

15 June 2018

Hong Kong

EQUITIES

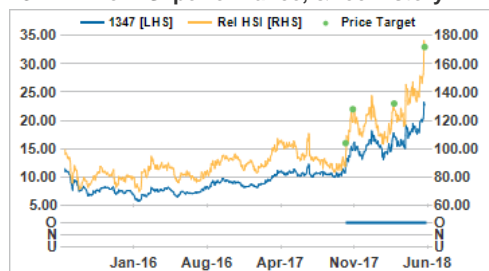
1347 HK Outperform
Price (at 13:00, 15 Jun 2018 GMT) HK\$22.70

| | | |
|--|-------|--------|
| Valuation | HK\$ | 33.00 |
| - Price to Book | | |
| 12-month target | HK\$ | 33.00 |
| Upside/Downside | % | +45.4 |
| 12-month TSR | % | +47.0 |
| Volatility Index | | High |
| GICS sector | | |
| Semiconductors & Semiconductor Equipment | | |
| Market cap | HK\$m | 23,608 |
| Market cap | US\$m | 3,008 |
| Free float | % | 38 |
| 30-day avg turnover | US\$m | 18.2 |
| Number shares on issue | m | 1,040 |

Investment fundamentals

| Year end 31 Dec | | 2017A | 2018E | 2019E | 2020E |
|-----------------|---|-------|-------|---------|---------|
| Revenue | m | 808.1 | 919.8 | 1,062.7 | 1,436.5 |
| EBIT | m | 151.3 | 180.5 | 207.6 | 250.8 |
| EBIT growth | % | 30.3 | 19.3 | 15.0 | 20.8 |
| Reported profit | m | 145.3 | 169.3 | 198.7 | 232.2 |
| EPS rep | ¢ | 14.0 | 14.6 | 15.5 | 18.1 |
| EPS rep growth | % | 12.7 | 4.0 | 6.3 | 16.8 |
| PER rep | x | 20.6 | 19.8 | 18.6 | 16.0 |
| Total DPS | ¢ | 4.2 | 4.0 | 4.7 | 5.4 |
| Total div yield | % | 1.5 | 1.4 | 1.6 | 1.9 |
| ROA | % | 7.7 | 7.2 | 6.9 | 7.6 |
| ROE | % | 9.1 | 8.5 | 8.4 | 9.2 |
| EV/EBITDA | x | 9.3 | 9.8 | 7.4 | 5.4 |
| Net debt/equity | % | -28.1 | -25.9 | -12.3 | -6.9 |
| P/BV | x | 1.8 | 1.6 | 1.5 | 1.4 |

1347 HK rel HSI 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, June 2018
(all figures in USD unless noted, TP in HKD)

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Hua Hong

PT up to HK\$33; 8" wafer in demand, IGBT, MCU

Key points

- ▶ The share price has been up 111% since Oct 2017 and reached our previous PT (23), we expect the street to follow our bullish view.
- ▶ We raise PT to HK\$33 with a higher conviction on Hua Hong's product mix upgrade toward IGBT/MCU, driving higher 8" wafer ASP growth than peers.
- ▶ Hua Hong's IGBT has been qualified by SAIC HEV and wind power project.

Conclusion

- **We raise 2018-20E EPS by 3%/4%/4% (Fig 4) on higher 8" wafer ASP and IGBT/MCU demand.** We see 8" wafer price hike across all foundries due to higher raw wafer cost and supply tightness, and we expect Hua Hong to enjoy stronger ASP growth on product mix (higher 90nm, IGBT, MCU).

Impact

- **8" wafer ASP growth higher than peers on product mix:** We expect Hua Hong's 8" wafer ASP to grow 10% YoY in 2018E (vs Vanguard's +3%), given 1) product mix improvement with 90nm up to 7% of rev in 2018E (vs 4% in 2017) and migration to high-ASP products such as IGBT, 2) reflecting higher 8" raw wafer cost of +11% YoY in 2018E, and 3) overall industry supply tightness with >90% utilization rates across all major foundries' 8" fabs.
- **IGBT – 1m units of 8" wafer demand from EV/HEV in China in 2020:** Hua Hong forecasts IGBT demand from EV/HEV in China growing to 1m units of 8" wafer in 2020, from 250k units of 8" wafer in 2016. Hua Hong's IGBT has been qualified by SAIC Roewe e550 HEV, and 3300V IGBT has been qualified by a wind power project in Inner Mongolia. Hua Hong has comprehensive IGBT technologies (Fig 1) across 600V to 6500V for applications such as power train, smart grid, EV/HEV, motor control, etc.
- **MCU – expanding analog IP portfolio:** Hua Hong recently developed its own analog IP portfolio for MCUs based on 0.11um ULL platform. The IP portfolio includes clock management, power management, and analog digital converter. Hua Hong targets to gain market share with these IPs in 8-bit and 32-bit MCUs for IoT, industrial control, and auto electronics applications. We expect Hua Hong's MCU revenue to grow 18% YoY and to contribute 20% of Hua Hong's revenue in 2018E (vs 19% in 2017).

Earnings and target price revision

- New PT HK\$33 is based on 2.2x 2019E PB (from 17.x 2018E PB). We raise our 2018-20E EPS by 3%/4%/4% on higher rev/GM.

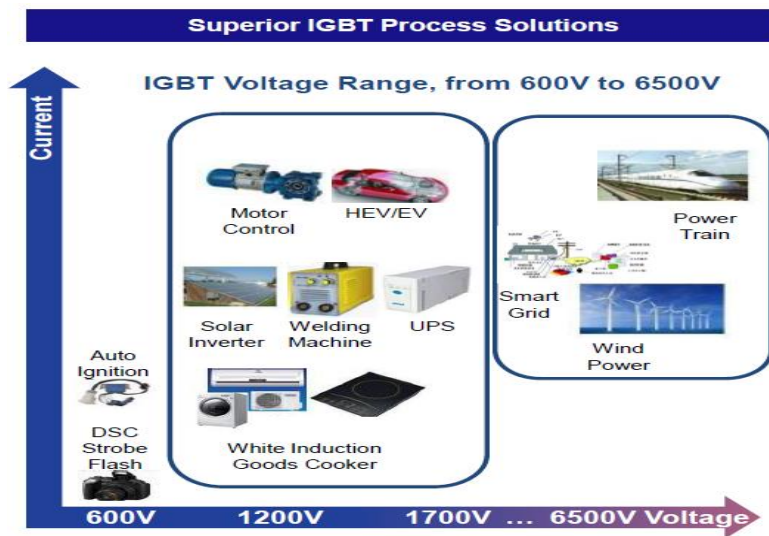
Price catalyst

- 12-month price target: HK\$33.00 based on a Price to Book methodology.
- Catalyst: 2Q18 results.

