Xinyi Glass

Glass conglomerate benefits from rising margins

Initiation
Overweight
0868.HK, 868 HK
Price: HK$6.24
Price Target: HK$8.30

China
Auto Parts

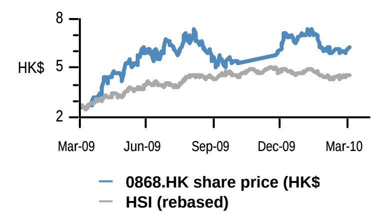
Leon Chik, CFA[AC]
(852) 2800-8590
leon.hk.chik@jpmorgan.com

Andrew Hsu
(852) 2800-8572
andrew.tj.hsu@jpmorgan.com

J.P. Morgan Securities (Asia Pacific) Limited

- **Initiating coverage with OW and Dec-10 PT of HK$8.3, offering 33.0% upside potential from the current share price**. XYG is scheduled to release its FY09 results at the end of March and we expect sales growth of 5.8% to HK$4.1B, gross margin of 33.2% (up from 31.1% last year) and EBIT margin of 20.6% (up from 19.7% last year). Management have been buyers of the shares recently at levels as high as HK$6.86.
- **Product diversity and exports remain key business drivers:** XYG is the most diversified maker of glass in China, producing auto glass, construction glass, float glass and glass for solar panels. It is also the largest exporter of glass from China. Margins are rising as float glass prices have nearly doubled over the past 12 months to HK$2,200 to HK$2,400 per ton, driving overall gross margin from 31% in 2008 to our estimate of 33.2% for FY09 and 37.3% for FY10.
- **Firm prices and sustained demand to drive performance**: The stock has risen 130% over the past year due to the improvement in glass demand from China's automotive and construction sector. Despite the rise in float glass prices, new supply in the industry is not expected to be significant in 2010, so we expect prices to remain at robust levels this year. We estimate that a 5.0% change in float glass prices could lift earnings by 7%.
- **Valuation, price target and risks:** XYG trades at 9.5x 2010E P/E compared with FY10E-12E EPS CAGR of 14%. Our FY10E P/E estimate is lower than the average FY10E P/E of 11.1x for Chinese SMID-cap industrial company peers. Our DCF-based Dec-10 PT of HK$8.30 implies a 12-month forward P/E of 12.6x, which is 0.4 standard deviation over the five-year historical average. The key risk to our recommendation and PT is the impact of the recent curbs on lending in China and the negative impact that would have on glass demand from automotive and construction sectors.

Price Performance



	YTD	1m	3m	12m
Abs	-11.2%	0.0%	-13.0%	130.3%
Rel	-5.5%	-1.2%	-4.5%	63.4%

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

HK$ in mn, year-end Dec	FY08A	FY09E	FY10E	FY11E	FY12E		
Revenue	3,894	4,119	5,692	8,324	9,815	Shares O/S (mn)	1,771
Net Profit	709.2	708.8	1,113.6	1,361.1	1,443.9	Market cap (HK$ mn)	11,050
EPS (HK$)	0.42	0.42	0.66	0.81	0.86	Market cap ($ mn)	1,424
DPS (HK$)	0.20	0.21	0.33	0.40	0.43	Price (HK$)	6.24
Revenue growth (%)	40.4%	5.8%	38.2%	46.2%	17.9%	Date Of Price	04 Mar 10
EPS growth (%)	1.4%	1.0%	57.1%	22.2%	6.1%	Free float (%)	26.5%
ROCE	15.0%	16.3%	17.2%	21.1%	20.4%	3-mth trading value (HK$ mn)	53.5
ROE	16.9%	14.8%	20.2%	22.2%	21.1%	3-mth trading value ($ mn)	6.9
P/E (x)	15.0	14.9	9.5	7.7	7.3	3-mth trading volume (mn)	8.5
P/BV (x)	2.4	2.0	1.8	1.6	1.5	HSI	20,576
EV/EBITDA (x)	11.1	8.8	7.5	5.6	5.1	Exchange Rate	7.76
Dividend Yield	3.2%	3.4%	5.3%	6.5%	6.9%	Fiscal Year End	Dec

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

Company description

Xinyi Glass was founded in 1988 and was listed in 2005, and is one of the largest glass conglomerates in China with the largest export volume in China for glass. Xinyi is a major supplier of replacement autoglass (about 30% of the US market share for non-original manufacturer autoglass) and also makes construction glass and float glass.

P&L sensitivity metrics

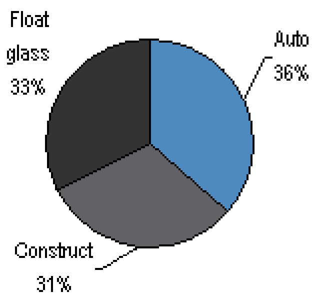
2010E	EBIT impact (%)	EPS impact (%)
Float glass price		
Impact of each 5 percentage points increase	7.2%	6.9%
Oil cost		
Impact of each 5 percentage points increase	-1.7%	-1.8%
Wages		
Impact of each 5 percentage points increase	-3.1%	-3.3%
GM: 1% Increase		
Impact of each 100bps increase	4.4%	4.7%

Source: J.P. Morgan estimates.

Price target and valuation analysis

Our Dec-10 price target is based on the DCF methodology. The nature of the industry leads us to apply a terminal growth of 3% (the low-end of the 3-6% growth rate used for SMID caps).

Revenue mix (2010E)



Source: J.P. Morgan estimates.

Risk-free rate:	4.20%
Market risk premium:	6.00%
Beta:	1.50
Cost of equity	13.20%
Terminal "g":	3.00%

Our PT (Dec-10, DCF-derived) of HK$8.3 implies a fwd P/BV (FY11E) of 2.4x and implies a fwd P/E of 12.6x (FY11E). A key risk to our PT is falling demand for construction and auto glass that may result from the cooling measures taken by the Chinese government.

EPS: J.P. Morgan vs. consensus

HK$	J. P. Morgan	Consensus
FY09E	0.42	0.401
FY10E	0.66	0.613
FY11E	0.81	0.783

Source: Bloomberg, J.P. Morgan estimates.

