

# Commodities Outlook

## China aluminium cuts in focus

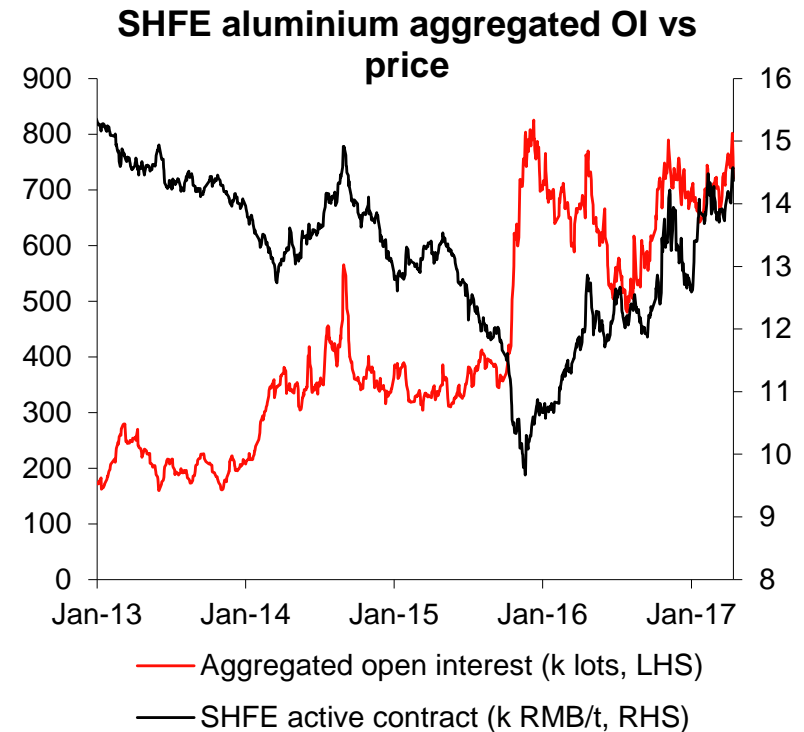
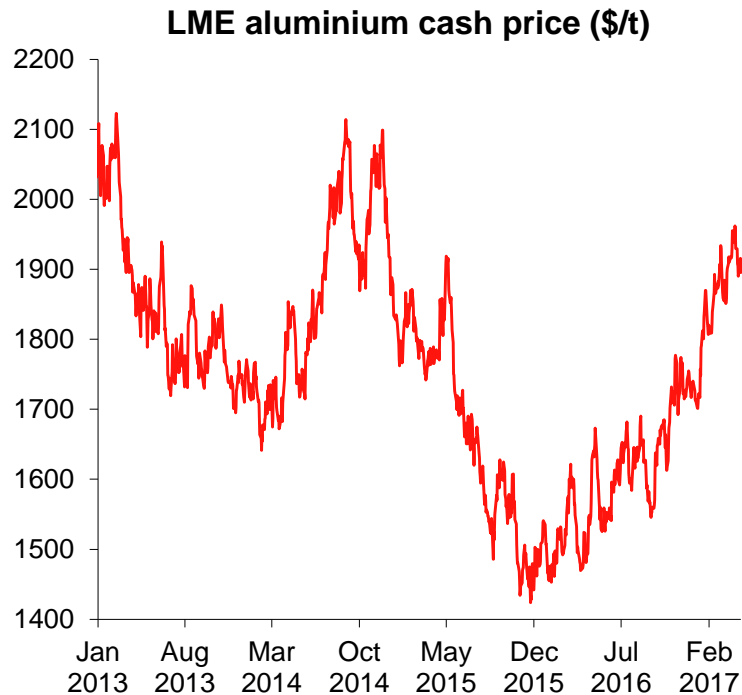
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# Aluminium reaches up to \$2,000/t once again as China (and other) speculators get long (but then corrects)