Action and recommendation

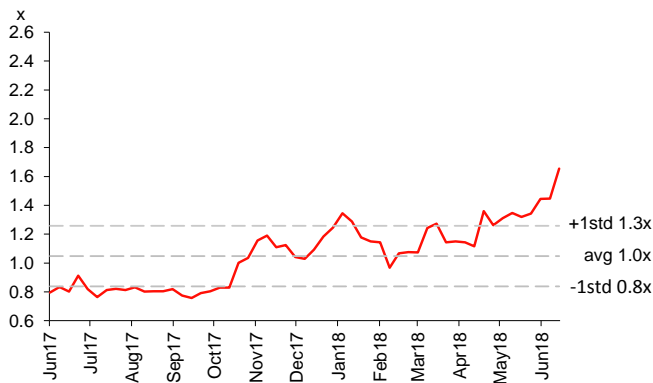
- Maintain Outperform.

Fig 1 Hua Hong's IGBT technology solutions



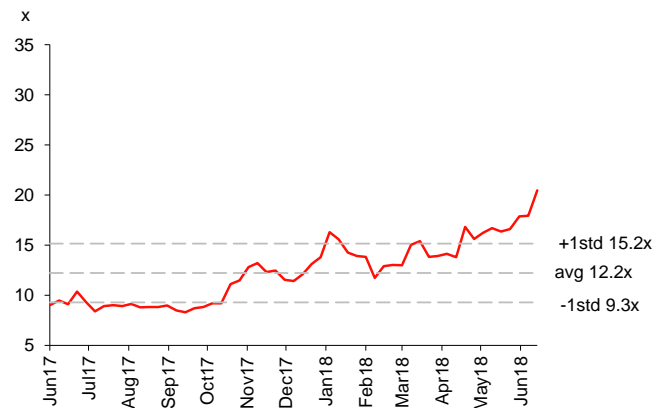
Source: Company data, June 2018

Fig 2 Hua Hong PB chart



Source: Company data, Macquarie Research, June 2018

Fig 3 Hua Hong PE chart



Source: Company data, Macquarie Research, June 2018

Fig 4 Macquarie Research vs. Bloomberg consensus

| (US\$m) | 2018E | | | 2019E | | | 2020E | | |
|------------------|-------|-------|------|-------|-------|------|-------|-------|------|
| | MQ | Con. | Diff | MQ | Con. | Diff | MQ | Con. | Diff |
| Sales | 920 | 908 | 1% | 1,063 | 1,019 | 4% | 1,436 | 1,243 | 16% |
| Gross profit | 304 | 303 | 0% | 347 | 332 | 4% | 425 | 366 | 16% |
| Operating profit | 181 | 179 | 1% | 208 | 194 | 7% | 251 | 209 | 20% |
| Net income | 169 | 168 | 1% | 199 | 190 | 5% | 232 | 216 | 7% |
| Margin | | | | | | | | | |
| Gross margin | 33.1% | 33.4% | | 32.7% | 32.6% | | 29.6% | 29.5% | |
| Operating margin | 19.6% | 19.7% | | 19.5% | 19.0% | | 17.5% | 16.9% | |
| Net margin | 18.4% | 18.5% | | 18.7% | 18.6% | | 16.2% | 17.4% | |

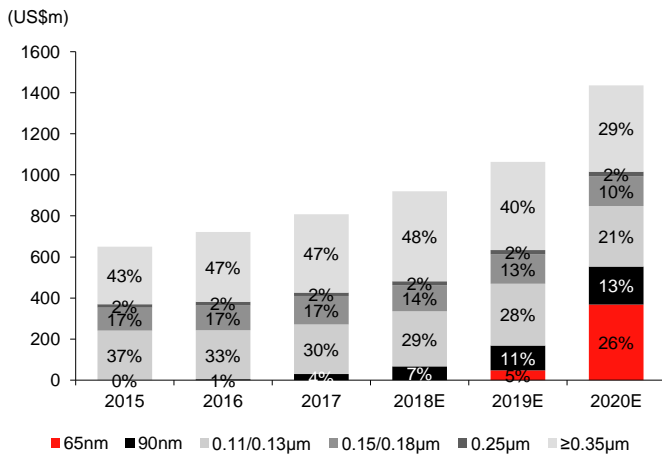
Source: Company data, Macquarie Research, June 2018

Fig 5 Earnings Revision

| (US\$m) | Revised | | | Prior | | | Change % | | |
|------------------|---------|-------|-------|-------|-------|-------|----------|-------|-------|
| | 2018E | 2019E | 2020E | 2018E | 2019E | 2020E | 2018E | 2019E | 2020E |
| Sales | 920 | 1,063 | 1,436 | 901 | 1,050 | 1,431 | 2% | 1% | 0% |
| Gross profit | 304 | 347 | 425 | 294 | 328 | 408 | 3% | 6% | 4% |
| Operating profit | 181 | 208 | 251 | 169 | 195 | 238 | 7% | 6% | 5% |
| Net income | 169 | 199 | 232 | 164 | 191 | 224 | 3% | 4% | 4% |
| Margin | | | | | | | | | |
| Gross margin | 33.1% | 32.7% | 29.6% | 32.6% | 31.3% | 28.5% | | | |
| Operating margin | 19.6% | 19.5% | 17.5% | 18.8% | 18.6% | 16.6% | | | |
| Net margin | 18.4% | 18.7% | 16.2% | 18.2% | 18.2% | 15.6% | | | |

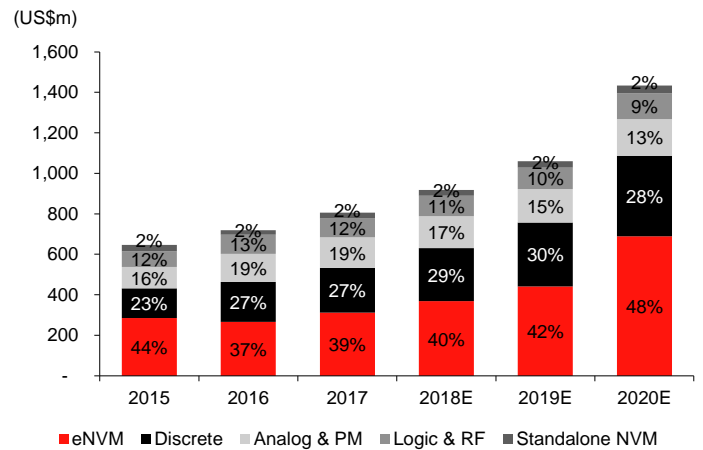
Source: Company data, Macquarie Research, June 2018