Peer valuation comparison

Companies	Ticker	Price, HK$	MCAP US$MM	Vol US$ MM	3M chg	2009E P/E (x)	2010E P/E(x)	10E EV / EBITDA	ROE (%)	P/B (x)	09E yld (%)
AMVIG HOLDINGS (NR)	2300 HK	3.50	491.4	0.8	13.6	9.9	7.6	5.8	10.3	0.7	1.2
CHONGQING MACHIN (NR)	2722 HK	1.76	835.4	2.1	3.5	11.5	10.3	5.6	19.1	1.6	0.0
HAITIAN INTL (NR)	1882 HK	4.19	861.5	0.2	20.1	17.5	12.7	8.8	14.1	1.9	1.4
LM PAPER (OW)*	2314 HK	5.2 (7.2)	3,024.6	10.0	4.1	17.6	10.8	10.7	18.9	2.1	2.5
LONKING HOLDINGS (NR)	3339 HK	4.93	1,359.1	5.0	2.1	15.0	11.5	9.4	22.3	2.6	1.8
ND PAPER (OW)*	2689 HK	11.3 (21)	6,714.0	20.4	(20.1)	20.9	13.8	13.0	15.4	2.3	0.6
PACIFIC TEXTILE (NR)	1382 HK	5.16	952.5	1.2	36.9	11.0	9.9	6.2	12.7	2.2	9.2
WASION GROUP HOL (NR)	3393 HK	5.56	667.0	5.0	(16.0)	15.1	13.1	9.2	20.1	2.8	2.0
Average					4.5	14.6	11.1	8.2	13.0	2.0	2.1

Source: Company data, Bloomberg, J.P. Morgan estimates (*). Bloomberg estimates for NR companies. Share prices are as of Close of 1 March 2010.

Investment summary

Positive share price drivers

China's most diversified glass conglomerate. XYG has been the largest exporter of glass for the replacement market for the past 10 years. It has used its vast collection of moulds for most vehicles made since 1960 to dominate the low-end of the global replacement windshield market. In 2006, it started selling a large volume of replacement glass to PPG of the US and also entered the OEM auto glass market in China in 2005. XYG is also one of the largest makers of construction glass specializing in an energy saving low emission glass (low-E glass) that is in high demand in China. The replacement auto glass market has proven to be very defensive and sustained high gross margin of between 35% and 40%, even during the worst period of the financial crisis and underpins 30-40% of XYG's EBIT. The big swing factor would come from the more cyclical construction and float glass division which is in the first half of a roughly two-year up-cycle in prices and margins, in our view.

Dramatic improvement in glass prices since 1Q09. Construction and float glass demand was weak in 1Q09, leading to a selling price that could not cover cost of production. However, the rising demand combined with idled production has led to a sharp doubling of float glass price from 1Q09 to 1Q10. Currently the demand for glass is robust, so XYG operates at nearly 100% capacity for its float glass operations. Selling price for float glass varies with thicknesses and quality but on an average, XYG's average selling price was approximately HK$1,100 per ton at Jan 2009, rising to HK$1,800 per ton by May 2009 and is now currently around HK$2,200 to HK$2,400 per ton.

Stable oil is good for XYG. The cost of producing glass is most impacted by bunker oil. XYG is converting 2-3 of its lines to natural gas by the end of 2010 and this can result in some cost savings. Overall, the rise in the price of crude oil since Jan 2009 has contributed to a higher cost of production from around HK$1,200 per ton in Jan 09 to around HK$1,500 per ton today. However, the higher cost is more than absorbed by even faster rising selling prices. Crude oil prices have been relatively stable over the past six months and this stability actually enables XYG to maximize its margins during a period of high demand and utilization. Current GM on float glass production is around 35-40%, near the historical high levels of 2007.

Strong balance sheet and high dividend yield. We expect XYG's net debt to equity ratio to rise to 11.9% by the end of 2009 and remain stable despite aggressive expansion of production which would be mostly funded by internally generated cash. XYG has historically paid a reasonable dividend (45-50% payout ratio) and we expect this to continue, resulting in a 10E yield of 5.4%. The company has made acquisitions in order to add new customers, such as the recent acquisition of China Southern Glass (CSG, 200012 CH)'s auto glass business. However, we do not believe that these acquisitions will be of a size that can materially change XYG's debt levels or dividend policy.

Management is buying shares. The nine main shareholders in XYG hold about 60% of the shares of the company. A few of the substantial shareholders including the Chairman Me Lee and the CEO Mr Tung and have been buying back shares with prices as high as HK$8.86 per share (on January 19, 2010). Although the total amounts of 7 to 8 million purchased in 2010 YTD is relatively small compared to

Leon Chik, CFA
(852) 2800-8590
leon.hk.chik@jpmorgan.com

their holdings, it does show some optimism from the part of management for the company and the industry for 2010.

Negative Share price drivers and risks to our thesis

Economic conditions deteriorating. XYG derived about half of its sales from overseas markets. There is a great deal of concern over the sustainability of the current economic recovery. If the economics of the US consumers do not recover, that could have a mildly negative impact on export prospects for exporters from China, like XYG. One point to note is that XYG targets the lower end of the market and offers an alternative to higher priced brands which makes it more defensive when consumers cut back.

Rising oil and other material costs. Around 40% of XYG's COGs is related to oil, up from 20% of COGs in 2004. If the oil price were to rise significantly, margins could be under pressure. Glass is a heavy product, especially in comparison with its selling price and the rising transportation costs would hurt the company as well.

Float glass is very cyclical. Float glass is a very cyclical industry and goes through cycles of oversupply and shortages (roughly 3 year cycles from trough to trough with last one being early 2006). The price and margins for float glass have recovered strongly in 2H09 and that is likely to attract new capacity in late 2010 and 2011. We believe that prices could peak in the middle of 2010 and then could trend downwards. The degree of the price decrease depends on the demand from China's automotive and construction sector which may be experiencing a much more uncertain year in 2010 compared to 2009.

Renminbi revaluation. Currently, around 50% of XYG's sales are for direct exports. A renminbi revaluation would effectively lift the cost of wages, energy and other overheads for XYG relative to other competitors that are not in China. XYG may not be able to fully pass on these higher costs to its U.S. or European customers.

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Valuation and share price analysis

DCF valuation

Our 12-month target price 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 1.5, higher than Bloomberg's beta of 1.30 in order to reflect the fact that the risks are higher now than over the past few years because almost all lines of business are at record high levels of pricing and margins. Accordingly, WACC is assumed at 13.2%. We have estimated free cash flow for XYG until 2015 and assume a terminal growth rate of 3.0%. The terminal growth is based on the annual growth rate expected in 2015 (the final year of the estimate period) subject to a minimum of 3% 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 1: XYG— Base-case DCF analysis