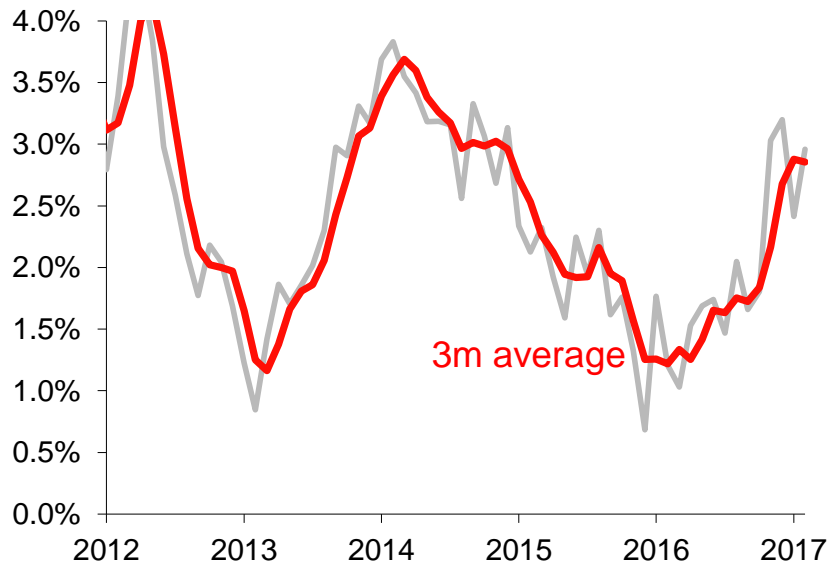




# The global industrial recovery has matured and become more broad-based, both in terms of sectors and geographies

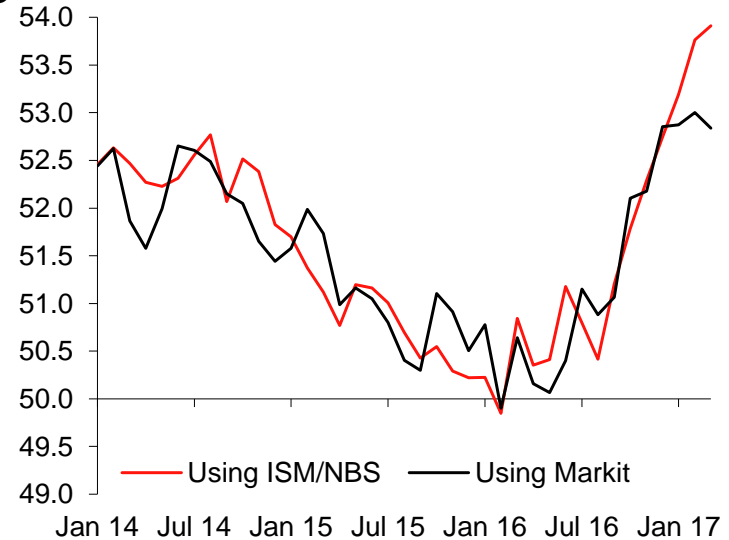
➔ The industrial sector still lags GDP growth but has clearly turned a corner, with YoY acceleration from less than 1% at the start of 2016 to 3% by year-end. It is however now maturing.

Global industrial production, % YoY



Source: National data, Macquarie Research, April 2017

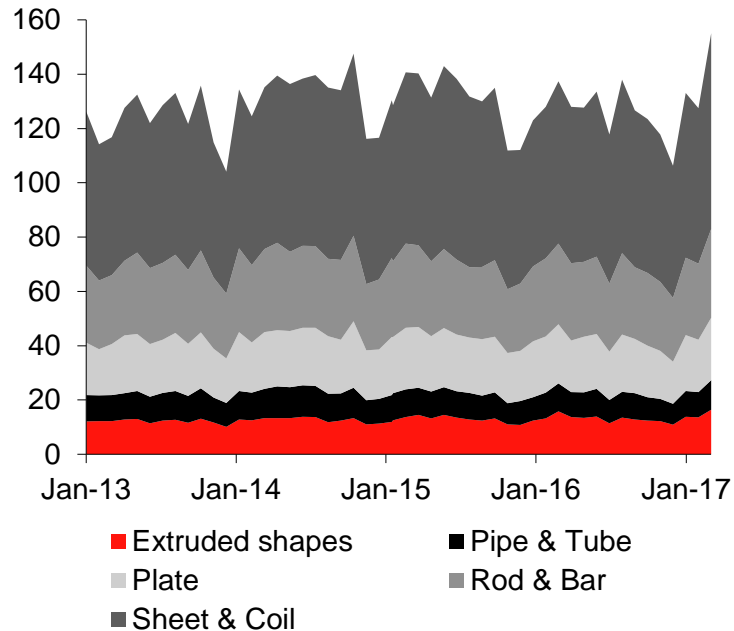
Global manufacturing PMIs (> 50 = growth)



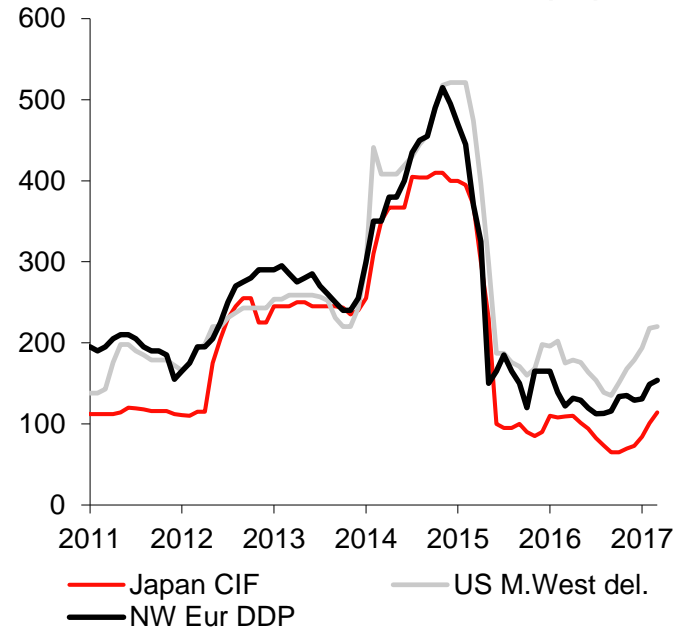
Source: National data, Macquarie Research, April 2017