Fig 6 Revenue mix by technology nodes



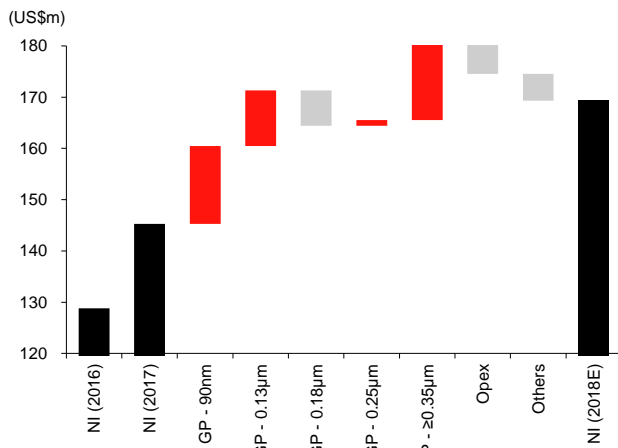
Source: Company data, Macquarie Research, June 2018

Fig 7 Revenue mix by technology platform



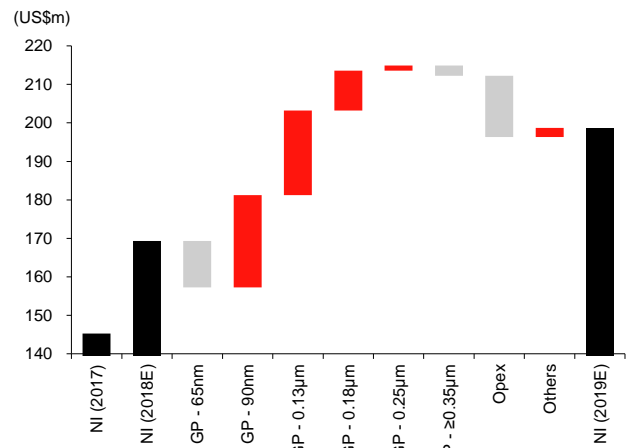
Source: Company data, Macquarie Research, June 2018

Fig 8 2018E waterfall chart



Source: Company data, Macquarie Research, June 2018

Fig 9 2019E waterfall chart



Source: Company data, Macquarie Research, June 2018

Fig 10 Hua Hong P&L

| (US\$m) | 1Q17 | 2Q17 | 3Q17 | 4Q17 | 1Q18 | 2Q18E | 3Q18E | 4Q18E | 2016 | 2017 | 2018E | 2019E | 2020E |
|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Net Sales | 183 | 198 | 210 | 217 | 210 | 225 | 239 | 246 | 721 | 808 | 920 | 1,063 | 1,436 |
| Gross profit | 54 | 66 | 74 | 73 | 67 | 73 | 81 | 83 | 220 | 267 | 304 | 347 | 425 |
| Op income | 32 | 38 | 45 | 36 | 42 | 43 | 49 | 47 | 116 | 151 | 181 | 208 | 251 |
| Pretax income | 34 | 40 | 49 | 49 | 40 | 47 | 56 | 53 | 153 | 172 | 195 | 227 | 269 |
| Net income | 34 | 34 | 35 | 42 | 40 | 40 | 44 | 45 | 129 | 145 | 169 | 199 | 232 |
| EPS (US\$) | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | 0.03 | 0.04 | 0.12 | 0.14 | 0.15 | 0.16 | 0.18 |
| Profitability | | | | | | | | | | | | | |
| Gross Margin | 29.7% | 33.2% | 35.2% | 33.7% | 32.1% | 32.6% | 33.8% | 33.6% | 30.5% | 33.1% | 33.1% | 32.7% | 29.6% |
| Operating Margin | 17.5% | 19.3% | 21.3% | 16.8% | 20.0% | 18.9% | 20.5% | 19.1% | 16.1% | 18.7% | 19.6% | 19.5% | 17.5% |
| Pretax Margin | 18.8% | 20.4% | 23.4% | 22.4% | 19.0% | 20.9% | 23.3% | 21.4% | 21.3% | 21.3% | 21.2% | 21.3% | 18.7% |
| Net Margin | 18.6% | 17.3% | 16.8% | 19.1% | 19.1% | 17.8% | 18.5% | 18.3% | 17.9% | 18.0% | 18.4% | 18.7% | 16.2% |
| Sequential growth | | | | | | | | | | | | | |
| Net Sales | -6% | 8% | 6% | 3% | -3% | 7% | 6% | 3% | 11% | 12% | 14% | 16% | 35% |
| Gross profit | -9% | 21% | 13% | -1% | -8% | 9% | 10% | 2% | 9% | 21% | 14% | 14% | 22% |
| Op income | 5% | 20% | 17% | -19% | 15% | 2% | 15% | -4% | 30% | 30% | 19% | 15% | 21% |
| Pretax income | -23% | 18% | 21% | -1% | -18% | 18% | 18% | -5% | 23% | 12% | 13% | 16% | 19% |
| Net income | -11% | 1% | 3% | 17% | -3% | 0% | 11% | 1% | 14% | 13% | 17% | 17% | 17% |

Source: Company data, Macquarie Research, June 2018

Fig 11 Hua Hong balance sheet

| US\$m | 2014 | 2015 | 2016 | 2017 | 2018E | 2019E | 2020E |
|-------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Cash & equivalents | 647 | 510 | 341 | 568 | 752 | 452 | 334 |
| Receivables | 108 | 104 | 106 | 112 | 132 | 158 | 210 |
| Inventory | 94 | 107 | 95 | 116 | 132 | 168 | 225 |
| Other current assets | 53 | 76 | 172 | 57 | 99 | 124 | 164 |
| Total current assets | 901 | 798 | 715 | 853 | 1,115 | 902 | 933 |
| Fixed assets | 593 | 651 | 677 | 733 | 1,249 | 1,683 | 1,957 |
| LT investments | 422 | 398 | 372 | 395 | 414 | 418 | 426 |
| Other non-current assets | 74 | 65 | 63 | 96 | 130 | 130 | 130 |
| Total non-current assets | 1,089 | 1,114 | 1,112 | 1,225 | 1,794 | 2,231 | 2,513 |
| Total assets | 1,990 | 1,912 | 1,827 | 2,078 | 2,909 | 3,133 | 3,446 |
| Short term debt | 82 | 43 | 2 | 61 | 76 | 95 | 108 |
| Payables | 64 | 66 | 65 | 68 | 74 | 86 | 122 |
| Other current liabilities | 184 | 169 | 171 | 208 | 238 | 283 | 376 |
| Total current liabilities | 330 | 278 | 238 | 337 | 388 | 465 | 605 |
| Long term debt | 183 | 138 | 91 | 32 | 33 | 33 | 33 |
| Other liabilities | 12 | 5 | 9 | 14 | 8 | 8 | 8 |
| Total LT liabilities | 195 | 143 | 100 | 46 | 41 | 41 | 41 |
| Total liabilities | 525 | 421 | 338 | 383 | 430 | 506 | 646 |
| Common stocks | 1,465 | 1,491 | 1,489 | 1,695 | 2,290 | 2,438 | 2,610 |
| Minority equity | 0 | 0 | 0 | 0 | 189 | 189 | 189 |
| Total equity | 1,465 | 1,491 | 1,489 | 1,695 | 2,479 | 2,627 | 2,799 |
| Total liabilities and equity | 1,990 | 1,912 | 1,827 | 2,078 | 2,909 | 3,133 | 3,446 |

