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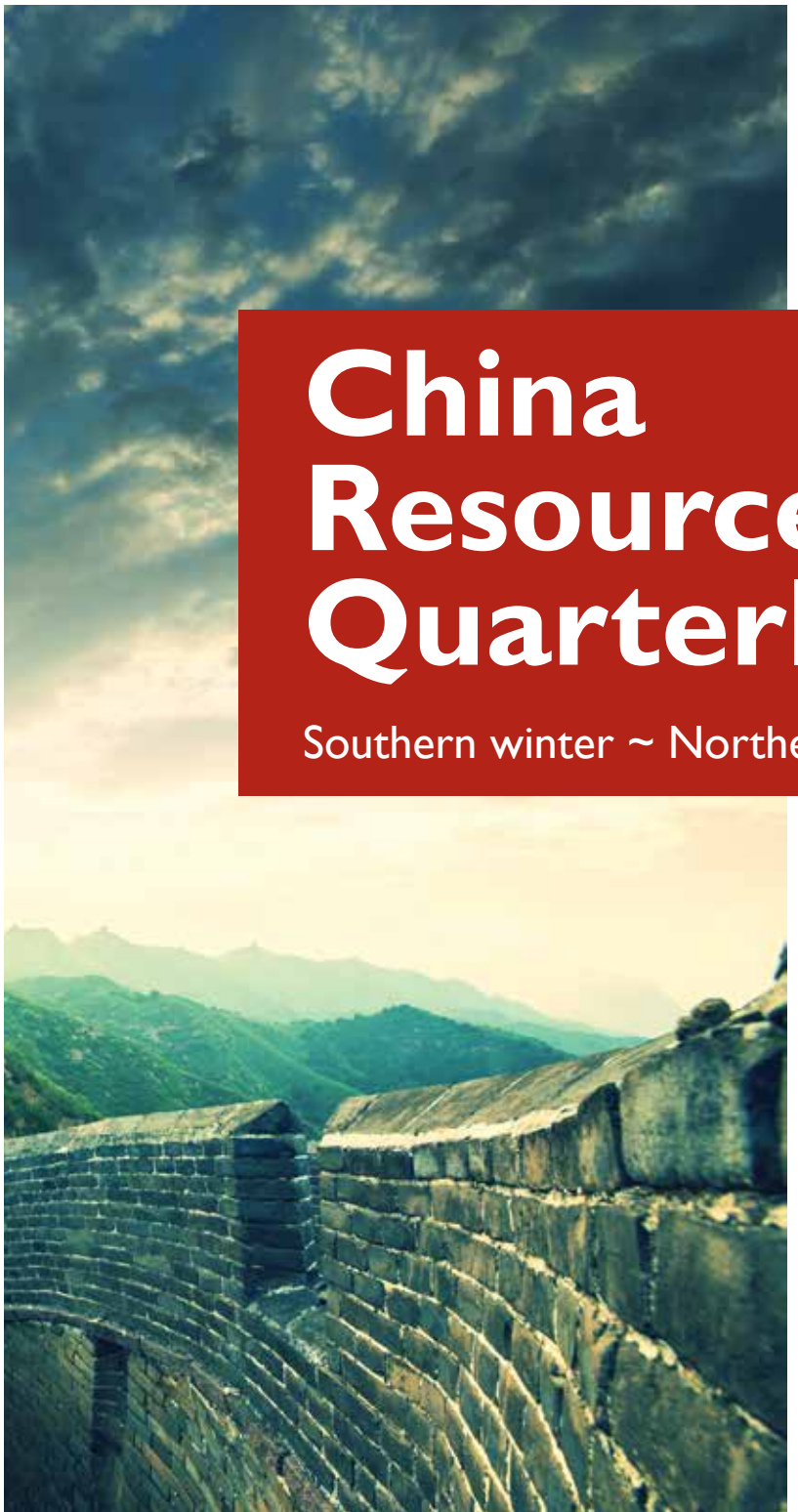