HK$ in millions, year-end Dec	2007	2008	2009E	2010E	2011E	2012E	2013E	2014E	2015E
Cash flow estimates									
Sales	2,775	3,894	4,119	5,692	8,324	9,815	11,380	12,481	13,950
EBIT	726	768	847	1,289	1,559	1,650	1,844	1,976	2,086
NOPAT	698	737	800	1,180	1,427	1,510	1,688	1,759	1,805
Capex, net	(1,661)	(857)	(811)	(796)	(1,167)	(1,078)	(991)	(1,046)	(1,103)
Depreciation	141	316	412	473	550	642	720	792	868
Change in working capital	(367)	(84)	231	(138)	(231)	(131)	(137)	(97)	(129)
Free operating CF (FoCF)	(1,189)	113	632	717	579	943	1,280	1,409	1,442
DCF Parameters				Assumptions					
Liabilities as a % of EV		0%		Terminal growth			3.0%		
WACC		13.2%		Risk-free rate			4.2%		
				Market risk			6.0%		
Enterprise NPV (10E-16E)		14,603		Beta			1.50		
+ Net cash (debt), current		(521)		Cost of debt			6.2%		
- Minorities (Market value)		(34)							
+/- Other items		0		Implied exit P/E multiple (x)			5.2x		
= Equity value		14,048							
/ Number of shares		1,689							
= Equity value per share (HK$)		8.3							

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

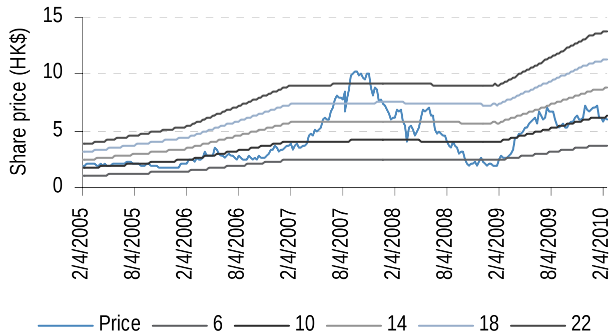
Table 2: XYG—Sensitivity analysis based on WACC and perpetual terminal growth rate

		Terminal growth rate						
		2%	2%	2.5%	3.0%	3.5%	4.0%	4.5%
WACC	11.5%	9	9.4	9.8	10.2	10.7	11.3	11.9
	12.0%	8.5	8.8	9.2	9.6	10	10.5	11.1
	12.5%	8.1	8.4	8.7	9	9.4	9.8	10.3
	13.0%	7.7	7.9	8.2	8.5	8.8	9.2	9.6
	13.5%	7.3	7.5	7.8	8	8.4	8.7	9.1
	14.0%	7	7.2	7.4	7.6	7.9	8.2	8.5
	14.5%	6.6	6.8	7	7.3	7.5	7.8	8

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

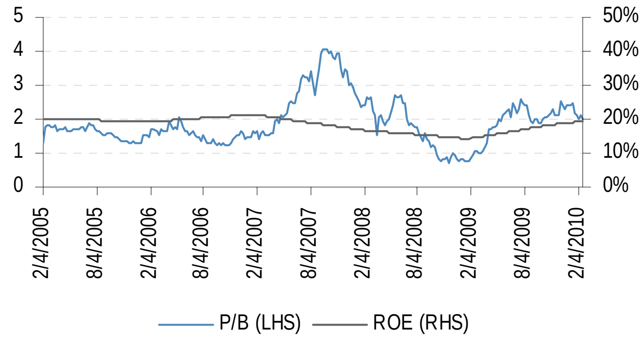
In the past four years, XYG has traded on a forward P/E range from as high as 24.1x to 4.7x . The implied 12-month forward P/E in our DCF based 12-month target price is 12.6x which is in the middle of the P/E range.

Figure 1: XYG—P/E bands for the past five years



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

Figure 2: XYG—P/B vs. ROE



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

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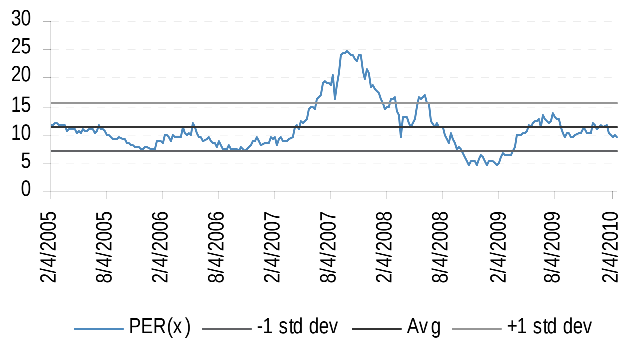
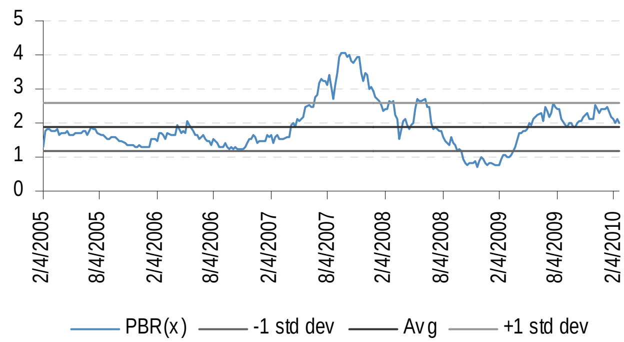
Figure 3: XYG—One-year forward P/E band



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

Figure 4: XYG—One-year forward P/B band



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

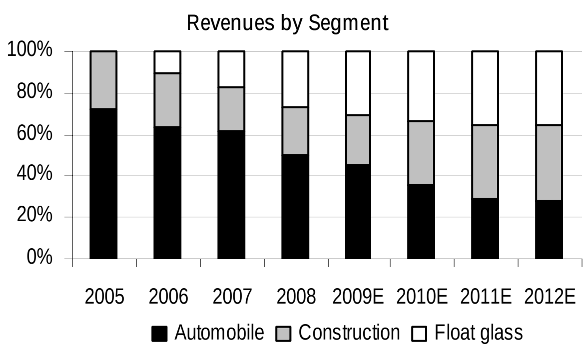
Company overview

XYG is China's largest exporter of auto glass (36% of 2010E sales) and a major producer of construction glass (21% of 2010E sales) for the domestic market. The company completed its first float glass line in 2006 and had 5 lines at the end of 2009 (about 15% of China's market for modern float production). The company is planning to complete a total of 10 such lines (5.2m tpa to 6.6 m tpa) by the end of 2012. Float glass makes up an estimated 33% of sales. A higher-end glass used for solar panels, called photovoltaic glass (PV), makes up an estimated 10% of 2010E sales.

Scale and diversity is the key

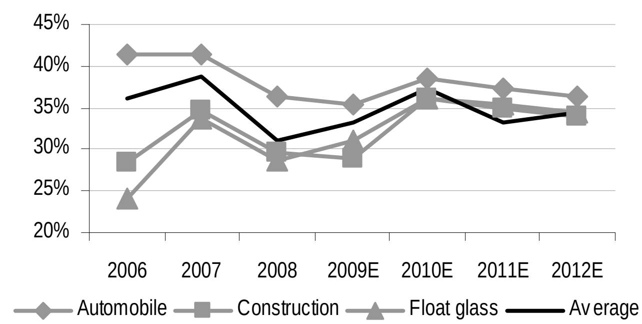
Since from around 1998, XYG has transformed itself from a new entrant into the US windshield replacement market to a market leader with almost 30% of the market. Low cost production is not the main reason for XYG's success. Although XYG has production plants in Dongguan, Shenzhen, Wuhu and Tianjin, of total gross floor area over 1,000,000 sq. m, many other producers have low cost plants in China. The key to the company's success is the library of over 20,000 moulds which XYG has developed in house for most of the used cars in the world today. Starting with the original windshield, XYG scans the shape in Los Angeles and makes the mould in Shenzhen. The wood or metal moulds are used to make windshields (as little as 10 pieces at a time) that can be shipped to small repair shops (or larger distributors).