# The US saw record March service centre shipments, and premiums are up everywhere ex-China...

**MSCI US AI semis shipments (k st)**



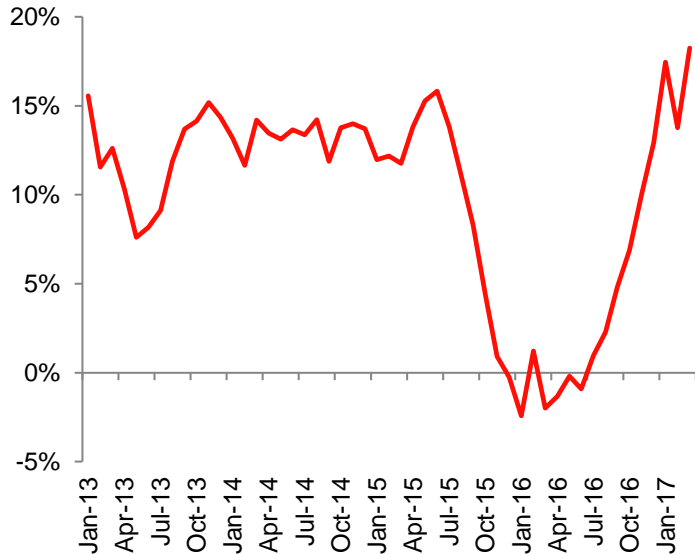
**Aluminium premiums (\$/t)**



Source: MSCI, CRU, Macquarie Research, April 2017

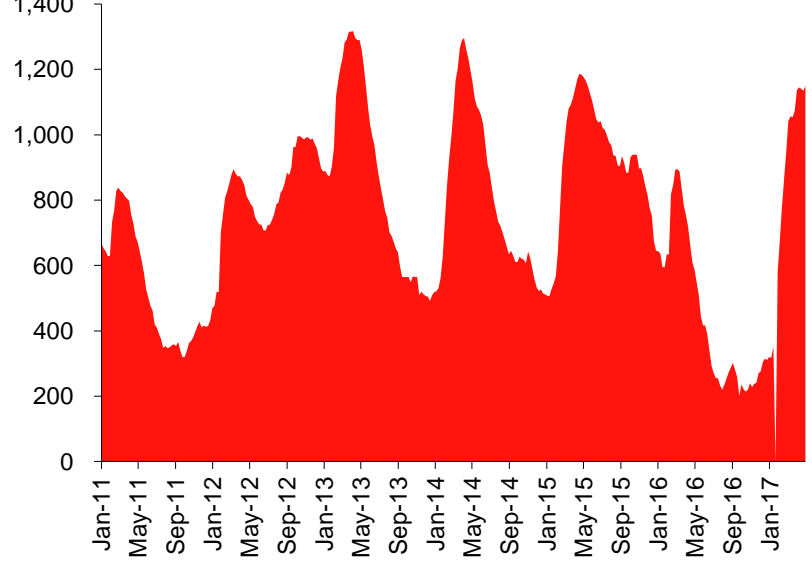
# Aluminium supply in China has soared in response to higher prices, is there now too much supply?

**Chinese aluminium production growth (YoY %)**



- ←Roaring output as China’s smelters raise annualised output from 30Mtpa a year ago to 35Mtpa in Q1!
- ..but the government is getting serious about “illegal capacity”. Besides the known Xinjiang and Shandong winter cuts, there are potentially 1Mt more of capacity cuts due to permitting and standards transgressions (our estimate) following a review process which ends in Oct 2017→

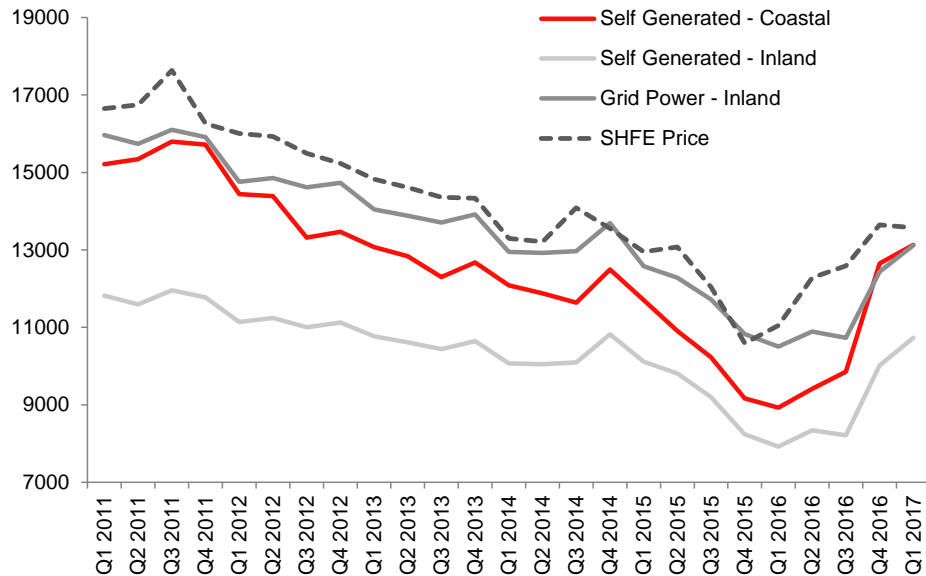
**'000 tonnes** ■ Aluminium ingot inventory in major cities