Source: Company data, Macquarie Research, June 2018

Fig 12 Hua Hong cash flow

| US\$m | 2014 | 2015 | 2016 | 2017 | 2018E | 2019E | 2020E |
|--------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Net profit | 93 | 113 | 129 | 145 | 169 | 199 | 232 |
| Depreciation | 85 | 79 | 85 | 105 | 142 | 217 | 326 |
| Amortization | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Associate share of (profits)/ loss | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total gross cash flow | 177 | 192 | 214 | 250 | 311 | 415 | 558 |
| Change in net working capital | 58 | -46 | -85 | 129 | -42 | -30 | -22 |
| Others | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total operating cash flow | 235 | 146 | 129 | 378 | 269 | 386 | 536 |
| Capex | -80 | -183 | -173 | -136 | -673 | -650 | -600 |
| (Purchase) Sale of ST investment | -59 | 24 | 25 | -23 | -18 | -4 | -8 |
| (Purchase) Sale of LT investment | 9 | 55 | 64 | -59 | -18 | 0 | 0 |
| Others | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total investment cash flow | -130 | -104 | -83 | -218 | -710 | -654 | -608 |
| Increase (decrease) in debt | -102 | -84 | -88 | 0 | 17 | 19 | 13 |
| Cash dividends | 0 | 0 | -36 | -40 | -44 | -51 | -60 |
| Change in share capital | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Others | 326 | -94 | -91 | 106 | 652 | 0 | 0 |
| Total financing cash flow | 224 | -178 | -215 | 66 | 625 | -32 | -47 |
| Net cash flow | 330 | -136 | -169 | 227 | 184 | -300 | -119 |
| FX change | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Net cash flow after FX change | 330 | -136 | -169 | 227 | 184 | -300 | -119 |

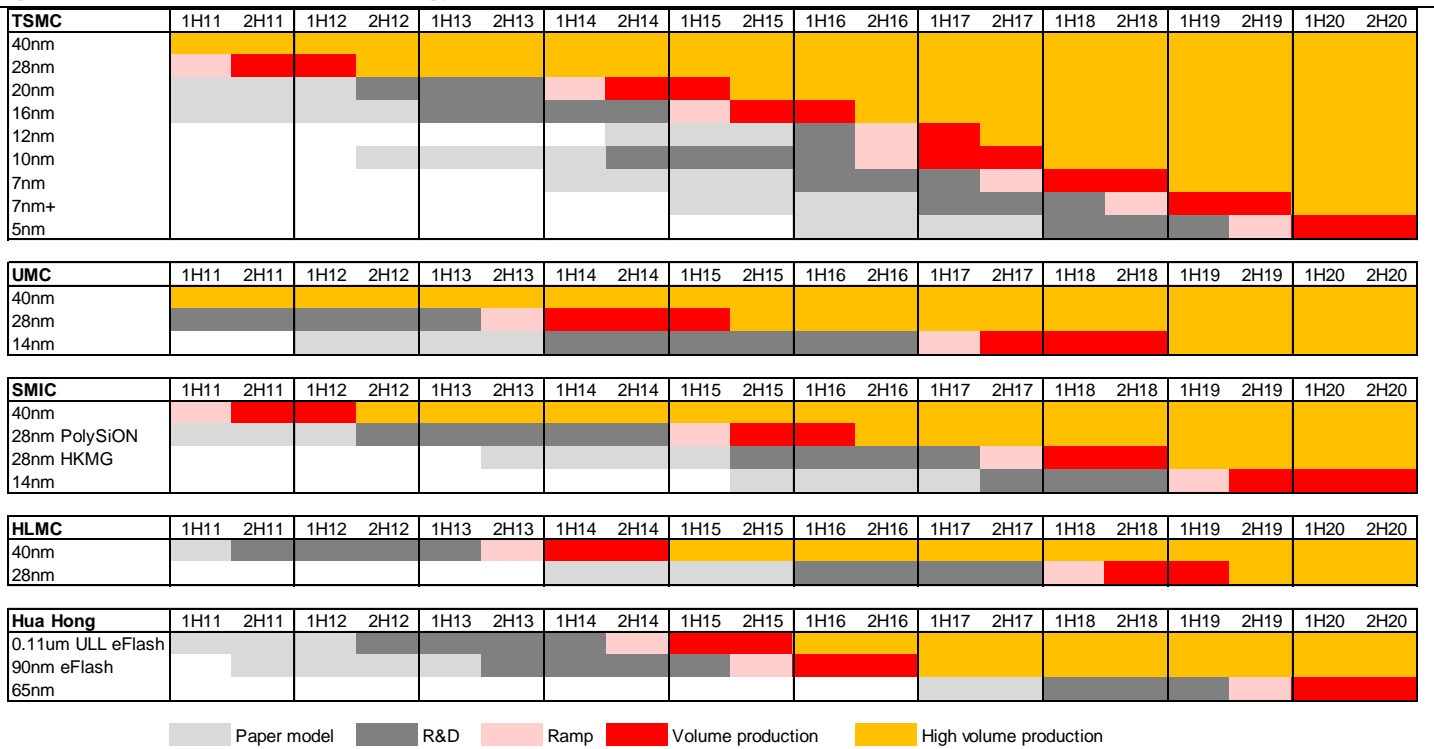
Source: Company data, Macquarie Research, June 2018