China Resources Quarterly

Southern winter ~ Northern summer 2015

China Resources Quarterly, Southern winter ~ Northern summer 2015

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Acronyms and abbreviations

ABS	Australian Bureau of Statistics
ASEAN	Association of Southeast Asian Nations
AUD, $A	Australian dollar
bcm	billion cubic metres
CEIC	Chinese Economic Information Company
CFR	Cost including freight
CNY, CNH	Chinese yuan (onshore & offshore)
cm	cubic metres
dltu	dry long tonne unit
FDI	foreign direct investment
FOB	free on board
FX	Foreign exchange
G3	United States, Europe and Japan
GDP	gross domestic product
GFC	global financial crisis
GFCF	gross fixed capital formation
GCF	gross capital formation
IEA	International Energy Agency
IMF	International Monetary Fund
koe, mtoe	kilogram of oil equivalent, million tonnes of oil equivalent
kgpp	kilograms per person
kWh	kilowatt hour
LNG	liquefied natural gas
Mt	million tonnes
na	not available
NAR	net as received
NIEs	Newly Industrialised Economies (Singapore, Taiwan, Hong Kong, South Korea)
ODI	outward direct investment
OECD	Organisation for Economic Cooperation and Development
OPEC	Organisation of Petroleum Exporting Countries
PMI	Purchasing Managers Index
PPP	purchasing–power parity
ppt	percentage point
RMB	Chinese Renminbi
SHIBOR	Shanghai Interbank Offered Rate
sqkm	square kilometres
USD, US$	United States dollar

Growth rate conventions and abbreviations.

"Year–ended growth", abbreviated %yr, is the level of an indicator in a single period (a month or quarter) versus the corresponding period in the prior year, expressed as a percentage.

The term "smoothed growth" should be understood to represent a 3 month moving average (3mma) of the year– ended growth rate.

"Year–to–date growth", abbreviated %ytd, is the accumulated level of an indicator at a point in the calendar year (for example year–to–June, year–to–Sep) versus the corresponding point in the prior year, expressed as a percentage.

"Annual average growth", abbreviated %ann, is the level of an indicator over four quarters, versus the previous four quarter period, expressed as a percentage.

"Month–on–month and quarter–on–quarter growth", abbreviated %mth or %qtr, is the level of an indicator in one period, versus the immediately prior period, expressed as a percentage.

"Annualised growth or annualised rate", is the change in an indicator in a single period grossed up to a year, expressed as a percentage. If seasonally adjusted, this may be rendered as %saar.

Foreword

Welcome to the Southern winter ~ Northern summer edition of the ***China Resources Quarterly*** – hereafter the ***CRQ***. The ***CRQ*** is a collaborative research venture between the Westpac Institutional Bank (hereafter Westpac) and the Australian Government Department of Industry and Science.

The ***CRQ*** is the primary reference point for public and private sector decision makers seeking to understand developments in the Chinese economy, with special reference to its demand for resources.

This edition has been compiled against an economic backdrop that, on balance, is moderately better than that described in its predecessor. Even so, China's domestic demand profile remains fragile and nominal activity growth is extremely subdued *vis-a-vis* the double digit percentage growth rates that were *de rigeur* for much of the last decade.

In the resources sphere, the intersection of increasing Australian supply potential and the fact that it is the most resource and energy intensive parts of the Chinese economy that have slowed the most, has produced steep declines in the prices of a number of important commodities.

With China's development model in the midst of a major structural inflection point, and Australia's own commodity cycle having shifted decisively into the supply phase, it is more vital than ever to trade in fact rather than rumour. The ***CRQ*** aims to do its part in this regard by making available rigorous and empirically grounded analysis of macroeconomic and resource industry trends. A special section on the Chinese equity market and its relationship to the real economy is included in this edition, echoing this spirit.

China is now the world's largest national economy in purchasing power parity (internationally comparable volume) terms and the largest producer of industrial value added, however measured. And it is now a free-trade agreement partner of Australia. These observations underscore the value of continuing to deepen our collective understanding of the ever–evolving Chinese economy.

Bill Evans

Chief Economist

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Chief Economist

Department of Industry & Science

Executive summary

The Chinese economy grew at a rate **below its potential** in the first half of 2015. The general impression left by the flow of data since the previous edition of the ***CRQ*** has been of modest improvement off a low base. Aggregate demand stabilized in the June quarter, following on from a weak second half of 2014 that spilled over into 2015Q1. The principal sources of weakness remain building activity and heavy industry, with services consumption and infrastructure capex providing partial offsets. Exports, which had been a support for growth in 2014, have slowed.

