

27 November 2018

China

EQUITIES

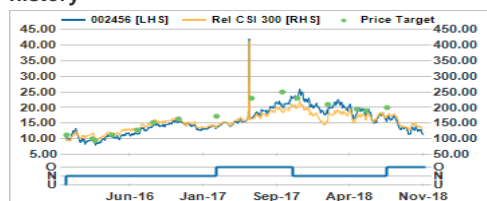
AShare
Research002456 CH Outperform
Price (at 14:02, 26 Nov 2018 GMT) Rmb11.23

Valuation	Rmb	20.00
- PER		
12-month target	Rmb	20.00
Upside/Downside	%	+78.1
12-month TSR	%	+79.3
GICS sector		
Technology Hardware & Equipment		
Market cap	Rmbm	30,466
Market cap	US\$m	4,389
Free float	%	68
30-day avg turnover	US\$m	92.9
Number shares on issue	m	2,713

Investment fundamentals

Year end 31 Dec		2017A	2018E	2019E	2020E
Revenue	m	33,791	45,312	57,221	70,644
EBITDA	m	2,491	4,708	6,788	7,390
EBITDA growth	%	52.5	89.0	44.2	8.9
EBIT	m	1,290	2,857	3,895	4,394
EBIT growth	%	21.3	121.4	36.3	12.8
Reported profit	m	823	1,925	2,790	3,210
EPS rep	Rmb	0.30	0.71	1.03	1.18
EPS rep growth	%	14.4	134.0	44.9	15.1
PER rep	x	37.1	15.8	10.9	9.5
Total DPS	Rmb	0.04	0.11	0.16	0.18
Total div yield	%	0.4	1.0	1.4	1.6
ROA	%	4.8	8.3	9.5	9.2
ROE	%	12.2	21.5	25.1	23.6
EV/EBITDA	x	15.8	8.4	5.8	5.3
Net debt/equity	%	51.9	52.0	41.5	33.2
P/BV	x	3.3	2.8	2.3	1.9

002456 CH rel CSI 300 performance, & rec history



Note: Recommendation timeline - if not a continuous line, then there was no Macquarie coverage at the time or there was an embargo period.

Source: FactSet, Macquarie Research, November 2018
(all figures in Rmb unless noted, TP in CNY)

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O-Film (A-Share) (002456 CH) NDR; handset lens in strong expansion

Key points

- ▶ We hosted a NDR with O-Film in Hong Kong on Nov 27.
- ▶ Investors are highly interested in its handset lens / vehicle lens progress, capital burden, qualification lead time, and camera module dynamics.
- ▶ We maintain our positive view on O-Film and suggest investors to short existing handset lens players: Sunny Optical, Largan and AAC.

Event

- **We hosted a NDR with O-Film in Hong Kong on Nov 27.** Investors are highly interested in its handset lens and vehicle lens, including the product progress / roadmap, capacity expansion plan, capital burden, qualification lead time, etc. Investors are also interested in camera module competition dynamics, smartphone end market outlook, and brand makers' camera design trend.

Impact

- **Handset lens capacity expansion:** Management is confident about their handset lens capacity expansion plan, which they guided in the 3Q18 analyst briefing ([link](#), Oct 25). Managements are also confident on the shipment / full utilization rate given their large scale in camera module. We model O-Film's 2019 single camera module shipment for China smartphones at 536m or 45m per month on average.
- **Handset lens qualification less than 1 month, leveraging camera module:** Management highlighted they will market their handset lens via its camera module, just like Sunny Optical, and highlighted the qualification takes less than 1 month, echoing our view that the impact to the industry is immediate.
- **Handset lens capacity expansion at light capex burden:** Management highlighted handset lens is a light-asset business, and do not see the capex as a burden to slow down its capacity expansion, echoing our view.
- **Vehicle lens, qualification lead time around 6 months:** Management highlighted that, apart from Fujifilm's clients (mainly German and Japanese auto brands), O-Film can also leverage its existing vehicle camera module clients, GAC group, and SAIC Motor. Management highlighted the qualification lead time for the vehicle lens on its existing module clients will only take around 6 months, much faster than the first-time application.
- **Camera module, market share gain in Huawei flagship models:** Management highlighted their allocation in P20 Pro was at 40% in the beginning and up to 60% in May due to quality, shorter response times, and strong execution. O-Film gained 60%+ allocation in Mate 20 / 20 Pro since beginning.