Fig 13 Hua Hong key financial ratios

| US\$m | 2014 | 2015 | 2016 | 2017 | 2018E | 2019E | 2020E |
|--------------------------------|--------|--------|--------|--------|--------|--------|-------|
| Revenue | 665 | 650 | 721 | 808 | 920 | 1,063 | 1,436 |
| Gross profit | 197 | 201 | 220 | 267 | 304 | 347 | 425 |
| EBIT | 106 | 89 | 116 | 151 | 181 | 208 | 251 |
| EBITDA | 190 | 168 | 201 | 256 | 322 | 424 | 577 |
| Pretax profit | 121 | 125 | 153 | 172 | 195 | 227 | 269 |
| Net profit | 93 | 113 | 129 | 145 | 169 | 199 | 232 |
| YoY (%) | | | | | | | |
| Revenue | 14% | -2% | 11% | 12% | 14% | 16% | 35% |
| Gross profit | 57% | 2% | 9% | 21% | 14% | 14% | 22% |
| Net profit | 50% | 21% | 14% | 13% | 17% | 17% | 17% |
| Per share data (US\$) | | | | | | | |
| Sales per share | 0.78 | 0.63 | 0.70 | 0.78 | 0.79 | 0.83 | 1.12 |
| EPS | 0.11 | 0.11 | 0.12 | 0.14 | 0.15 | 0.16 | 0.18 |
| BVPS | 1.42 | 1.44 | 1.44 | 1.63 | 1.79 | 1.90 | 2.04 |
| DPS | 0.00 | 0.03 | 0.04 | 0.04 | 0.04 | 0.05 | 0.05 |
| FCF PS | 0.18 | -0.04 | -0.04 | 0.23 | -0.35 | -0.21 | -0.05 |
| Net cash PS | 0.45 | 0.32 | 0.24 | 0.46 | 0.55 | 0.25 | 0.15 |
| Net debt/Equity | -26.1% | -22.1% | -16.7% | -28.1% | -25.9% | -12.3% | -6.9% |
| Margin (%) | | | | | | | |
| Gross margin | 29.6% | 31.0% | 30.5% | 33.1% | 33.1% | 32.7% | 29.6% |
| EBIT margin | 15.9% | 13.7% | 16.1% | 18.7% | 19.6% | 19.5% | 17.5% |
| EBITDA margin | 28.6% | 25.9% | 27.9% | 31.7% | 35.0% | 39.9% | 40.2% |
| Pretax margin | 18.2% | 19.3% | 21.3% | 21.3% | 21.2% | 21.3% | 18.7% |
| Net margin | 14.0% | 17.3% | 17.9% | 18.0% | 18.4% | 18.7% | 16.2% |
| Valuation multiples (x) | | | | | | | |
| P/E | 22.9 | 22.9 | 20.0 | 17.8 | 19.9 | 18.7 | 16.0 |
| P/B | 1.8 | 1.7 | 1.7 | 1.5 | 1.6 | 1.5 | 1.4 |
| FCF yield | 7.3% | -1.4% | -1.7% | 9.4% | -12.0% | -7.1% | -1.7% |
| ROE (%) | 7.4% | 7.6% | 8.6% | 9.1% | 8.1% | 7.8% | 8.6% |
| Dividend yield | 0.0% | 1.4% | 1.5% | 1.7% | 1.4% | 1.6% | 1.9% |
| Payout ratio | 0.0% | 31.9% | 30.8% | 29.9% | 27.2% | 30.0% | 30.0% |

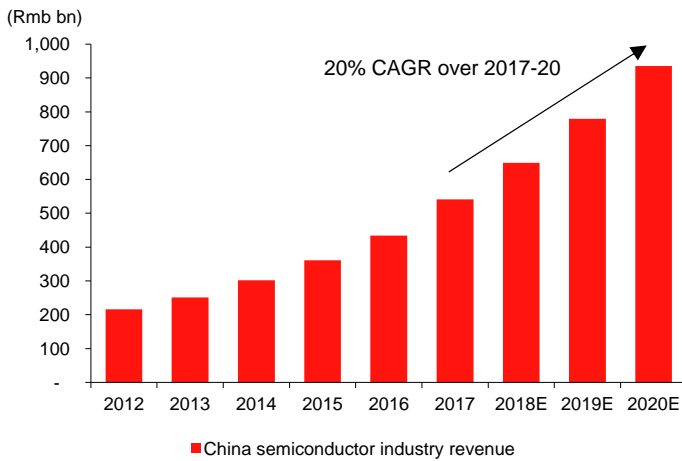
Source: Company data, Macquarie Research, June 2018

Fig 14 Foundries advanced technology development schedule



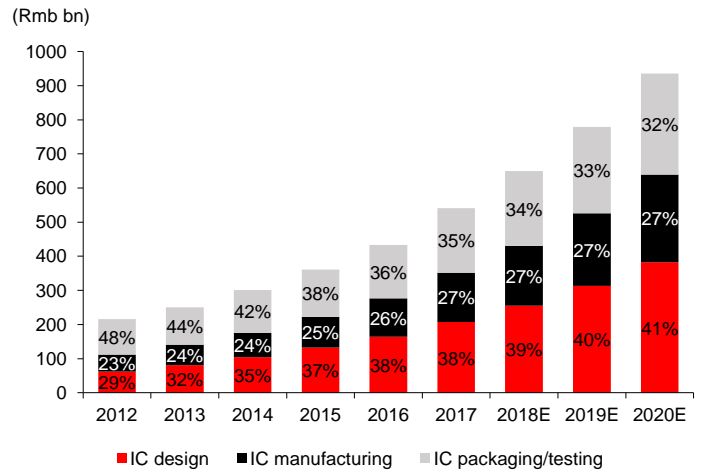
Source: Company data, Macquarie Research, June 2018

Fig 15 China semiconductor industry revenue



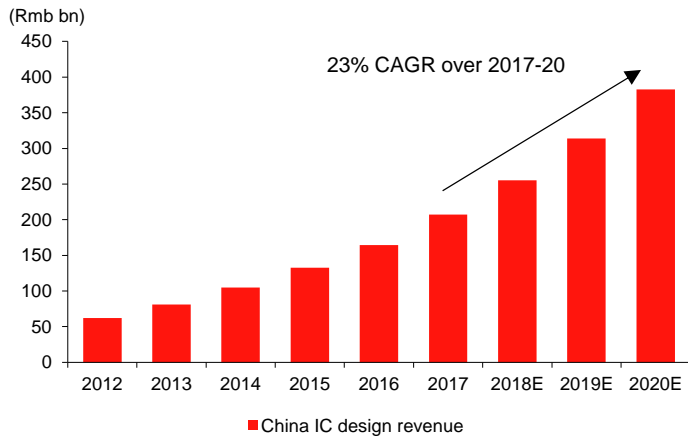
Source: CSIA, Macquarie Research, June 2018