Growth in **heavy industrial capacity** and in **mining investment** both slowed significantly in the first half of 2015. **Coal mining** and **ferrous metals smelting** are among the weakest segments. Outlays on **utilities capex** have continued to grow at a healthy pace. Investment in **transport infrastructure** continues to run at a relatively high level. **Public sector capex** has stabilized in 2015 to date having experienced steep declines last year, but overall the support for demand from this quarter has been extremely modest.

Real estate construction activity remains weak, but **housing sales turnover** has begun to firm on the back of policy support. **Dwelling prices** are rising again in the wealthy coastal metropoli and in a meaningful number of smaller cities. However, the supply imbalance in lower tier jurisdictions remains large, which will delay any recovery in building activity until well into next year.

The **heavy industrial sector** continues to struggle. The proportion of industrial firms making losses remains historically high; the demand for **basic inputs consumed by construction** has deteriorated; as a result excess capacity is looking increasingly pronounced in some sub-sectors; and **producer prices** continue to decline, as they have done since early 2012.

China's **exports** have slowed in recent times, with the deterioration evident across the **G3**, in **intra–Asian trade** and in shipments to **extra-regional emerging markets**. Chinese exporters gained global market share in 2014, despite the considerable appreciation of the **real exchange rate**, but its shipments are presently undershooting the aggregate growth in international trade.

The Chinese **equity market** dominated the news cycle in late June and early July. In recognition of this, we have included a supplementary discussion on the macroeconomic import of the **dramatic volatility** in stocks.

Demand for **imported raw materials** has been reasonable (albeit volatile) in volume terms, but the overall import bill has declined due to steep falls in **metals, energy** and certain **food prices.** China and Australia signed a Free Trade Agreement during the inter-***CRQ*** period. References to the commodity specific elements of the FTA are sprinkled through the report.

Commodity prices exhibited considerable softness during the first half of 2015, following on from the inglorious collapse of 2014. Lower prices have been driven largely by the increase in supply, although as noted above and throughout the ***CRQ***, the growth in demand has, in the main, been considerably lower than the norms established in the 2000s.

The global supply trend has been exemplified by **Australia's bulk commodity export volumes**, which have continued to increase despite substantially lower prices. Even so, as the period of time that commodity prices spend around their current levels extends, the more pressure will be brought to bear on those mines, in Australia, China and elsewhere, that are operating in the upper quartile of their respective industry cost curves.

Recent developments in the Chinese economy

The Chinese economy grew at a rate below its potential in the first half of 2015. The general impression left by the flow of data since the previous edition of the ***CRQ*** has been of modest improvement off a low base. Aggregate demand stabilized in the June quarter, following on from a weak second half of 2014 that spilled over into 2015Q1. The principal sources of weakness remain building activity and heavy industry, with services consumption and infrastructure capex providing partial offsets. Exports, which had been a support for growth in 2014, have slowed of late.

Real GDP expanded by 7.0% year–on–year in the June quarter alone. That compares to 7.0% in Q1, 7.3% in the December quarter; 7.4% for 2014 as a whole and the 7.7% outcome for 2013. Nominal GDP, which has historically exhibited significantly more cyclical amplitude than the volume measure, picked up to 7.1% in Q2, from the very weak 5.8% of the March quarter. With the exception of the GFC period, the recent phase has produced the slowest nominal growth since the deflationary late 1990s. The change in the GDP deflator – the statistician's estimate of economy-wide prices – was +0.1% year–ended in Q2, up from –1.1% in Q4.

Looking at the breakdown of real activity from the production side of the accounts, on a broad sectoral basis, secondary output slowed 0.3ppts to 6.1%ytd while tertiary activity was 0.5ppts higher at 8.4%. As for the estimated quarterly contributions on an expenditure basis, they were: 4.2ppts from final consumption (4.0ppts in the corresponding quarter of 2014); 2.5ppts from investment (versus 3.6ppts 2014Q2); and net exports at +0.3ppts (–0.2ppts).

Real urban fixed investment growth (including land purchases, so not directly comparable to the national accounts measure) fell away by 2.6ppts in Q2. In terms of the sectoral composition of investment activity, on a nominal basis, growth in heavy industrial capacity and the extractive industries remains weak. Growth in utilities capex has picked up a little from an already high level, while transport fell back modestly. Real estate was again a drag. Housing and non–residential building are still in the doldrums (see page 4).

