of rating

category: BUY / Outperform - CLSA: 2.61%; CLST only: 0.00%, Underperform / SELL - CLSA: 1.76%; CLST only: 0.00%, Restricted - CLSA: 0.00%; CLST only: 0.00%. Data for 12-month period ending 31 December 2017.

There are no numbers for Hold/Neutral as CLSA/CLST do not have such investment rankings. For a history of the recommendation, price targets and disclosure information for companies mentioned in this report please write to: CLSA Group Compliance, 18/F, One Pacific Place, 88 Queensway, Hong Kong and/or; (c) CLST Compliance (27/F, 95, Section 2 Dun Hua South Road, Taipei 10682, Taiwan, telephone (886) 2 2326 8188). EVA® is a registered trademark of Stern, Stewart & Co. "CL" in charts and tables stands for CLSA, "CT" stands for CLST estimates and "CS" for Citic Securities estimates unless otherwise noted in the source.

This publication/communication is subject to and incorporates the terms and conditions of use set out on the www.clsa.com website (https://www.clsa.com/disclaimer.html). Neither the publication/communication nor any portion hereof may be reprinted, sold, resold, copied, reproduced, distributed, redistributed, published, republished, displayed, posted or transmitted in any form or media or by any means without the written consent of CLSA and/or CLST. CLSA and/or CLST has/have produced this publication/communication for private circulation to professional, institutional and/or wholesale clients only, and may not be distributed to retail investors. The information, opinions and estimates herein are not directed at, or intended for distribution to or use by, any person or entity in any jurisdiction where doing so would be contrary to law or regulation or which would subject CLSA, and/or CLST to any additional registration or licensing requirement within such jurisdiction. The information and statistical data herein have been obtained from sources we believe to be reliable. Such information has not been independently verified and we make no representation or warranty as to its accuracy, completeness or correctness. Any opinions or estimates herein reflect the judgment of CLSA and/or CLST at the date of this publication/communication and are subject to change at any time without notice. Where any part of the information, opinions or estimates contained herein reflects the views and opinions of a sales person or a non-analyst, such views and opinions may not correspond to the published view of CLSA and/or CLST. Any price target given in the report may be projected from one or more valuation models and hence any price target may be subject to the inherent risk of the selected model as well as other external risk factors. Where the publication does not contain ratings, the material should not be construed as research but is offered as factual commentary. It is not intended to, nor should it be used to form an investment opinion about the non-rated companies.

This publication/communication is for information purposes only and it does not constitute or contain, and should not be considered as an offer or invitation to sell, or any solicitation or invitation of any offer to subscribe for or purchase any securities in any jurisdiction and neither this publication/communication nor anything contained herein shall form the basis of any investment decision, contract or commitment whatsoever. This is not intended to provide professional, investment or any other type of advice or recommendation and does not take into account the particular investment objectives, financial situation or needs of individual Before acting on any information recipients. in this publication/communication, you should consider whether it is suitable for your particular circumstances and, if appropriate, seek professional advice, including tax advice. Investments involve risks, and investors should exercise prudence and their own judgment in making their investment decisions. The value of any investment or income my go down as well as up, and investors may not get back the full (or any) amount invested. Past performance is not necessarily a guide to future performance. CLSA and/or CLST do/does not accept any responsibility and cannot be held liable for any person's use of or reliance on the information and opinions contained herein. To the extent permitted by applicable securities laws and regulations, CLSA and/or CLST accept(s) no liability whatsoever for any direct or consequential loss arising from the use of this publication/communication or its contents.

To maintain the independence and integrity of our research, our Corporate Finance, Sales Trading, Asset Management and Research

business lines are distinct from one another. This means that CLSA's Research department is not part of and does not report to CLSA Corporate Finance department or CLSA's Sales and Trading business. Accordingly, neither the Corporate Finance nor the Sales and Trading department supervises or controls the activities of CLSA's research analysts. CLSA's research analysts report to the management of the Research department, who in turn report to CLSA's senior management. CLSA has put in place a number of internal controls designed to manage conflicts of interest that may arise as a result of CLSA engaging in Corporate Finance, Sales and Trading, Asset Management and Research activities. Some examples of these controls include: the use of information barriers and other controls designed to ensure that confidential information is only shared on a "need to know" basis and in compliance with CLSA's Chinese Wall policies and procedures; measures designed to ensure that interactions that may occur among CLSA's Research personnel, Corporate Finance, Asset Management, and Sales and Trading personnel, CLSA's financial product issuers and CLSA's research analysts do not compromise the integrity and independence of CLSA's research.