Figure 5: XYG—Revenue mix trends



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

Figure 6: XYG—Gross margin by line of business



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

Production facilities are based in Dongguan, Shenzhen, Wuhu and Tianjin with a total annual capacity of 8.5m pieces of automobile laminated glass. After completing the acquisition of CSG in Nov. 07, the combined annual capacity exceeded 10m million pieces per year in 2007. Prior to being acquired by XYG, CSG was the third largest Chinese automobile glass exporter with a large EU client base. Currently, XYG's' auto glass capacity is 11.2m at the end of 2009.

Construction glass accounts for an estimated 21% of XYG's total 2010E sales. The Gross margin for the construction glass business fluctuates from 20% to 40% and is economically sensitive. XYG began production of construction glass at the end of

1998. After the completion of the Dongguan facility in 2005, XYG increased annual capacity to over 13 million sq. m of construction glass and has remained unchanged until the end of 2009.

XYG also produces low-emission glass (low-E glass) with an annual capacity of 12m sq. m. (low E-glass is an upgraded product using construction glass as the raw material and applying an energy saving coating. Due to its environmentally friendly and energy saving features, low-E glass is becoming popular for airports, office buildings and high-end residential towers. Recently, XYG has started making translucent conductive oxide (TCO) glass which concerts 6-8% of sunlight into electricity and is applied to the exterior of buildings (capacity around 2.0m sq. m. by the end of 2010).

Float glass (including PV glass) accounts for an estimated 43% of XYG's total 2010E sales. Gross margin is quite volatile and can fluctuate depending on supply and demand. Typically, it is not easy to cut supply when demand is weak because the float glass lines need to run at above 80% utilization in order to maintain high glass quality and cannot be stopped without incurring significant re-starting costs. New lines also take 18 months to build and another 4-6 months to fine tune. We saw a sharp decrease in GM from 31% in 1H08 to 11% in 1H09 but stronger demand is expected to push float glass GM up to above 30% for 2H09 and above 35% for 2010.

Shareholding

The nine main shareholders in XYG hold about 60% of the shares of the shares of the company. A few of the substantial shareholders including the Chairman Me Lee and the CEO Mr Tung have been buying back shares with prices as high as HK$8.86 per share (on 19 Jan 2010). Although the total amounts of 7 to 8 million purchased in 2010 YTD are relatively small compared to their holdings, in our view it does show some optimism from the part of management for the company and the industry for 2010.

SWOT analysis

Strengths

- The company is the one of largest producers of glass in China. XYG has the most diversified portfolio of glass products relative to its major peers and makes float glass, construction glass, auto glass and photovoltaic glass.
- It is the largest exporter of replacement auto glass from China and has gained about 30% of the generic US replacement auto glass market.
- The company has over 20,000 molds of most of the windshields for all types of vehicles made since 1960s. This library of molds enables XYG to be able to fulfill a wide variety of needs for the garages and auto repair shops in US and other international markets.
- The management team is made up of seasoned veterans with the majority of the shareholders still actively involved in the business.

Weaknesses

- The nature of the float glass and construction business results in volatile gross margins that tend to fluctuate from as high as 40% to as low as 20%.
- The market is relatively fragmented and subject to fierce price wars during times of demand slowdown.
- The business is capital intensive and there is an upcoming capital expenditure cycle for XYG in 2010 and 2011 that is likely to be higher than previous years.
- The company is dependent on oil and soda ash as its key costs and the prices of these commodities are rising.
- The distribution channel for auto replacement glass in US, EU and internationally are operated by third parties with XYG unable to exert direct controls on the distributors.

Opportunities

- Strong demand for glass at the tail end of massive construction projects in China. The Rmb4.0 trillion stimulus package is currently under construction and demand for glass is usually at the end of these projects.
- China has the fastest growing market for automobiles in the world. As the number of installed base of vehicles grows, XYG’s unique library of molds should enable it to take a large share of China's replacement market.
- XYG is converting its float glass furnaces from using bunker oil to using natural gas / liquefied petroleum gas as the main fuel, potentially creating significant savings.
- The company has acquired land in Jiangmen, Guangdong to facilitate the expansion of new lines for float glass. The land acquisition cost and set up costs have been incurred in 2009 already and new lines should start contribution in 2010.

Threats

- There are a number of strong glass players in China that may expand capacity as prices for flat glass rises and margins expand.
- The capital requirement to expand into PV glass is very high and the prices can be volatile depending on the demand for solar energy and government subsidies for panels.
- The implementation risk of putting in new lines in Jiangmen could be higher than putting in lines in existing locations.
- The company makes cheaper generic versions of auto glass to compete with branded operators and has been subject to lawsuits in the past with relations to their exported auto glass products.

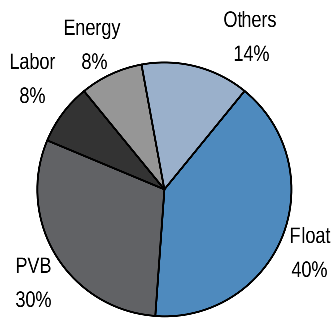
Leon Chik, CFA
(852) 2800-8590
leon.hk.chik@jpmorgan.com

Financial analysis

We expect an EPS CAGR of 14% between 2010-2012

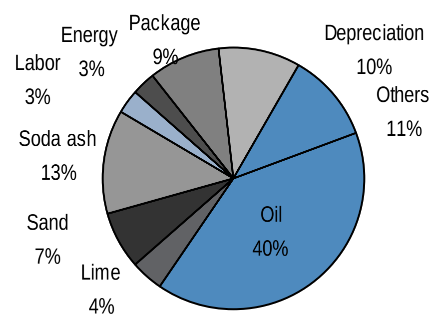
We expect XYG to record a sales CAGR of 21.8% from 2007 to 2009 which is a much better growth rate than most industrial companies in China. We estimate XYG will achieve a sales CAGR of 31.3% between 2010 and 2012 due to continued expansion of capacity of float glass and solar glass. XYG plans to lift the number of float glass lines in operations from 5 at the end of 2009 to 8 by the end of 2010 to 10 by the end of 2011. Within 2010, we expect to see the commencement of operations of three new float glass lines in Q210 (2 lines in Wuhu, Anhui province) and in 4Q10 (one line in Jiangmen, Guangdong Province). One float glass line~~s~~ produces 600 to 900 tons of glass a day depending on the thickness of the glass. XYG has also added a new photovoltaic (PV) glass line at the end of 2009 which would not contribute significantly to sales until 2010. There are no plans to add a new PV line in 2010 but we expect the company to add another PV line in 2011. With the addition of all the lines by the end of 2011, XYG would have increased its capacity by more than 10 times since its first float glass line was in operation~~s~~ in 2006.