State–owned enterprises contributed 32.8% of the growth in fixed investment in 2015Q2, their highest share since 2010.

Figure 1: Nominal GDP: total & broad sectors

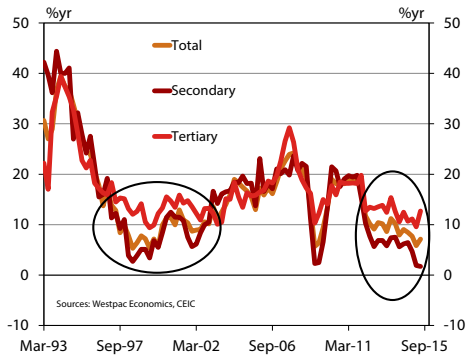


Figure 2: Various elements of the national accounts

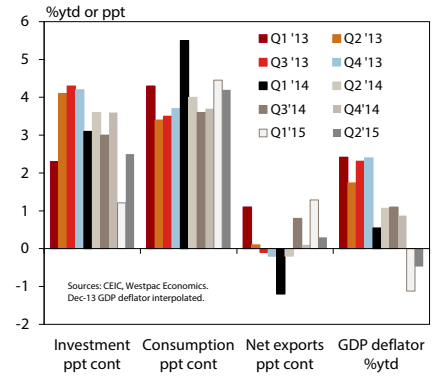
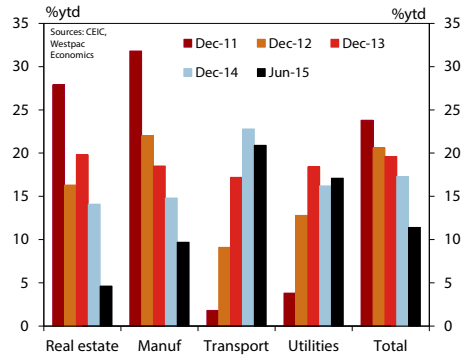


Figure 3: The investment cycle: a sectoral view



Rather than relying on GDP alone to assess the state of the Chinese economy, it is prudent to complement the national accounts with a range of alternative indicators that also correlate with overall activity. Doing so provides a richer and more complete picture of macroeconomic trends. For the real economy (as opposed to the monetary–financial sphere, which will be dealt with subsequently), these data fall into three broad categories. They are (1) nationwide surveys (2) economy-wide measures of intermediate input, and (3) bellwether industry sectors that map the broader economic cycle. Additionally, balance sheet information from government and business contain relevant insights on underlying growth.

In the previous edition of ***CRQ*** we argued that a balanced reading of the alternative indicators suggested that aggregate demand growth was running somewhere between the *real* (7.0%) and *nominal* (5.8%) estimates of GDP growth. In Q2, these two measures have converged on 7%, which feels perhaps a tick high, but no more than that.

The People's Bank of China's corporate survey is the most valuable resource in category (1). The largest firms in the country gauge that business conditions deteriorated in the first half of 2015, leaving them far below average levels. The details of the Q2 survey, however, argue that both domestic and external demand conditions improved *vis-a-vis* Q1.

In category (2), alongside the traditional proxy of electricity output, logistics volumes provide additional insight. At the end of Q2 the smoothed year–ended growth rate of these proxies was 3.9% (electricity); 1.7% (terrestrial freight) and 1.6% (aquatic freight). Note that these proxies work best for heavy industry and exports, twin pillars of the 'old' model. They do not necessarily capture trends in services, which are now a major source of growth.

In category (3), the real estate industry – especially its construction arm – is the bellwether of choice. It is considered in detail on the following page. Regarding balance sheets, the year–ended growth rate (smoothed) of central government revenues was 7.5% in Q2, against outlays running at 7.1%. The profits of industrial firms (manufacturing, mining & utilities) declined in year-ended terms in the first half, but margins were showing signs of firming at the end of Q2.