Earnings and target price revision

- No change.

Price catalyst

- 12-month price target: Rmb20.00 based on a PER method (20x 2019E PE).
- Catalyst: Handset lens, Vehicle lens

Action and recommendation

- Maintain Outperform.

Stocks mentioned

Sunny Optical (2382 HK, HK\$75.40, Underperform, TP: HK\$60.00, Allen Chang)

Largan Precision (3008 TT, NT\$3,485.00, Underperform, TP: NT\$2,200.00, Allen Chang)

AAC Technologies (2018 HK, HK\$54.95, Underperform, TP: HK\$43.00, Allen Chang)

Macquarie Quant Alpha Model Views

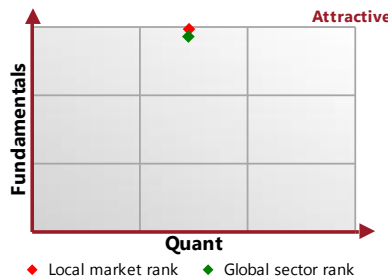
The Quant View page below has been derived from models that are developed and maintained by Sales and Trading personnel at Macquarie. The models are not a product of the Macquarie Research Department.

The quant model currently holds a neutral view on O-Film (A-Share). The strongest style exposure is Earnings Momentum, indicating this stock has received earnings upgrades and is well liked by sell side analysts. The weakest style exposure is Quality, indicating this stock is likely to have a weaker and less stable underlying earnings stream.

495/955

Global rank in
Technology Hardware & Equipment

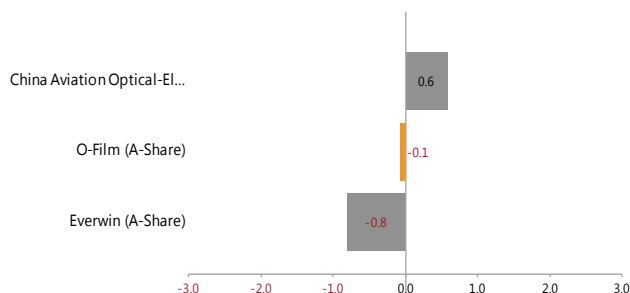
% of BUY recommendations: 85% (17/20)
 Number of Price Target downgrades: 2
 Number of Price Target upgrades: 0



Displays where the company's ranked based on the fundamental consensus Price Target and Macquarie's Quantitative Alpha model. Two rankings: Local market (China A) and Global sector (Technology Hardware & Equipment)

Macquarie Alpha Model ranking

A list of comparable companies and their Macquarie Alpha model score (higher is better).



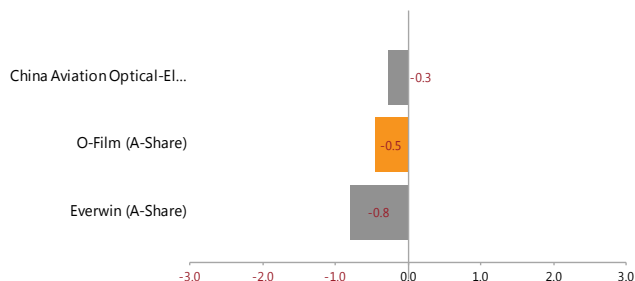
Factors driving the Alpha Model

For the comparable firms this chart shows the key underlying styles and their contribution to the current overall Alpha score.



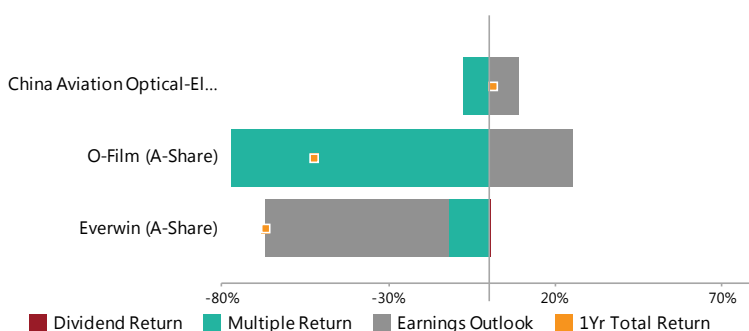
Macquarie Earnings Sentiment Indicator

The Macquarie Sentiment Indicator is an enhanced earnings revisions signal that favours analysts who have more timely and higher conviction revisions. Current score shown below.