Fig 16 China semi industry revenue by sub-segment



Source: CSIA, Macquarie Research, June 2018

Fig 17 China IC design industry revenue



Source: CSIA, Macquarie Research, June 2018

Fig 18 China IC manufacturing industry revenue



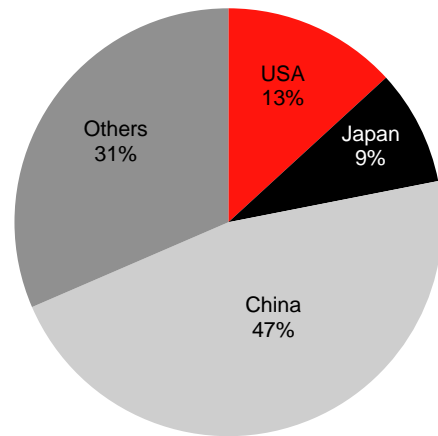
Source: CSIA, Macquarie Research, June 2018

Fig 19 China IC packaging/testing revenue



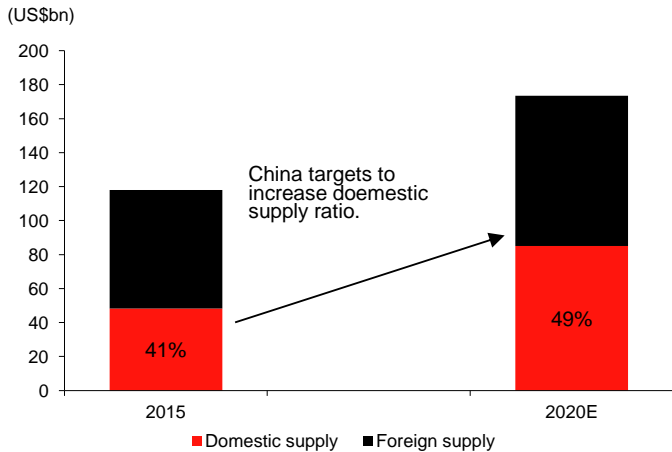
Source: CSIA, Macquarie Research, June 2018

Fig 20 China demand at 47% in 2020E global semi market



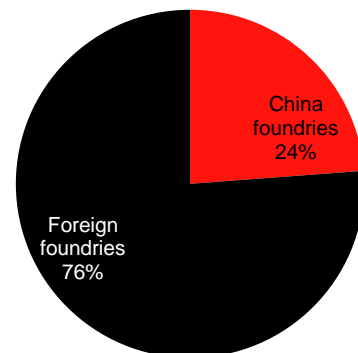
Source: SMIC, Macquarie Research, June 2018

Fig 21 China Semiconductor market supply



Source: State Council of PRC, Macquarie Research, June 2018

Fig 22 China IC design foundry source in 2017



Source: SMIC, Macquarie Research, June 2018

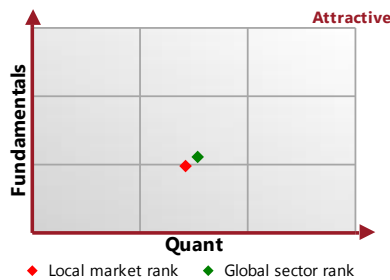
Macquarie Quant View

The quant model currently holds a neutral view on Hua Hong Semiconductor. The strongest style exposure is Price Momentum, indicating this stock has had strong medium to long term returns which often persist into the future. The weakest style exposure is Profitability, indicating this stock is not efficiently converting investments to earnings; proxied by ratios like ROE or ROA.

189/386

Global rank in Semiconductors & Semiconductor Equip.

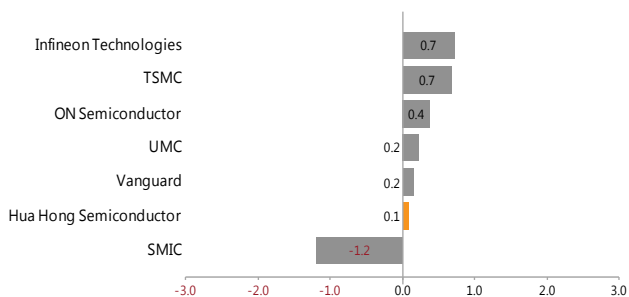
- % of BUY recommendations: 83% (10/12)
- Number of Price Target downgrades: 0
- Number of Price Target upgrades: 3



Displays where the company's ranked based on the fundamental consensus Price Target and Macquarie's Quantitative Alpha model. Two rankings: Local market (Hong Kong) and Global sector (Semiconductors & Semiconductor Equip.)

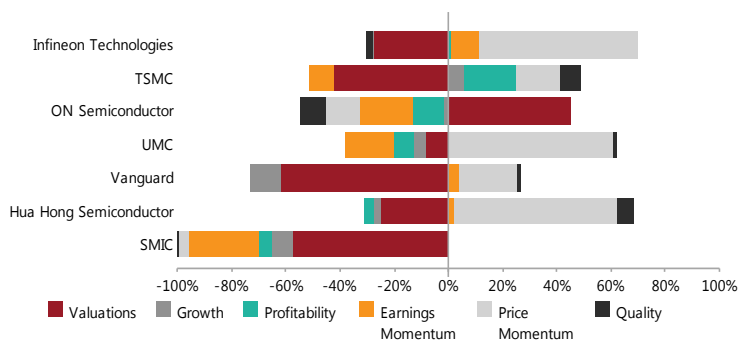
Macquarie Alpha Model ranking

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



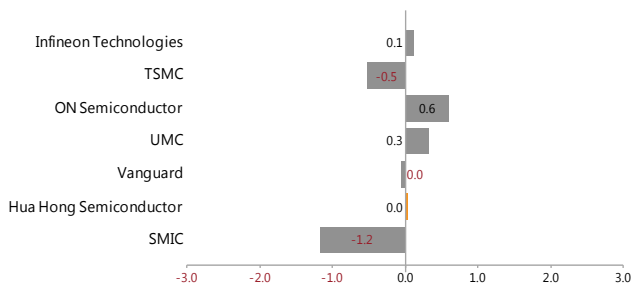
Factors driving the Alpha Model

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



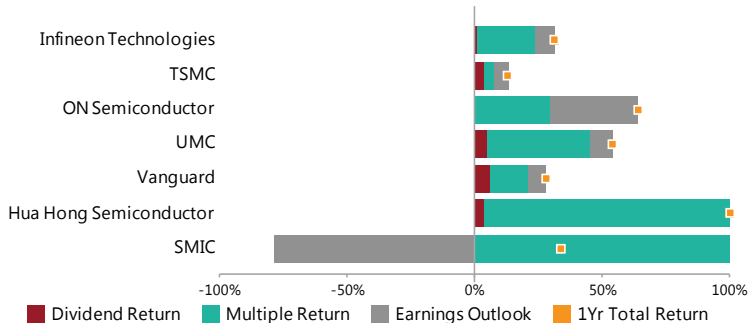
Macquarie Earnings Sentiment Indicator

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.