# Meanwhile cost input inflation compressed margins but raw material cost has started to drop

Chinese aluminium production cash costs (RMB/t)

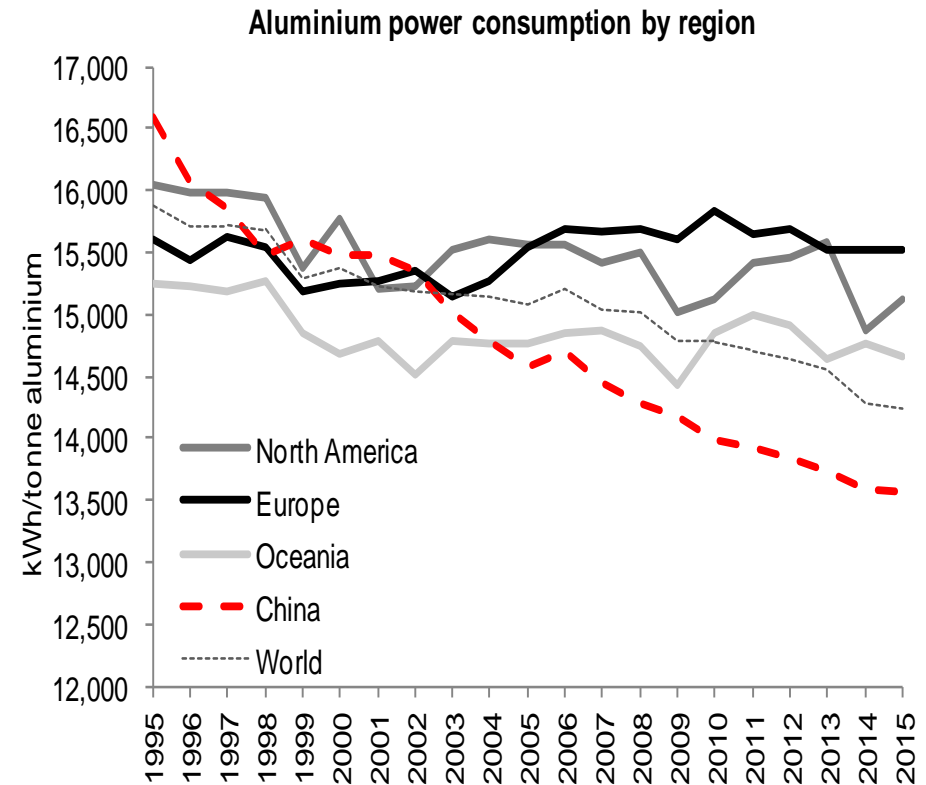
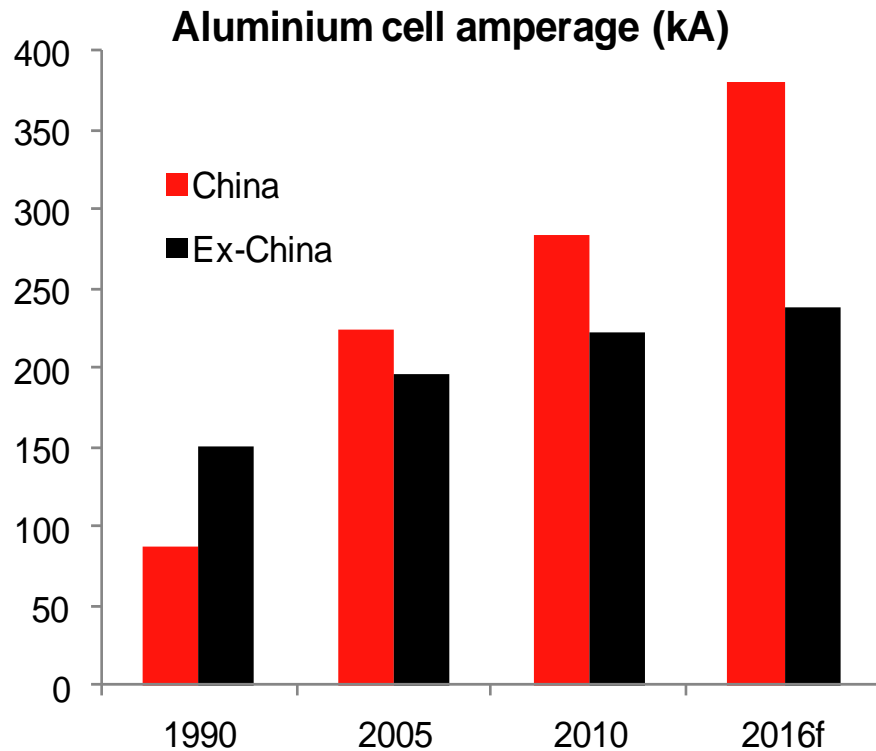