Figure 4: Business conditions, orders & GDP

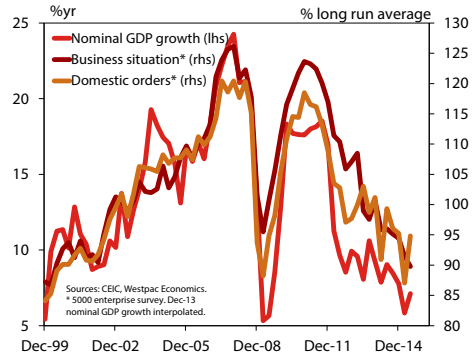


Figure 5: Selected aggregate activity proxies

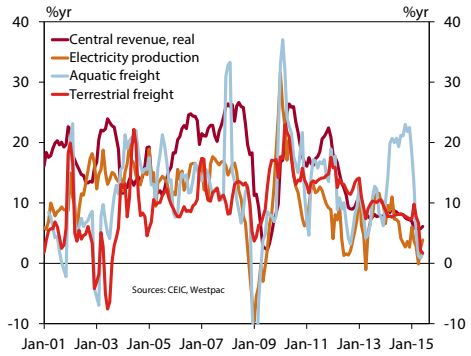
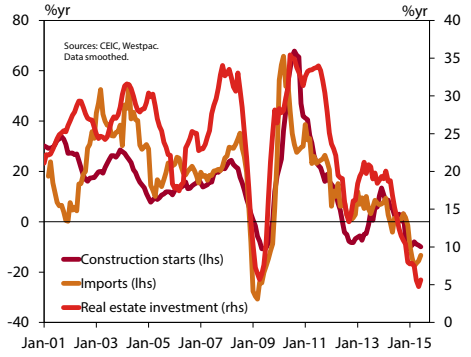


Figure 6: Selected aggregate activity proxies



The real estate sector

Real estate represents around one quarter of nominal urban fixed investment. Real estate investment itself is split roughly 70/30 between residential and non–residential. State–owned enterprises represent around 14% of the total.

In the previous edition of the ***CRQ*** we noted that the real estate slowdown directly accounted for half of the 4.7ppt deceleration in investment growth in 2014. Real estate's direct contribution to the year-to-June 2015 slowdown of 5.9ppts is around two-fifths.

The volume of housing sales declined heavily across all regions in 2014 and early 2015, but a clear turnaround has now emerged in the secondary (established) market in Tier-1 cities and in a number of smaller locations. The market for new dwellings has lagged behind, reflecting the inventory overhang, but even there some healing is evident. The continued presence of excess stock is driving a major wedge between the raw growth rate of sales (+16%yr) and starts (–15%yr), and will continue to serve as a headwind for price appreciation in the new market. Even so, with sales turnover on the up and the rate of new completions now declining visibly, the cyclical fundamentals of the market are much improved from where they began the year.

In the background, we note that the renewed policy emphasis on urban renewal and public housing has not as yet revived activity in the under–the–radar off–market segment. Off–market construction accounts for around a third of the urban total. It has declined consistently since April 2014 leaving a large hole in construction activity. We await a consolidation in this area with fiscal policy turning more expansionary and state-owned enterprises awakening from their recent slumber.

Given the policy support now in place (the Sept 2014 package; multiple rate cuts; maximum mortgage loan-to-value ratio increases, cessation of most buying restrictions) the shift in sentiment towards real estate has been slow and timid relative to previous instances of policy easing. The weak policy multiplier, especially *vis-a-vis* the rebooting of construction activity, highlights that there are structural aspects to the current slowdown, over and above the cyclical-policy nexus.