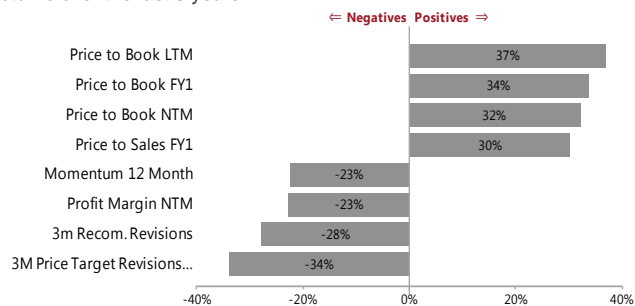
Drivers of Stock Return

Breakdown of 1 year total return (local currency) into returns from dividends, changes in forward earnings estimates and the resulting change in earnings multiple.



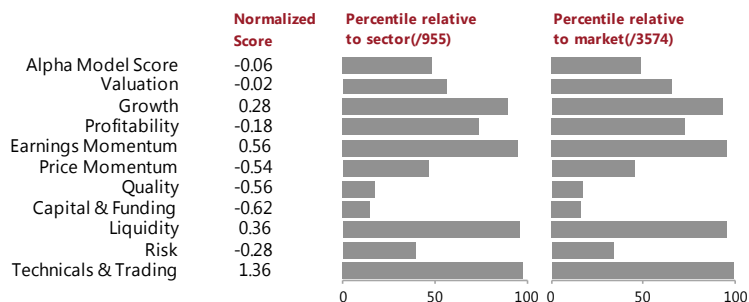
What drove this Company in the last 5 years

Which factor score has had the greatest correlation with the company's returns over the last 5 years.



How it looks on the Alpha model

A more granular view of the underlying style scores that drive the alpha (higher is better) and the percentile rank relative to the sector and market.



Source (all charts): FactSet, Thomson Reuters, and Macquarie Quant. For more details on the Macquarie Alpha model or for more customised analysis and screens, please contact the Macquarie Global Quantitative/Custom Products Group (cpg@macquarie.com)

O-Film (A-Share) (002456 CH, Outperform, Target Price: Rmb20.00)