Source: SHFE, SMM, CRU, Macquarie Research, May 2017

# China capacity cuts are becoming the real story

kt	Winter curtailment (30% of capacity)	Illegal capacity cut (capacity under risk)	Stage	Date	Outcome
Shandong	3129	2500	Producers self-check	Now to 15th May	Report illegal capacity to provincial government or SASAC
Shanxi	66	0	Provincial government and SASAC check	16th May to 30th June	Report illegal capacity to central government (NDRC, MIIT, MLR and MEP)
Henan	295	0	Central government inspection	1st July to 15th September	Central government to send teams to provinces to inspect capacity issues
Xinjiang	0	800	Supervision and clean up	16th September to 15th October	Central government to supervision illegal capacity clean up
Inner Mongolia	0	200			

# China is an ever more efficient aluminium producer



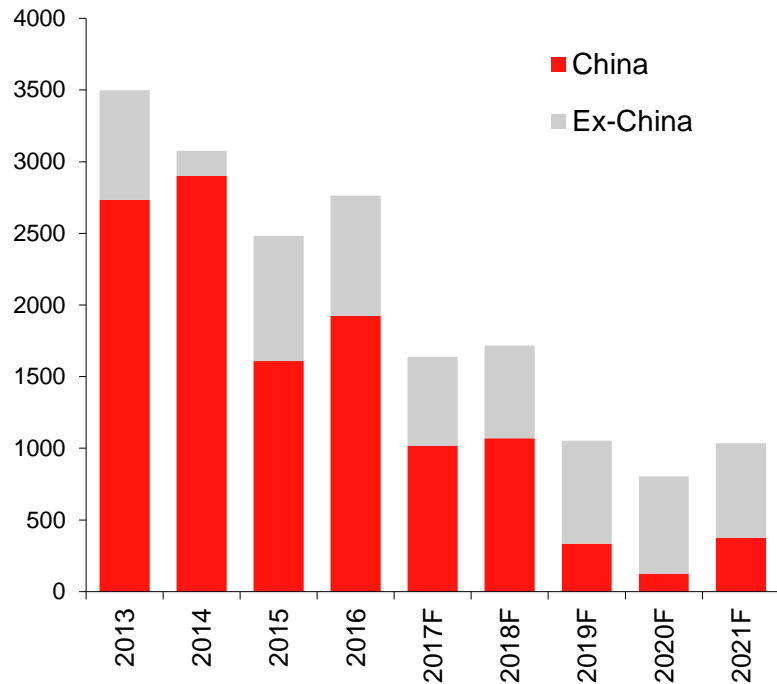
Source: IAI, CRU, Macquarie Research, May 2017



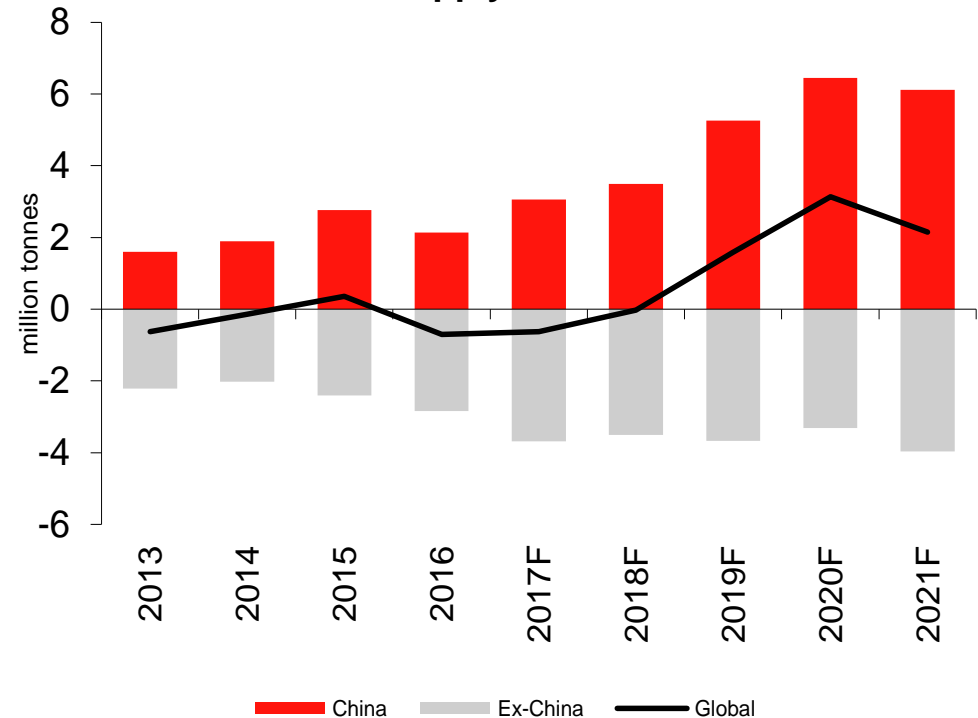


..so we see a tight couple of years...before capacity overbuild washes over the market later in the decade