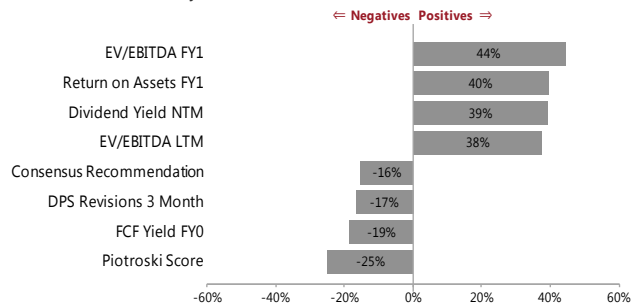
Drivers of Stock Return

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



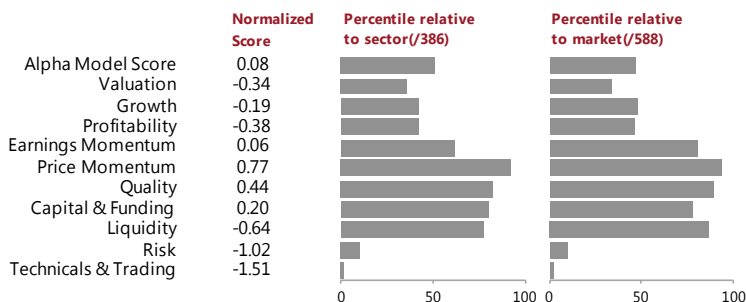
What drove this Company in the last 5 years

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 Research. 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)

Hua Hong Semiconductor (1347 HK, Outperform, Target Price: HK\$33.00)

| Quarterly Results | | | | | Profit & Loss | | | | | | |
|--------------------------|---|--------|--------|--------|-------------------|----------------------------|-------|-------|-------|-------|-------|
| | | 1Q/18A | 2Q/18E | 3Q/18E | 4Q/18E | | 2017A | 2018E | 2019E | 2020E | |
| Revenue | m | 210 | 225 | 239 | 246 | Revenue | m | 808 | 920 | 1,063 | 1,436 |
| Gross Profit | m | 67 | 73 | 81 | 83 | Gross Profit | m | 267 | 304 | 347 | 425 |
| Cost of Goods Sold | m | 143 | 152 | 158 | 163 | Cost of Goods Sold | m | 541 | 616 | 715 | 1,011 |
| EBITDA | m | 72 | 74 | 86 | 90 | EBITDA | m | 256 | 322 | 424 | 577 |
| Depreciation | m | 30 | 32 | 36 | 43 | Depreciation | m | 105 | 142 | 217 | 326 |
| Amortisation of Goodwill | m | 0 | 0 | 0 | 0 | Amortisation of Goodwill | m | 0 | 0 | 0 | 0 |
| Other Amortisation | m | 0 | 0 | 0 | 0 | Other Amortisation | m | 0 | 0 | 0 | 0 |
| EBIT | m | 42 | 43 | 49 | 47 | EBIT | m | 151 | 181 | 208 | 251 |
| Net Interest Income | m | 2 | 2 | 4 | 4 | Net Interest Income | m | 5 | 13 | 11 | 4 |
| Associates | m | 0 | 1 | 1 | 1 | Associates | m | 10 | 3 | 4 | 8 |
| Exceptionals | m | 0 | 0 | 0 | 0 | Exceptionals | m | 0 | 0 | 0 | 0 |
| Forex Gains / Losses | m | 0 | 0 | 0 | 0 | Forex Gains / Losses | m | 0 | 0 | 0 | 0 |
| Other Pre-Tax Income | m | -5 | 1 | 1 | 1 | Other Pre-Tax Income | m | 7 | -2 | 4 | 6 |
| Pre-Tax Profit | m | 40 | 47 | 56 | 53 | Pre-Tax Profit | m | 172 | 195 | 227 | 269 |
| Tax Expense | m | 0 | -7 | -11 | -8 | Tax Expense | m | -27 | -25 | -37 | -44 |
| Net Profit | m | 40 | 40 | 44 | 45 | Net Profit | m | 145 | 170 | 190 | 225 |
| Minority Interests | m | -0 | -0 | -0 | -0 | Minority Interests | m | 0 | -1 | 9 | 7 |
| Reported Earnings | m | 40 | 40 | 44 | 45 | Reported Earnings | m | 145 | 169 | 199 | 232 |
| Adjusted Earnings | m | 40 | 40 | 44 | 45 | Adjusted Earnings | m | 145 | 169 | 199 | 232 |
| EPS (rep) | | 0.04 | 0.04 | 0.03 | 0.04 | EPS (rep) | | 0.14 | 0.15 | 0.16 | 0.18 |
| EPS (adj) | | 0.04 | 0.04 | 0.03 | 0.04 | EPS (adj) | | 0.14 | 0.15 | 0.16 | 0.18 |
| EPS Growth yoy (adj) | % | 17.2 | 15.9 | 1.2 | -12.4 | EPS Growth (adj) | % | 12.6 | 4.6 | 5.7 | 16.8 |
| | | | | | | PE (rep) | x | 20.6 | 19.8 | 18.6 | 16.0 |
| | | | | | | PE (adj) | x | 20.6 | 19.7 | 18.6 | 16.0 |
| EBITDA Margin | % | 34.3 | 33.0 | 35.8 | 36.7 | Total DPS | | 0.04 | 0.04 | 0.05 | 0.05 |
| EBIT Margin | % | 20.0 | 18.9 | 20.5 | 19.1 | Total Div Yield | % | 1.5 | 1.4 | 1.6 | 1.9 |
| Earnings Split | % | 23.7 | 23.6 | 26.2 | 26.5 | Basic Shares Outstanding | m | 1,037 | 1,281 | 1,281 | 1,281 |
| Revenue Growth | % | 14.7 | 13.6 | 13.8 | 13.3 | Diluted Shares Outstanding | m | 1,035 | 1,160 | 1,281 | 1,281 |
| EBIT Growth | % | 31.0 | 11.2 | 9.9 | 29.2 | | | | | | |
| Profit and Loss Ratios | | | | | Cashflow Analysis | | | | | | |
| | | 2017A | 2018E | 2019E | 2020E | | 2017A | 2018E | 2019E | 2020E | |
| Revenue Growth | % | 12.0 | 13.8 | 15.5 | 35.2 | EBITDA | m | 256 | 322 | 424 | 577 |
| EBITDA Growth | % | 27.2 | 25.9 | 31.7 | 36.0 | Tax Paid | m | -27 | -25 | -37 | -44 |
| EBIT Growth | % | 30.3 | 19.3 | 15.0 | 20.8 | Chgs in Working Cap | m | 129 | -42 | -30 | -22 |
| Gross Profit Margin | % | 33.1 | 33.1 | 32.7 | 29.6 | Net Interest Paid | m | 5 | 13 | 11 | 4 |
| EBITDA Margin | % | 31.7 | 35.0 | 39.9 | 40.2 | Other | m | 17 | 1 | 17 | 21 |
| EBIT Margin | % | 18.7 | 19.6 | 19.5 | 17.5 | Operating Cashflow | m | 378 | 269 | 386 | 536 |
| Net Profit Margin | % | 18.0 | 18.4 | 18.7 | 16.2 | Acquisitions | m | 0 | 0 | 0 | 0 |
| Payout Ratio | % | 29.9 | 27.0 | 30.0 | 30.0 | Capex | m | -139 | -658 | -650 | -600 |
| EV/EBITDA | x | 9.3 | 9.8 | 7.4 | 5.4 | Asset Sales | m | 0 | 0 | 0 | 0 |
| EV/EBIT | x | 15.4 | 17.3 | 15.0 | 12.3 | Other | m | -79 | -53 | -4 | -8 |
| Balance Sheet Ratios | | | | | | Investing Cashflow | m | -218 | -710 | -654 | -608 |
| ROE | % | 9.1 | 8.5 | 8.4 | 9.2 | Dividend (Ordinary) | m | -40 | -44 | -51 | -60 |
| ROA | % | 7.7 | 7.2 | 6.9 | 7.6 | Equity Raised | m | 0 | 363 | 0 | 0 |
| ROIC | % | 10.3 | 12.9 | 9.5 | 9.1 | Debt Movements | m | 0 | 17 | 19 | 13 |
| Net Debt/Equity | % | -28.1 | -25.9 | -12.3 | -6.9 | Other | m | 106 | 289 | 0 | -0 |
| Interest Cover | x | nmf | nmf | nmf | nmf | Financing Cashflow | m | 66 | 625 | -32 | -47 |
| Price/Book | x | 1.8 | 1.6 | 1.5 | 1.4 | Net Chg in Cash/Debt | m | 227 | 184 | -300 | -119 |
| Book Value per Share | | 1.6 | 1.8 | 1.9 | 2.0 | Free Cashflow | m | 240 | -388 | -264 | -64 |
| | | | | | | Balance Sheet | | 2017A | 2018E | 2019E | 2020E |
| | | | | | | Cash | m | 568 | 752 | 452 | 334 |
| | | | | | | Receivables | m | 112 | 132 | 158 | 210 |
| | | | | | | Inventories | m | 116 | 132 | 168 | 225 |
| | | | | | | Investments | m | 395 | 414 | 418 | 426 |
| | | | | | | Fixed Assets | m | 733 | 1,249 | 1,683 | 1,957 |
| | | | | | | Intangibles | m | 0 | 0 | 0 | 0 |
| | | | | | | Other Assets | m | 153 | 229 | 254 | 294 |
| | | | | | | Total Assets | m | 2,078 | 2,909 | 3,133 | 3,446 |
| | | | | | | Payables | m | 68 | 74 | 86 | 122 |
| | | | | | | Short Term Debt | m | 61 | 76 | 95 | 108 |
| | | | | | | Long Term Debt | m | 32 | 33 | 33 | 33 |
| | | | | | | Provisions | m | 0 | 0 | 0 | 0 |
| | | | | | | Other Liabilities | m | 222 | 246 | 291 | 384 |
| | | | | | | Total Liabilities | m | 383 | 430 | 506 | 646 |
| | | | | | | Shareholders' Funds | m | 1,695 | 2,253 | 2,401 | 2,573 |
| | | | | | | Minority Interests | m | 0 | 189 | 189 | 189 |
| | | | | | | Other | m | 0 | 37 | 37 | 37 |
| | | | | | | Total S/H Equity | m | 1,695 | 2,479 | 2,627 | 2,799 |
| | | | | | | Total Liab & S/H Funds | m | 2,078 | 2,909 | 3,133 | 3,446 |