Subject to any applicable laws and regulations at any given time, CLSA, CLST, their respective affiliates, officers, directors or employees may have used the information contained herein before publication and may have positions in, or may from time to time purchase or sell or have a material interest in any of the securities mentioned or related securities, or may currently or in future have or have had a business or financial relationship with, or may provide or have provided corporate finance/capital markets and/or other services to, the entities referred to herein, their advisors and/or any other connected parties. As a result, you should be aware that CLSA and/or CLST and/or their respective affiliates, officers, directors or employees may have one or more conflicts of interest. Regulations or market practice of some jurisdictions/markets prescribe certain disclosures to be made for certain actual, potential or perceived conflicts of interests relating to research reports. Details of the disclosable interest can be found in certain reports as required by the relevant rules and regulation and the full details are available at http://www.clsa.com/member/research_disclosures/. Disclosures therein include the position of CLSA and CLST only. Unless specified otherwise, CLSA did not receive any compensation or other benefits company, from the subiect covered in this publication/communication, or from any third party. If investors have any difficulty accessing this website, please contact webadmin@clsa.com on +852 2600 8111. If you require disclosure dates, information on previous please contact compliance hk@clsa.com.

This publication/communication is distributed for and on behalf of CLSA Limited (for research compiled by non-US and non-Taiwan analyst(s)), and/or CLST (for research compiled by Taiwan analyst(s)) in Australia by CLSA Australia Pty Ltd; in Hong Kong by CLSA Limited; in India by CLSA India Private Limited, (Address: 8/F, Dalamal House, Nariman Point, Mumbai 400021. Tel No: +91-22-66505050. Fax No: +91-22-22840271; CIN: U67120MH1994PLC083118; SEBI Registration No: INZ000001735 Stock Broker, INM000010619 as Merchant Banker and as INH000001113 as Research Analyst,; in Indonesia by PT CLSA Sekuritas Indonesia; in Japan by CLSA Securities Japan Co., Ltd; in Korea by CLSA Securities Korea Ltd; in Malaysia by CLSA Securities Malaysia Sdn Bhd; in the Philippines by CLSA Philippines Inc (a member of Philippine Stock Exchange and Securities Investors Protection Fund); in Singapore by CLSA Singapore Pte Ltd and solely to persons who qualify as an institutional investor, accredited investor or expert investor; in Thailand by CLSA Securities (Thailand) Limited; in Taiwan by CLST and in United Kingdom by CLSA (UK).

United States of America: Where any section is compiled by non-US analyst(s), it is distributed into the United States by CLSA solely to persons who qualify as "Major US Institutional Investors" as defined in Rule 15a-6 under the Securities and Exchange Act of 1934 and who deal with CLSA Americas. However, the delivery of this research report to any person in the United States shall not be deemed a recommendation to effect any transactions in the securities discussed herein or an endorsement of any opinion expressed herein. Any recipient of this research in the United States wishing to effect a transaction in any security mentioned herein should do so by contacting CLSA Americas.

United Kingdom: In the United Kingdom, this research is a marketing communication. It has not been prepared in accordance with the legal requirements designed to promote the independence of investment research, and is not subject to any prohibition on dealing ahead of the dissemination of investment research. The research is disseminated in the EU by CLSA (UK), which is authorised and regulated by the Financial Conduct Authority. This document is directed at persons having professional experience in matters relating to investments as defined in Article 19 of the FSMA 2000 (Financial Promotion) Order 2005. Any investment activity to which it relates is only available to such persons. If you do not have

professional experience in matters relating to investments you should not rely on this document. Where the research material is compiled by the UK analyst(s), it is produced and disseminated by CLSA (UK). For the purposes of the Financial Conduct Rules this research is prepared and intended as substantive research material.

For all other jurisdiction-specific disclaimers please refer to https://www.clsa.com/disclaimer.html. The analysts/contributors to this publication/communication may be employed by any relevant CLSA entity or CLST, which is different from the entity that distributes the publication/communication in the respective jurisdictions.© 2018 CLSA Limited and/or CL Securities Taiwan Co., Ltd. ("CLST").