Aluminium annual consumption growth (kt)

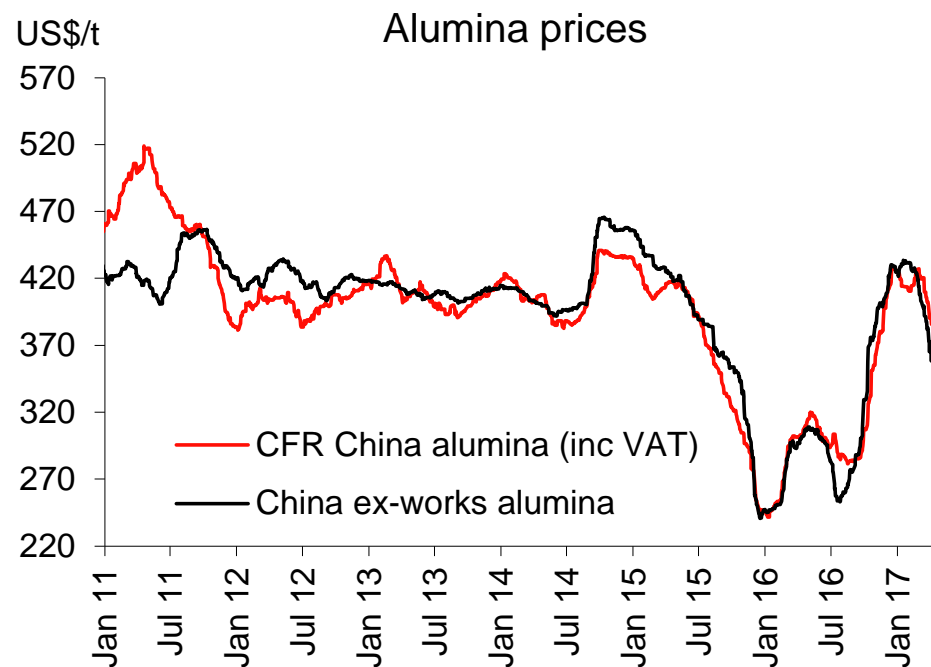
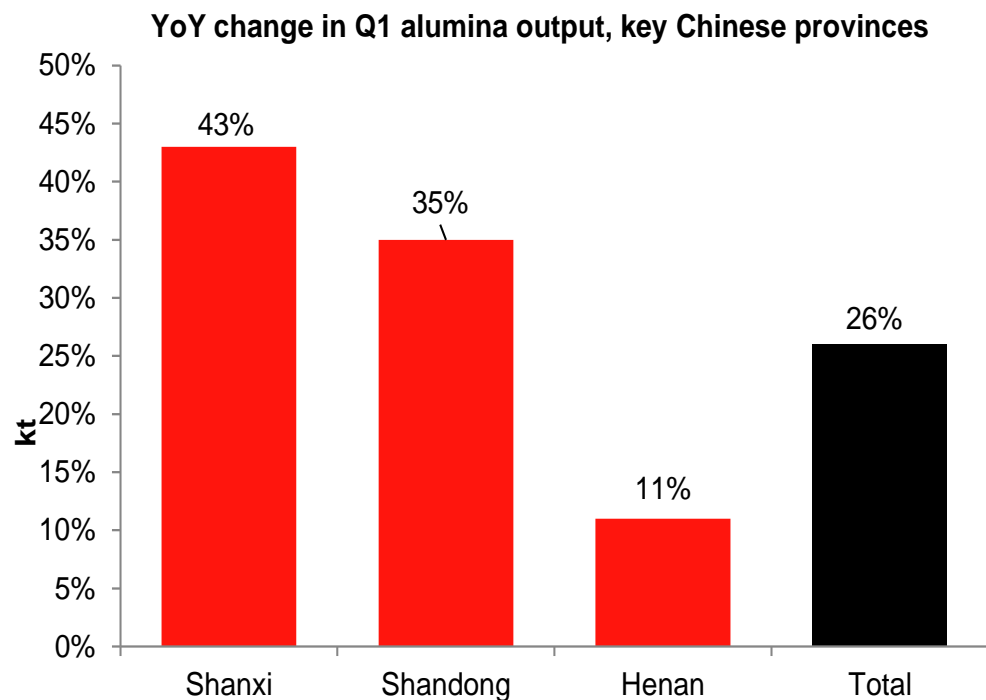