Figure 7: 70 city house prices: m/m chg net balance

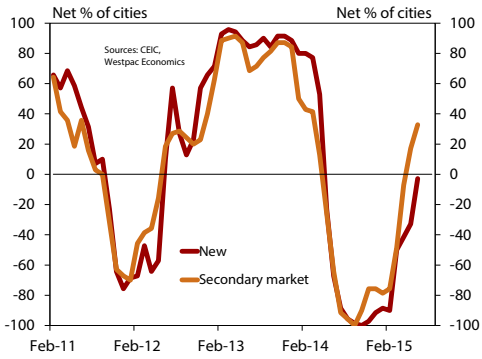


Figure 8: Completions, sales & land prices

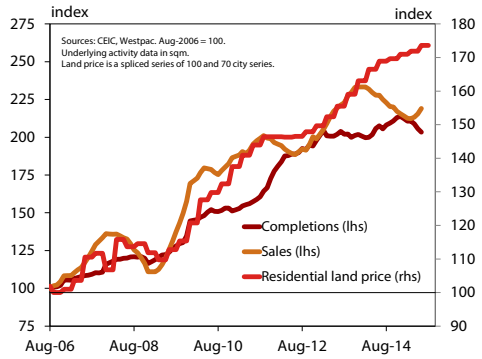
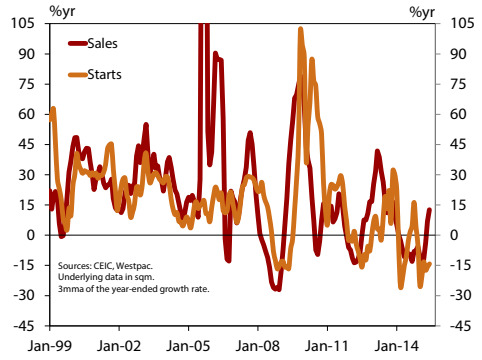


Figure 9: Housing sales and starts: volumes



International trade

Gross value–added attributable to the export sector accounts for approximately 17% of China's GDP. So while exports are secondary in importance to the domestic construction cycle as a source of economic growth (and ultimately resource demand) they are far from irrelevant. Indeed, given the large amplitude of historical swings in export growth, at certain times external demand can outweigh the domestic story.

Net exports were a support for real GDP growth in the first half of 2015, but they fell back from a +1.3ppts contribution to year–to-date growth in 2015Q1, to just +0.3ppts in Q2. A weaker export performance was the main driver of this lower contribution, as imports are still declining in both value and volume terms. As of Q2, exports to the G3 (–1.0%yr) were performing somewhat better than China's overall global shipments (–2.2%). Intra–Asian sales are running at close to the global rate of contraction, while shipments to extra–regional emerging markets have decelerated sharply.

The business surveys describe an external demand environment that is distinctly underwhelming. The "new export orders" sub–index in the two most watched manufacturing surveys (where 50 signifies the dividing line between expansion and decline) averaged just 48.4 in the four months to July 2015. Furthermore, the monthly observations deteriorated between ***CRQs***, indicating unfavourable momentum. The 48.4 average compares to 51.0 in the second half of 2014 and 49.0 in the first four months of 2015.

Imports of machinery and transport equipment fell by 6.3%yr in Q2, having contracted by 3.1% in the previous quarter. They increased by 3.7% in 2014Q2. These subdued growth rates reflect the state of the IT product cycle, excess capacity in the onshore machinery sector, weak auto sales amidst mild market share losses for imported vehicles and subdued domestic equipment outlays.

The growth of food import values rebounded to +11.1%yr in June, which brought a price driven eight–month run of negative year–ended growth outcomes to an end. The value of imports from commodity producing countries continues to decline heavily, slashing the overall import bill. Imports from the G3 and from Asia ex Japan are also declining.

Figure 10: Trade flows by source and destination

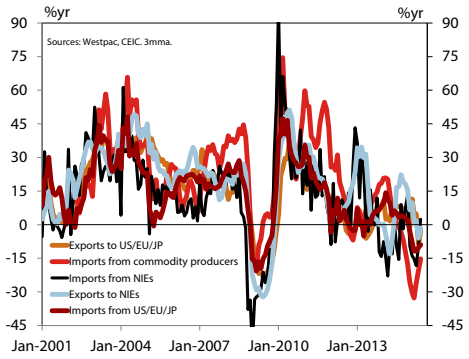


Figure 11: Export orders: survey measures

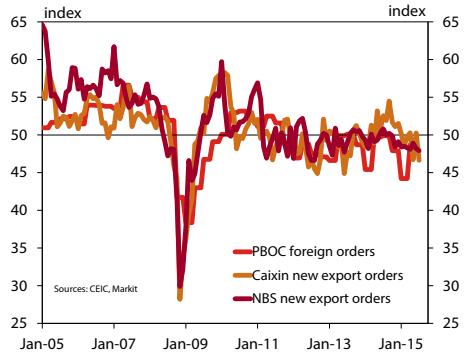
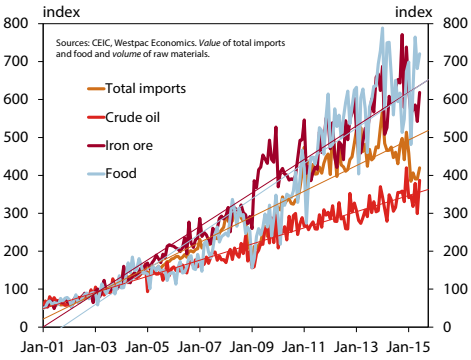