Figure 7: XYG—Cost breakdown—Auto glass (2010E)



Source: J.P. Morgan estimates.

Figure 8: XYG—Cost breakdown—Float glass (2010E)



Source: J.P. Morgan estimates.

Currently the demand for glass is robust so XYG operates at nearly 100% capacity for its float glass operations. Another contributor to sales growth in 2010 would be a much higher selling price for gloat glass. Selling price for float glass varies with thicknesses and quality but on average, XYG's average selling prices was approximately HK$1,100 per ton at Jan 2009, rising to HK$1,800 per ton by May 2009 and is now currently around HK$2,200 to HK$2,400 per ton. The cost of producing glass is most impacted by bunker oil. XYG is converting 2-3 of its lines to natural gas by the end of 2010 and that could result in some cost savings. Overall, the rise in the price of crude oil since Jan 2009 has contributed to a higher cost of production from around HK$1,200 per ton in Jan 09 to around HK$1,500 per ton today. Current GM on float glass production is around 35-40%, near the historical high levels of 2007.

Autoglass should contribute 38% to 2010E sales

Autoglass makes up an estimated 38% of 2010 sales (down from 64% in 2007). The autoglass business has a relatively steady GM of around 40% and contributes to an estimated 38% of 2010 EBIT (est. 52% of 2009 EBIT). The autoglass business is typically more important to the profitability of XYG during market slumps and, accordingly, XYG is more defensive than other pure glass makers without a replacement auto glass business.

One of the key disappointments in 1H09 was the fall in GM from 34.6% in 1H08 to 28.4% in 1H09 despite a large drop in the cost of oil and petrochemical related costs. We expect higher prices for all products but especially for float glass in 2H09 to result in a rebound in margins for 2H09 to 36.7%. We expect gross margin to move to 37.3% in 2010 due to a rise in the average price of float glass from an estimated average price of HK$1,700 per ton to HK$2,300 per ton in 2010. Due to a fall in prices and utilization in 1H09, we expect XYG to experience a rise in its SG&A expenses as a percentage of sales from 13.5% in 2008 to 15.7% in 2009.

XYG squeezed out an EPS CAGR of 1.2% between 2007 and 2009, which is lower than its historical average EPS growth exceeding 30%. However, we estimate that XYG's EPS will increase at a CAGR of 38.6% in FY2009-11.

Historically, XYG's profitable business generated almost enough cash to fund capital expenditure for 2006 through 2009. XYG currently has a net debt to equity of 12% and we expect this level to stay below 20% in the foreseeable future.

Leon Chik, CFA
(852) 2800-8590
leon.hk.chik@jpmorgan.com

Table 3: XYG—Key assumptions

Year to December	2007	2008	2009E	2010E	2011E	2012E
Auto glass capacity (m)	8.9	10.4	11.9	12.9	14.4	15.9
Cons. glass capacity (m sq. m)	14.7	19.1	23.5	28.0	30.5	33.0
Float glass capacity (MM tonnes)	0.38	0.67	0.95	1.07	1.83	2.39
Auto glass utilization	70%	71%	63%	59%	61%	62%
Construction glass utilization	44%	40%	35%	40%	50%	60%
Inventory Days	67	57	57	57	57	57
Receivable Days	89	62	62	62	62	62

Source: J.P. Morgan estimates.

Table 4: XYG—Revenue mix

HK$ MM, year-Dec	2006	2007	2008	2009E	2010E	2011E	2012E
Automobile glass	1,229	1,717	1,964	1,902	2,074	2,398	2,803
YoY	24.0%	39.7%	14.4%	-3.2%	9.0%	15.6%	16.9%
% of total	63.6%	61.9%	50.4%	46.2%	36.4%	28.8%	28.6%
Construction glass	498	472	651	713	1,198	1,663	2,060
YoY	27.7%	-5.3%	38.0%	9.5%	68.1%	38.8%	23.9%
% of total	25.8%	17.0%	16.7%	17.3%	21.0%	20.0%	21.0%
Float glass	206	586	1,279	1,504	2,420	4,263	4,952
YoY		184.8%	118.2%	17.6%	60.9%	76.2%	16.2%
% of total	10.6%	21.1%	32.8%	36.5%	42.5%	51.2%	50.5%
- Standard	206	492	1,030	1,215	1,852	3,094	3,579
YoY		139.0%	109.3%	18.0%	52.4%	67.1%	15.7%
- UPG		94	249	289	568	1,169	1,374
YoY			164.5%	16.0%	96.5%	105.7%	17.5%
Total revenue	1,933	2,775	3,894	4,119	5,692	8,324	9,815

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

Leon Chik, CFA
(852) 2800-8590
leon.hk.chik@jpmorgan.com

Table 5: XYG—P&L statement

Year to Dec (HK$MM)	2006	2007	2008	2009E	2010E	2011E	2012E
Total Revenues	1,933	2,775	3,894	4,119	5,692	8,324	9,815
YoY change (%)	40.0%	43.5%	40.4%	5.8%	38.2%	46.2%	17.9%
Cost of Goods Sold	(1,233)	(1,702)	(2,683)	(2,750)	(3,566)	(5,544)	(6,720)
YoY change (%)	36.7%	38.1%	57.6%	2.5%	29.7%	55.4%	21.2%
Gross Profit	700	1,072	1,211	1,369	2,126	2,780	3,095
YoY change (%)	46.2%	53.1%	12.9%	13.1%	55.3%	30.8%	11.3%
Gross Margin	36.2%	38.6%	31.1%	33.2%	37.3%	33.4%	31.5%
SGA	(322)	(421)	(527)	(648)	(896)	(1,310)	(1,544)
YoY change (%)	46.6%	31.0%	25.2%	22.9%	38.2%	46.2%	17.9%
Other Income/(Expenses)	32	75	84	126	59	89	99
Operating profit	411	726	768	847	1,289	1,559	1,650
EBITDA	508	867	1,084	1,259	1,762	2,110	2,292
EBITDA margin	26.3%	31.3%	27.8%	30.6%	30.9%	25.3%	23.3%
Depreciation & Amortization	(97)	(141)	(316)	(412)	(473)	(550)	(642)
YoY change (%)	82.5%	45.0%	124.8%	30.3%	14.6%	16.5%	16.6%
EBIT	411	726	768	847	1,289	1,559	1,650
EBIT margin	21.2%	26.2%	19.7%	20.6%	22.6%	18.7%	16.8%
Net Interest Expense	(12)	(24)	(24)	(70)	(70)	(70)	(70)
Exceptional item	0	0	0	0	0	0	0
Associates	(1)	2	0	0	0	0	0
Gains/losses	0	0	0	0	0	0	0
Net Income Before Taxes	399	703	753	776	1,219	1,489	1,580
YoY change (%)	44.0%	76.5%	7.0%	3.1%	57.0%	22.2%	6.1%
Tax	(16)	(30)	(42)	(66)	(103)	(126)	(134)
Effective Tax rate	4.0%	4.0%	5.5%	8.5%	8.5%	8.5%	8.5%
Minority Interests	2	(2)	(2)	(2)	(2)	(2)	(2)
Net Income	385	671	709	709	1,114	1,361	1,444
YoY change (%)	49.5%	74.3%	5.7%	-0.1%	57.1%	22.2%	6.1%
Net margin	19.9%	24.2%	18.2%	17.2%	19.6%	16.4%	14.7%