Aluminium supply-demand balance



Source: SHFE, SMM, CRU, Macquarie Research, May 2017

# Alumina – Supply is rising quickly in China but winter curtailment to come

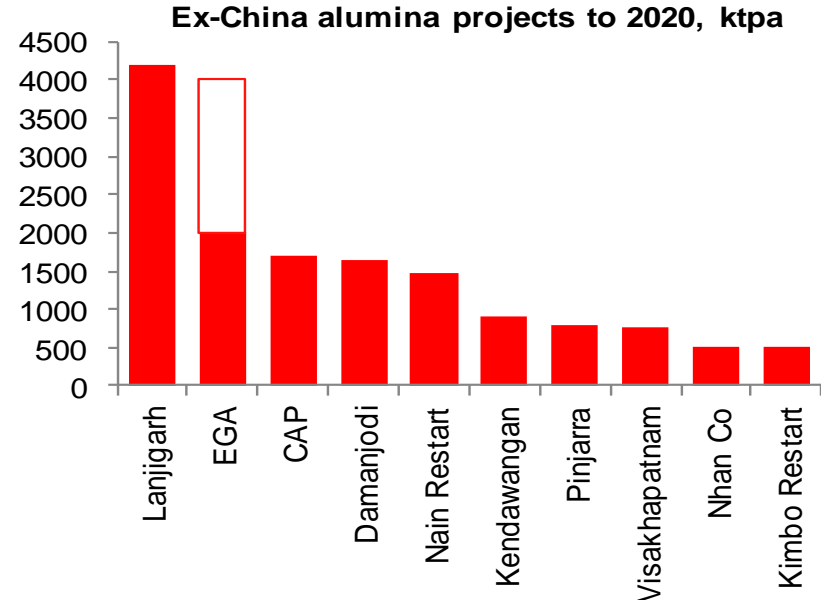
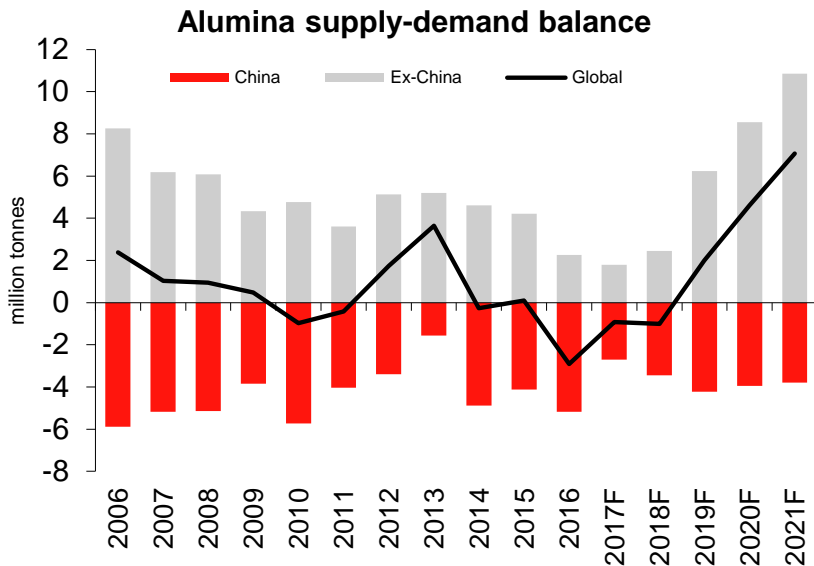


Source: NBS, ABS, CRU, IAI, Macquarie Research, May 2017



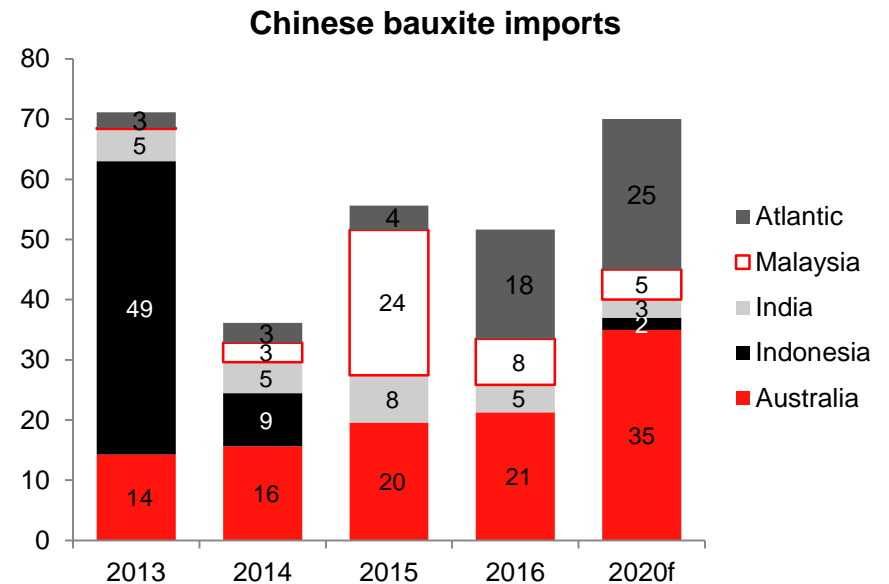
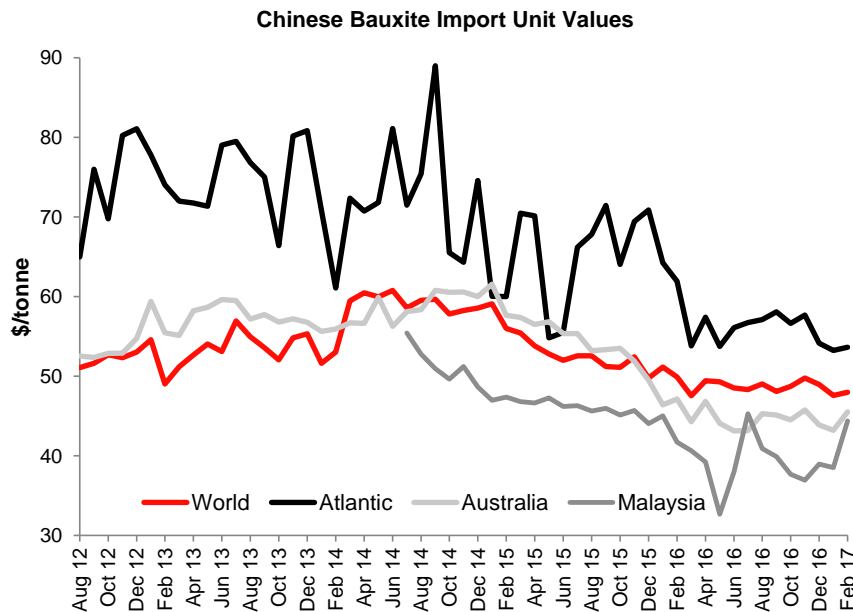
# Alumina – still a deficit for this year but smaller than previous modelled