All figures in USD unless noted.

Source: Company data, Macquarie Research, June 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

Macquarie – Asia/Europe

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

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 / epowa*

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

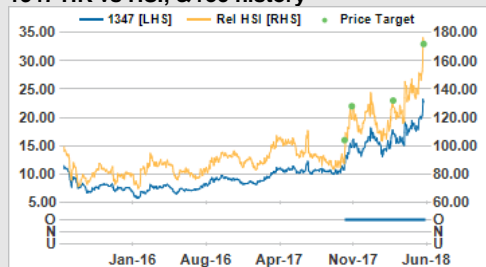
*equivalent fully paid ordinary weighted average number of shares

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

Recommendation proportions – For quarter ending 31 March 2018

| | AU/NZ | Asia | RSA | USA | CA | EUR | |
|--------------|--------|--------|--------|--------|--------|--------|---|
| Outperform | 54.38% | 58.90% | 48.35% | 43.91% | 69.03% | 45.26% | (for global coverage by Macquarie, 3.69% of stocks followed are investment banking clients) |
| Neutral | 32.48% | 27.88% | 34.07% | 48.73% | 21.29% | 38.95% | (for global coverage by Macquarie, 3.07% of stocks followed are investment banking clients) |
| Underperform | 13.14% | 13.21% | 17.58% | 7.37% | 9.68% | 15.79% | (for global coverage by Macquarie, 0.39% of stocks followed are investment banking clients) |

1347 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, June 2018

12-month target price methodology

1347 HK: HK\$33.00 based on a Price to Book methodology

Company-specific disclosures:

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| Date | Stock Code (BVG code) | Recommendation | Target Price |
|-------------|-----------------------|----------------|--------------|
| 14-Mar-2018 | 1347 HK | Outperform | HK\$23.00 |
| 08-Nov-2017 | 1347 HK | Outperform | HK\$22.00 |
| 17-Oct-2017 | 1347 HK | Outperform | HK\$16.00 |

Target price risk disclosures:

1347 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.

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| Kervin Sisayan (Philippines) | (632) 857 0893 |
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| YingYing Hou (Asia) | (852) 3922 5422 |

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Regional Heads of Sales

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| Christina Lee (UK/Europe) | (44 20) 3037 4873 |

Sales Trading

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| Stanley Dunda (Indonesia) | (6221) 515 1555 |

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| Marc Rosa (New York) | (1 212) 231 2555 |
| Justin Morrison (Singapore) | (65) 6601 0288 |
| Daniel Clarke (Taiwan) | (8862) 2734 7580 |
| Brendan Rake (Thailand) | (662) 694 7707 |
| Mike Keen (UK/Europe) | (44 20) 3037 4905 |