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

Leon Chik, CFA
(852) 2800-8590
leon.hk.chik@jpmorgan.com

Table 6: Interim estimates

Year to Dec (HK$ MM)	1H08	2H08	1H09	2H09E	1H10E	2H10E
Total Revenues	1,883	2,011	1,628	2,491	2,720	2,972
Gross Profit	651	560	462	907	999	1,127
EBIT	457	311	265	582	631	658
Net Income Before Taxes	434	319	259	517	596	622
Net Income	402	307	225	484	572	542
Diluted EPS (HK$)	0.236	0.182	0.133	0.286	0.339	0.321
Ratios						
Revenue split	48.4%	51.6%	39.5%	60.5%	47.8%	52.2%
GPM	34.6%	27.8%	28.4%	36.4%	36.7%	37.9%
EBIT margin	24.2%	15.5%	16.3%	23.3%	23.2%	22.2%
NPM	21.4%	15.3%	13.8%	19.4%	21.0%	18.2%
YoY						
Revenue	na	na	-13.5%	23.8%	67.1%	19.3%
GP	na	na	-29.1%	62.1%	116.2%	24.2%
EBIT	na	na	-42.0%	87.0%	138.0%	13.2%
NP	na	na	-44.0%	57.5%	154.1%	12.0%

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

Table 7: XYG—Balance sheet

Year to Dec (HK$MM)	2006	2007	2008	2009E	2010E	2011E	2012E
Cash and Cash Equivalents	173	316	436	632	736	504	516
Inventories	371	511	612	647	895	1,308	1,543
Accounts receivable	569	675	661	699	966	1,413	1,667
Other Current Assets	77	58	56	552	518	610	681
Total Current Assets	1,190	1,559	1,765	2,530	3,115	3,836	4,407
Intangible Assets	0	0	0	0	0	0	0
Property and Equipment, Net	1,790	3,269	3,972	4,371	4,695	5,312	5,748
Other Assets	265	543	761	875	1,007	1,157	1,331
Non-Current assets	2,055	3,811	4,733	5,246	5,702	6,469	7,079
Total Assets	3,245	5,371	6,498	7,777	8,817	10,305	11,486
Accounts Payable	342	185	470	696	962	1,406	1,658
Other Accrued Expenses	230	442	332	491	670	1,008	1,205
Taxes Payable	12	14	50	74	111	134	142
ST and current LT debts	335	424	772	779	779	779	779
Total Current Liabilities	919	1,065	1,624	2,040	2,521	3,327	3,783
Long-term Debt	80	260	484	478	478	478	478
Other Noncurrent Liability	0	0	1	1	1	2	3
Noncurrent liabilities	80	260	485	479	479	480	480
Total Liabilities	999	1,325	2,109	2,518	3,000	3,807	4,264
Share capital	1,011	2,246	1,998	2,511	2,511	2,511	2,511
Reserves and Surplus	1,237	1,799	2,371	2,726	3,282	3,963	4,685
Total Shareholders' Equity	2,248	4,045	4,369	5,237	5,793	6,474	7,196
Minority Interest	(2)	0	20	22	23	25	26
Total Shareholders' Equity	2,246	4,045	4,389	5,258	5,816	6,498	7,222
Total Liabilities and Equity	3,245	5,371	6,498	7,777	8,817	10,305	11,486

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

Table 8: XYG—Cash flow statement

Year to Dec (HK$ MM)	2006	2007	2008	2009E	2010E	2011E	2012E
EBIT	411	726	768	847	1,289	1,559	1,650
Depreciation and Amortization	97	141	316	412	473	550	642
Working Capital Changes	(101)	(367)	(84)	231	(138)	(231)	(131)
Tax Paid	(19)	(24)	(30)	(42)	(66)	(103)	(126)
Cash Flow From Operations	388	476	970	1,448	1,557	1,775	2,034
Capital expenditures	(456)	(1,661)	(857)	(811)	(796)	(1,167)	(1,078)
Investments and others	(14)	232	(219)	(114)	(131)	(151)	(174)
Net Interest	(12)	(37)	(24)	(70)	(70)	(70)	(70)
Cash Flow from Investing	(481)	(1,467)	(1,100)	(996)	(998)	(1,389)	(1,322)
Free Cash Flow	(94)	(990)	(129)	452	559	387	713
Dividends	(141)	(257)	(325)	(346)	(456)	(619)	(701)
Common issue	186	1,310	0	90	0	0	0
Debt	81	129	574	0	0	1	0
Other Financing	0	(76)	0	0	0	0	0
Cash Flow from financing	125	1,106	249	(256)	(455)	(618)	(701)
Change in cash	32	116	120	196	104	(231)	12
Cash beginning	141	173	316	436	632	736	504
Foreign exchange changes	0	31	0	0	0	0	0
Cash at end	173	316	436	632	736	504	516