Quarterly Results					Profit & Loss						
		3Q/18A	4Q/18E	1Q/19E	2Q/19E		2017A	2018E	2019E	2020E	
Revenue	m	12,890	14,166	12,212	13,525	Revenue	m	33,791	45,312	57,221	70,644
Gross Profit	m	1,885	1,918	1,660	1,833	Gross Profit	m	4,651	6,590	7,791	9,123
Cost of Goods Sold	m	11,005	12,248	10,552	11,691	Cost of Goods Sold	m	29,140	38,723	49,430	61,521
EBITDA	m	1,337	1,244	1,540	1,623	EBITDA	m	2,491	4,708	6,788	7,390
Depreciation	m	406	406	666	666	Depreciation	m	973	1,623	2,666	2,769
Amortisation of Goodwill	m	57	57	57	57	Amortisation of Goodwill	m	228	228	228	228
Other Amortisation	m	0	0	0	0	Other Amortisation	m	0	0	0	0
EBIT	m	874	782	817	900	EBIT	m	1,290	2,857	3,895	4,394
Net Interest Income	m	-174	-115	-146	-146	Net Interest Income	m	-307	-576	-584	-582
Associates	m	-0	0	0	0	Associates	m	1	-10	0	0
Exceptionals	m	0	0	0	0	Exceptionals	m	0	0	0	0
Forex Gains / Losses	m	-35	0	0	0	Forex Gains / Losses	m	-114	-51	0	0
Other Pre-Tax Income	m	36	0	-0	-0	Other Pre-Tax Income	m	113	61	-0	-0
Pre-Tax Profit	m	701	666	671	754	Pre-Tax Profit	m	983	2,282	3,311	3,811
Tax Expense	m	-70	-120	-107	-121	Tax Expense	m	-162	-362	-530	-610
Net Profit	m	631	546	564	633	Net Profit	m	821	1,920	2,781	3,201
Minority Interests	m	2	2	2	2	Minority Interests	m	2	5	8	8
Reported Earnings	m	633	549	566	636	Reported Earnings	m	823	1,925	2,790	3,210
Adjusted Earnings	m	690	606	623	693	Adjusted Earnings	m	1,050	2,153	3,017	3,437
EPS (rep)		0.23	0.20	0.21	0.23	EPS (rep)		0.30	0.71	1.03	1.18
EPS (adj)		0.25	0.22	0.23	0.26	EPS (adj)		0.39	0.79	1.11	1.27
EPS Growth yoy (adj)	%	50.3	nmf	76.8	37.1	EPS Growth (adj)	%	21.6	105.0	40.2	13.9
						PE (rep)	x	37.1	15.8	10.9	9.5
						PE (adj)	x	29.0	14.2	10.1	8.9
EBITDA Margin	%	10.4	8.8	12.6	12.0	Total DPS		0.04	0.11	0.16	0.18
EBIT Margin	%	6.8	5.5	6.7	6.7	Total Div Yield	%	0.4	1.0	1.4	1.6
Earnings Split	%	32.0	28.1	20.6	23.0	Basic Shares Outstanding	m	2,714	2,714	2,714	2,714
Revenue Growth	%	38.1	51.8	61.6	26.4	Diluted Shares Outstanding	m	2,714	2,714	2,714	2,714
EBIT Growth	%	57.0	nmf	58.0	31.6						
Profit and Loss Ratios					Cashflow Analysis						
		2017A	2018E	2019E	2020E		2017A	2018E	2019E	2020E	
Revenue Growth	%	26.3	34.1	26.3	23.5	EBITDA	m	2,491	4,708	6,788	7,390
EBITDA Growth	%	52.5	89.0	44.2	8.9	Tax Paid	m	-162	-362	-530	-610
EBIT Growth	%	21.3	121.4	36.3	12.8	Chgs in Working Cap	m	-2,096	2,659	-1,903	-2,327
Gross Profit Margin	%	13.8	14.5	13.6	12.9	Net Interest Paid	m	-307	-576	-584	-582
EBITDA Margin	%	7.4	10.4	11.9	10.5	Other	m	403	15	8	8
EBIT Margin	%	3.8	6.3	6.8	6.2	Operating Cashflow	m	329	6,445	3,780	3,880
Net Profit Margin	%	3.1	4.8	5.3	4.9	Acquisitions	m	0	0	0	0
Payout Ratio	%	11.4	13.6	14.0	14.2	Capex	m	-3,141	-7,000	-3,200	-3,200
EV/EBITDA	x	15.8	8.4	5.8	5.3	Asset Sales	m	0	0	0	0
EV/EBIT	x	30.4	13.8	10.1	8.9	Other	m	-895	0	0	0
Balance Sheet Ratios						Investing Cashflow	m	-4,036	-7,000	-3,200	-3,200
ROE	%	12.2	21.5	25.1	23.6	Dividend (Ordinary)	m	-119	-292	-423	-487
ROA	%	4.8	8.3	9.5	9.2	Equity Raised	m	1,628	0	0	0
ROIC	%	11.4	17.2	19.9	19.8	Debt Movements	m	3,539	0	0	0
Net Debt/Equity	%	51.9	52.0	41.5	33.2	Other	m	-1,130	-10	0	-0
Interest Cover	x	4.2	5.0	6.7	7.5	Financing Cashflow	m	3,918	-302	-423	-487
Price/Book	x	3.3	2.8	2.3	1.9	Net Chg in Cash/Debt	m	216	-857	156	193
Book Value per Share		3.4	4.0	4.9	5.9	Free Cashflow	m	-2,811	-555	580	680
						Balance Sheet		2017A	2018E	2019E	2020E
						Cash	m	1,591	734	890	1,083
						Receivables	m	7,612	8,972	12,016	15,542
						Inventories	m	7,680	8,829	11,863	15,380
						Investments	m	0	0	0	0
						Fixed Assets	m	8,367	13,744	14,279	14,710
						Intangibles	m	1,203	975	747	519
						Other Assets	m	4,386	4,386	4,386	4,386
						Total Assets	m	30,838	37,640	44,182	51,620
						Payables	m	9,933	15,102	19,278	23,993
						Short Term Debt	m	4,189	4,189	4,189	4,189
						Long Term Debt	m	2,169	2,169	2,169	2,169
						Provisions	m	0	0	0	0
						Other Liabilities	m	5,359	5,359	5,359	5,359
						Total Liabilities	m	21,650	26,819	30,994	35,710
						Shareholders' Funds	m	9,268	10,901	13,267	15,989
						Minority Interests	m	0	0	0	0
						Other	m	-80	-80	-80	-80
						Total S/H Equity	m	9,188	10,821	13,187	15,910
						Total Liab & S/H Funds	m	30,838	37,640	44,182	51,620