- ➔ The alumina market remains one of the few for which we are seeing ex-China capacity additions still planned.
- ➔ However, for this year and next the ex-China surplus we have become accustomed to in alumina is much smaller following US alumina closures and ex-China aluminium growth.



# Bauxite – supply shifts, price sticks

- ➔ Despite the ongoing shifts in the supply side, pricing remains dull.
- ➔ While decent growth in traded volumes is likely over the coming years, this seems set to be driven by excess supply growth more than anything else.



Source: CRU, IAI, Macquarie Research, May 2017

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<p><b>Recommendation definitions</b></p> <p><b>Macquarie - Australia/New Zealand</b></p> <p>Outperform – return &gt; 3% in excess of benchmark return          Neutral – return within 3% of benchmark return          Underperform – return &gt; 3% below benchmark return</p> <p>Benchmark return is determined by long term nominal GDP growth plus 12 month forward market dividend yield.</p> <p><b>Macquarie – Asia/Europe</b></p> <p>Outperform – expected return &gt;+10%          Neutral – expected return from -10% to +10%          Underperform – expected &lt;-10%</p> <p><b>Macquarie - South Africa</b></p> <p>Outperform – return &gt; 10% in excess of benchmark return          Neutral – return within 10% of benchmark return          Underperform – return &gt; 10% below benchmark return</p> <p><b>Macquarie - Canada</b></p> <p>Outperform – return &gt; 5% in excess of benchmark return          Neutral – return within 5% of benchmark return          Underperform – return &gt; 5% below benchmark return</p> <p><b>Macquarie - USA</b></p> <p>Outperform – return &gt; 5% in excess of benchmark return          Neutral – return within 5% of benchmark return          Underperform – return &gt; 5% below benchmark return</p>	<p><b>Volatility index definition*</b></p> <p>This is calculated from the volatility of historic price movements.</p> <p><b>Very high–highest risk</b> – Stock should be expected to move up or down 60-100% in a year – investors should be aware this stock is highly speculative.</p> <p><b>High</b> – 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.</p> <p><b>Medium</b> – stock should be expected to move up or down at least 30-40% in a year.</p> <p><b>Low–medium</b> – stock should be expected to move up or down at least 25-30% in a year.</p> <p><b>Low</b> – stock should be expected to move up or down at least 15-25% in a year.</p> <p>* Applicable to Australian/NZ stocks only</p> <p><b>Recommendation</b> – 12 months</p> <p><b>Note:</b> Quant recommendations may differ from Fundamental Analyst recommendations</p>	<p><b>Financial definitions</b></p> <p>All "Adjusted" data items have had the following adjustments made:</p> <p><b>Added back:</b> goodwill amortisation, provision for catastrophe reserves, IFRS derivatives &amp; hedging, IFRS impairments &amp; IFRS interest expense</p> <p><b>Excluded:</b> non recurring items, asset revals, property revals, appraisal value uplift, preference dividends &amp; minority interests</p> <p><b>EPS</b> = adjusted net profit /efpowa*  <b>ROA</b> = adjusted ebit / average total assets  <b>ROA Banks/Insurance</b> = adjusted net profit /average total assets  <b>ROE</b> = adjusted net profit / average shareholders funds  <b>Gross cashflow</b> = adjusted net profit + depreciation          *equivalent fully paid ordinary weighted average number of shares</p> <p><b>All Reported numbers for Australian/NZ listed stocks are modelled under IFRS (International Financial Reporting Standards).</b></p>
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	AU/NZ	Asia	RSA	USA	CA	EUR
Outperform	47.26%	55.50%	38.46%	45.47%	59.09%	48.21%
Neutral	38.01%	29.31%	42.86%	48.77%	37.88%	36.79%
Underperform	14.73%	15.19%	18.68%	5.76%	3.03%	15.00%

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