Source: Company data, J.P. Morgan estimates

Leon Chik, CFA
(852) 2800-8590
leon.hk.chik@jpmorgan.com

Xinyi Glass Holdings Co Ltd: Summary of financials

Income Statement					
HK$ in millions, year end Dec	FY07	FY08	FY09E	FY10E	FY11E
Revenues	2,775	3,894	4,119	5,692	8,324
% change Y/Y	43.5%	31.0%	17.6%	17.8%	46.2%
Gross Profit	1,072	1,211	1,369	2,126	2,780
% change Y/Y	53.1%	12.9%	13.1%	55.3%	30.8%
EBITDA	806	1,042	1,303	1,522	2,110
% change Y/Y	68.5%	29.3%	25.0%	16.8%	19.8%
EBIT	726	768	847	1,289	1,559
% change Y/Y	72.0%	20.8%	24.6%	15.8%	21.0%
EBIT Margin	23.5%	21.6%	22.9%	22.5%	18.7%
Net Interest	-25	-40	-48	-48	-
Earnings before tax	703	753	776	1,219	1,489
% change Y/Y	76.5%	7.0%	3.1%	57.0%	22.2%
Tax	-30	-42	-66	-103	-126
as % of EBT	4.3%	5.0%	5.0%	5.0%	8.5%
Net income (reported)	671	709	709	1,114	1,361
% change Y/Y	72.8%	17.2%	22.9%	15.1%	22.2%
Shares outstanding	1,637	1,706	1,689	1,689	1,689
EPS (reported)	0.41	0.42	0.42	0.66	0.81
% change Y/Y	67.1%	13.2%	22.9%	15.1%	22.4%

Cash flow statement					
HK$ in millions, year end Dec	FY07	FY08	FY09E	FY10E	FY11E
EBIT	726	768	847	1,289	1,559
Depr. & amortization	141	316	412	473	550
Change in working capital	(367)	(84)	231	(138)	(231)
Taxes	-24	-30	-42	-66	-103
Cash flow from operations	476	970	1,448	1,557	1,775
Capex	(1,661)	(857)	(811)	(796)	(1,167)
Net Interest	(37)	(24)	(70)	(70)	(70)
Free cash flow	(990)	(129)	452	559	387
Equity raised/(repaid)	1,310	0	90	0	0
Debt raised/(repaid)	129	574	0	0	1
Other	-76	0	0	0	0
Dividends paid	-257	-325	-346	-456	-619
Beginning cash	173	316	436	632	736
Ending cash	316	436	632	736	504
DPS	0.19	0.20	0.21	0.33	0.40

Balance sheet					
HK$ in millions, year end Dec	FY07	FY08	FY09E	FY10E	FY11E
Cash and cash equivalents	316	436	632	736	504
Accounts receivable	675	661	699	966	1,413
Inventories	511	612	647	895	1,308
Others	58	56	552	518	610
Current assets	1,559	1,765	2,530	3,115	3,836
LT investments	542	761	875	1,007	1,157
Net fixed assets	3,269	3,972	4,371	4,695	5,312
Total Assets	5,370	6,498	7,777	8,817	10,305
Liabilities					
Short-term loans	424	772	779	779	779
Payables	184	470	696	962	1,406
Others	457	382	565	781	1,142
Total current liabilities	1,065	1,624	2,040	2,521	3,327
Long-term debt	260	484	478	478	478
Other liabilities	0	1	1	1	2
Total Liabilities	1,325	2,109	2,518	3,000	3,807
Shareholders' equity	4,045	4,369	5,237	5,793	6,474
BVPS	2.35	2.59	3.10	3.43	3.83

Ratio Analysis					
HK$ in millions, year end Dec	FY07	FY08	FY09E	FY10E	FY11E
Gross margin	38.6%	35.6%	36.8%	36.2%	33.4%
EBITDA margin	29.1%	26.8%	31.6%	26.7%	25.3%
Operating margin	23.46%	21.64%	22.93%	22.53%	18.73%
Net margin	24.2%	18.2%	17.2%	19.6%	16.4%
Sales per share growth	38.8%	26.6%	17.6%	17.8%	46.2%
Sales growth	43.5%	31.0%	17.6%	17.8%	46.2%
Net profit growth	72.8%	17.2%	22.9%	15.1%	22.2%
EPS growth	67.1%	13.2%	22.9%	15.1%	22.4%
Interest coverage (x)	32.58	26.02	27.03	32.03	-
Net debt to equity	9.1%	20.4%	17.9%	15.3%	11.6%
Working Capital to Sales	36.1%	20.6%	15.8%	15.8%	15.8%
Sales/assets	0.64	0.61	0.62	0.66	0.87
Assets/equity	1.33	1.48	1.46	1.43	1.59
ROE	21.3%	18.5%	20.4%	20.9%	22.2%
ROCE	17.6%	15.0%	16.3%	17.2%	21.1%

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

Leon Chik, CFA
(852) 2800-8590
leon.hk.chik@jpmorgan.com

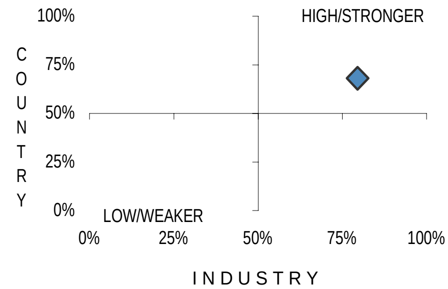
All Data As Of 02-Mar-10

Q-Snapshot: Xinyi Glass Holdings Ltd.

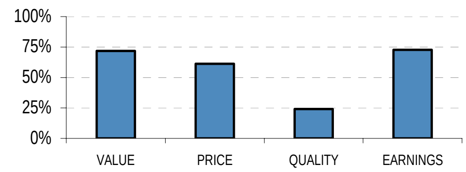
Quant Return Drivers (a Score >50% indicates company ranks 'above average')

Score 0% (worst) to 100% (best)	vs Country	vs Industry	Raw Value
Value			
P/E Vs Market (12mth fwd EPS)	67%	71%	0.8x
P/E Vs Sector (12mth fwd EPS)	63%	70%	0.8x
EPS Growth (forecast)	66%	61%	34.8%
Value Score	72%	75%	
Price Momentum			
12 Month Price Momentum	56%	78%	132.8%
1 Month Price Reversion	68%	58%	-1.0%
Momentum Score	61%	79%	
Quality			
Return On Equity (forecast)	62%	71%	16.0%
Earnings Risk (Variation in Consensus)	12%	15%	0.24
Quality Score	24%	34%	
Earnings & Sentiment			
Earnings Momentum 3mth (risk adjusted)	46%	43%	12.8
1 Mth Change in Avg Recom.	30%	30%	0.00
Net Revisions FY2 EPS	92%	88%	100%
Earnings & Sentiment Score	73%	70%	
COMPOSITE Q-SCORE* (0% To 100%)	68%	80%	

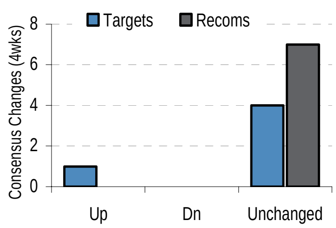
J.P. Morgan Composite Q-Score



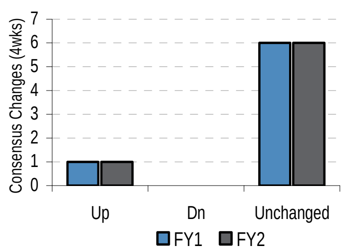
Quant Return Drivers Summary (vs Country)