All figures in Rmb unless noted.

Source: Company data, Macquarie Research, November 2018

Important disclosures:

Recommendation definitions

Macquarie - Australia/New Zealand

Outperform – return >3% in excess of benchmark return
 Neutral – return within 3% of benchmark return
 Underperform – return >3% below benchmark return

Benchmark return is determined by long term nominal GDP growth plus 12 month forward market dividend yield, which is currently around 9%.

Macquarie – Asia/Europe

Outperform – expected return >+10%
 Neutral – expected return from -10% to +10%
 Underperform – expected return <-10%

Mazi Macquarie – South Africa

Outperform – expected return >+10%
 Neutral – expected return from -10% to +10%
 Underperform – expected return <-10%

Macquarie - Canada

Outperform – return >5% in excess of benchmark return
 Neutral – return within 5% of benchmark return
 Underperform – return >5% below benchmark return

Macquarie - USA

Outperform (Buy) – return >5% in excess of Russell 3000 index return
 Neutral (Hold) – return within 5% of Russell 3000 index return
 Underperform (Sell) – return >5% below Russell 3000 index return

Volatility index definition*

This is calculated from the volatility of historical price movements.

Very high-highest risk – Stock should be expected to move up or down 60–100% in a year – investors should be aware this stock is highly speculative.

High – stock should be expected to move up or down at least 40–60% in a year – investors should be aware this stock could be speculative.

Medium – stock should be expected to move up or down at least 30–40% in a year.

Low-medium – stock should be expected to move up or down at least 25–30% in a year.

Low – stock should be expected to move up or down at least 15–25% in a year.

* Applicable to Asia/Australian/NZ/Canada stocks only

Recommendations – 12 months

Note: Quant recommendations may differ from Fundamental Analyst recommendations

Financial definitions

All "Adjusted" data items have had the following adjustments made:

Added back: goodwill amortisation, provision for catastrophe reserves, IFRS derivatives & hedging, IFRS impairments & IFRS interest expense
 Excluded: non recurring items, asset revals, property revals, appraisal value uplift, preference dividends & minority interests

EPS = adjusted net profit / efpowa*

ROA = adjusted ebit / average total assets

ROA Banks/Insurance = adjusted net profit / average total assets

ROE = adjusted net profit / average shareholders funds

Gross cashflow = adjusted net profit + depreciation

*equivalent fully paid ordinary weighted average number of shares

All Reported numbers for Australian/NZ listed stocks are modelled under IFRS (International Financial Reporting Standards).

Recommendation proportions – For quarter ending 30 September 2018

	AU/NZ	Asia	RSA	USA	CA	EUR	
Outperform	51.56%	59.51%	45.05%	46.88%	67.86%	46.70%	(for global coverage by Macquarie, 3.70% of stocks followed are investment banking clients)
Neutral	33.20%	28.92%	37.36%	47.70%	25.00%	42.73%	(for global coverage by Macquarie, 2.04% of stocks followed are investment banking clients)
Underperform	15.23%	11.57%	17.58%	5.42%	7.14%	10.57%	(for global coverage by Macquarie, 0.47% of stocks followed are investment banking clients)

002456 CH vs CSI 300, & rec history



(all figures in CNY currency unless noted)

2382 HK vs HSI, & rec history



(all figures in HKD currency unless noted)

3008 TT vs TAIEX, & rec history



(all figures in TWD currency unless noted)