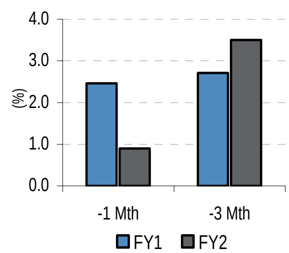
Targets & Recommendations**



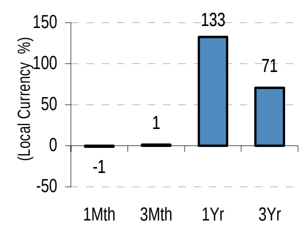
EPS Revisions**



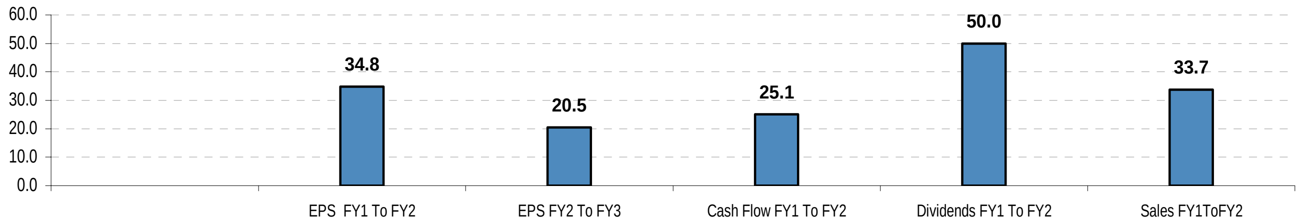
EPS Momentum (%)



Historical Total Return (%)



Consensus Growth Outlook (%)



Closest in Country by Size (Consensus. ADV = average daily value traded in US$m over the last 3 mths)

Code	Name	Industry	USD MCAP	ADV	PE FY1	Q-Score*
903-HK	TPV Technology Ltd.	Computer Peripherals	1,414	4.08	12.0	17%
331-HK	PCD Stores Group Ltd.	Department Stores	1,398	24.20	33.4	
589-HK	Ports Design Ltd.	Apparel/Footwear	1,383	5.05	20.5	31%
425-HK	Minth Group Ltd.	Auto Parts: OEM	1,379	3.46	15.8	86%
848-HK	Maoye International Holdings Ltd.	Department Stores	1,377	3.66	19.9	68%
868-HK	**Xinyi Glass Holdings Ltd.**	**Industrial Specialties**	**1,370**	**8.38**	**14.4**	**68%**
3339-HK	Lonking Holdings Ltd.	Trucks/Construction/Farm Machinery	1,359	5.30	15.6	59%
1114-HK	Brilliance China Automotive Holdings Ltd.	Motor Vehicles	1,348	17.32	-17.1	63%
1812-HK	Shandong Chenming Paper Holdings Ltd.	Pulp & Paper	1,336	1.14	11.3	89%
2332-HK	Hutchison Telecommunications International Ltd.	Major Telecommunications	1,321	2.97	1.5	1%
440-HK	Dah Sing Financial Holdings Ltd.	Regional Banks	1,321	1.20	12.5	73%

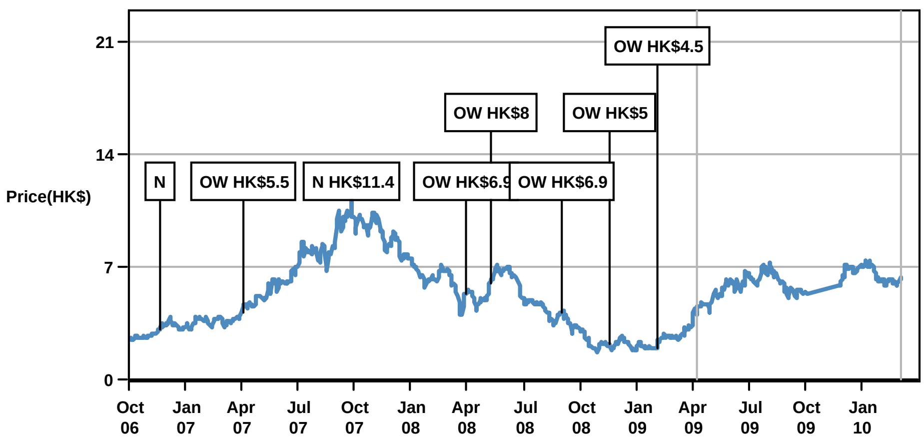
Source: Factset, Thomson and J.P. Morgan Quantitative Research. For an explanation of the Q-Snapshot, please visit http://jpmorgan.hk.acrobat.com/qsnapshot/
Q-Snapshots are a product of J.P. Morgan's Global Quantitative Analysis team and provide quantitative metrics summarized in an overall company 'Q-Score.'
Q-Snapshots are based on consensus data and should not be considered as having a direct relationship with the J.P. Morgan analysts' recommendation.
* The Composite Q-Score is calculated by weighting and combining the 10 Quant return drivers shown. The higher the Q-Score the higher the one month expected return. On a 14 Year back-test the stocks with the highest Q-Scores have been shown (on average) to significantly outperform those stocks with the lowest Q-Scores in this universe. ** The number of up, down and unchanged target prices, recommendations or EPS forecasts that make up consensus.

Leon Chik, CFA
(852) 2800-8590
leon.hk.chik@jpmorgan.com

Analyst Certification:
The research analyst(s) denoted by an “AC” on the cover of this report certifies (or, where multiple research analysts are primarily responsible for this report, the research analyst denoted by an “AC” on the cover or within the document individually certifies, with respect to each security or issuer that the research analyst covers in this research) that: (1) all of the views expressed in this report accurately reflect his or her personal views about any and all of the subject securities or issuers; and (2) no part of any of the research analyst’s compensation was, is, or will be directly or indirectly related to the specific recommendations or views expressed by the research analyst(s) in this report.

Important Disclosures

Xinyi Glass (0868.HK) Price Chart



Date	Rating	Share Price (HK$)	Price Target (HK$)
20-Nov-06	N	3.11	-
03-Apr-07	OW	4.11	5.50
28-Sep-07	N	11.20	11.40
31-Mar-08	OW	5.36	6.90
08-May-08	OW	6.00	8.00
02-Sep-08	OW	4.15	6.90
18-Nov-08	OW	2.15	5.00
03-Feb-09	OW	1.97	4.50

Source: Bloomberg and J.P. Morgan; price data adjusted for stock splits and dividends.
Break in coverage Apr 08, 2009 - Mar 04, 2010. This chart shows J.P. Morgan's continuing coverage of this stock; the current analyst may or may not have covered it over the entire period.
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IB clients*	78%	73%	57%

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Leon Chik, CFA
(852) 2800-8590
leon.hk.chik@jpmorgan.com

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