2018 HK vs HSI, & rec history



(all figures in HKD currency unless noted)

Note: Recommendation timeline – if not a continuous line, then there was no Macquarie coverage at the time or there was an embargo period.
 Source: FactSet, Macquarie Research, November 2018

12-month target price methodology

002456 CH: Rmb20.00 based on a PER methodology

2382 HK: HK\$60.00 based on a PER methodology

3008 TT: NT\$2,200.00 based on a PER methodology

2018 HK: HK\$43.00 based on a PER methodology

Company-specific disclosures:

2382 HK: Macquarie Capital Limited makes a market in the securities of Sunny Optical Technology (Group) Company Limited. **2018 HK:** Macquarie Capital Limited makes a market in the securities of AAC Technologies Inc.

Important disclosure information regarding the subject companies covered in this report is available at www.macquarie.com/research/disclosures.

Date	Stock Code (BBG code)	Recommendation	Target Price
07-Aug-2018	002456 CH	Outperform	Rmb20.00
04-Jun-2018	002456 CH	Neutral	Rmb19.00
07-May-2018	002456 CH	Neutral	Rmb19.50
07-Feb-2018	002456 CH	Neutral	Rmb21.00

06-Nov-2017	002456 CH	Neutral	Rmb23.00
24-Oct-2017	002456 CH	Neutral	Rmb25.00
21-Sep-2017	002456 CH	Outperform	Rmb25.00
19-Jun-2017	002456 CH	Outperform	Rmb23.00
04-Mar-2017	002456 CH	Outperform	Rmb17.20
08-Nov-2016	002456 CH	Neutral	Rmb16.40
23-Aug-2016	002456 CH	Neutral	Rmb15.20
05-Jul-2016	002456 CH	Neutral	Rmb12.80
19-Apr-2016	002456 CH	Neutral	Rmb11.20
27-Feb-2016	002456 CH	Neutral	Rmb9.40
19-Feb-2016	002456 CH	Neutral	Rmb10.00
02-Dec-2015	002456 CH	Neutral	Rmb11.20

Target price risk disclosures:

002456 CH: Any inability to compete successfully in their markets may harm the business. This could be a result of many factors which may include geographic mix and introduction of improved products or service offerings by competitors. The results of operations may be materially affected by global economic conditions generally, including conditions in financial markets. The company is exposed to market risks, such as changes in interest rates, foreign exchange rates and input prices. From time to time, the company will enter into transactions, including transactions in derivative instruments, to manage certain of these exposures.

2382 HK: Any inability to compete successfully in their markets may harm the business. This could be a result of many factors which may include geographic mix and introduction of improved products or service offerings by competitors. The results of operations may be materially affected by global economic conditions generally, including conditions in financial markets. The company is exposed to market risks, such as changes in interest rates, foreign exchange rates and input prices. From time to time, the company will enter into transactions, including transactions in derivative instruments, to manage certain of these exposures.

3008 TT: Any inability to compete successfully in their markets may harm the business. This could be a result of many factors which may include geographic mix and introduction of improved products or service offerings by competitors. The results of operations may be materially affected by global economic conditions generally, including conditions in financial markets. The company is exposed to market risks, such as changes in interest rates, foreign exchange rates and input prices. From time to time, the company will enter into transactions, including transactions in derivative instruments, to manage certain of these exposures.

2018 HK: Any inability to compete successfully in their markets may harm the business. This could be a result of many factors which may include geographic mix and introduction of improved products or service offerings by competitors. The results of operations may be materially affected by global economic conditions generally, including conditions in financial markets. The company is exposed to market risks, such as changes in interest rates, foreign exchange rates and input prices. From time to time, the company will enter into transactions, including transactions in derivative instruments, to manage certain of these exposures.

Analyst certification:

We hereby certify that all of the views expressed in this report accurately reflect our personal views about the subject company or companies and its or their securities. We also certify that no part of our compensation was, is or will be, directly or indirectly, related to the specific recommendations or views expressed in this report. The Analysts responsible for preparing this report receive compensation from Macquarie that is based upon various factors including Macquarie Group Ltd total revenues, a portion of which are generated by Macquarie Group's Investment Banking activities.

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