Figure 12: Imports – total & key primary products



The monetary & financial sphere

The monetary policy stance has been characterized by a basic tightening posture since 2011, related to the unwinding of the stimulus era legacy; but this has been periodically interrupted by a cyclical need to underpin growth and/or accommodate smooth refinancing. The annual flow of credit to GDP peaked at 41% in late 2009; hit a local trough of 26% of GDP in early 2012; rebounded to 34% of GDP in early 2013; and has hit another low south of 23% of GDP as of 2015Q2. While traditional bank loans were a major contributor to the stimulus package, much of the cyclical amplitude since has been related to shadow finance, which is dominated by off-balance sheet activity of the banks themselves (figure 13).

The previous edition of the ***CRQ*** argued that the People's Bank's reluctance to ease aggressively, in a world where few central banks are exercising such discipline, has led to aggregate financial conditions becoming inappropriately restrictive (figure 14). The real exchange rate has appreciated sharply and real interest rates are still above average, despite muliple cuts in the one-year benchmark lending rate. Furthermore, with FX reserves declining in each of the last four quarters, the growth in broad money, and the monetary authority's own balance sheet, has also slowed. The diminished growth rate of the central bank's balance sheet reflects both the impact of net capital outflows (that manifest as declining FX reserves) and the relative passivity of its domestic monetary activities in the cycle to date. Given the absence of inflationary pressures, financial conditions ought to be less restrictive. We await further initiatives in pursuit of this objective.

It is, however, clear that the price and availability of finance are not the main impediments to stronger credit growth. The main culprit is the fact that animal spirits are at a low ebb, which leads to fewer new projects being pursued, which in turn produces low demand for credit (figure 15). On a sectoral basis, the secular slowdown in credit-intensive heavy industrial investment and the parlous state of building activity are the major proximate causes of diminished demand for loans.

Finally, the equity market was in a bull-run at the time of the last ***CRQ***. Few readers will be unaware of what has happened since. Reflecting the elevated degree of interest in the stock market, an extended discussion has been included on pages 14-17.

Figure 13: Flow of credit by type, % of GDP

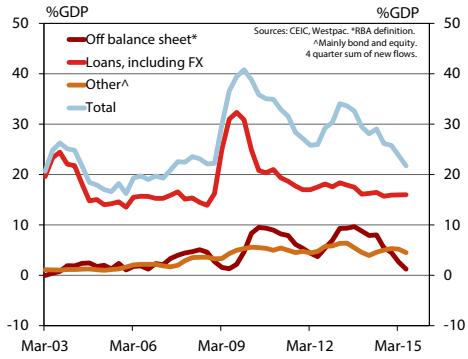


Figure 14: Financial conditions in China

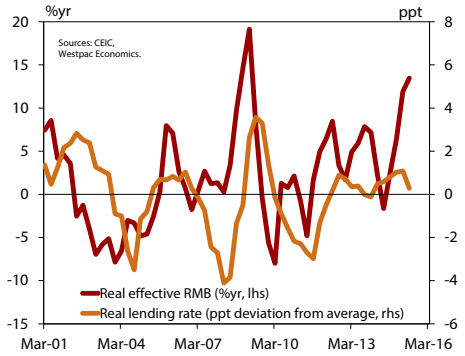
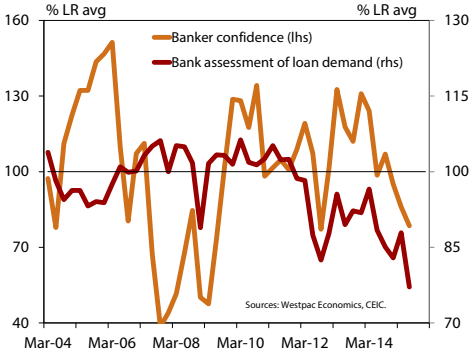


Figure 15: Banker confidence & loan demand



External finance & the currency

The bilateral exchange rate with the US dollar has appreciated by a cumulative 33% since the peg exit in June 2005. The real effective exchange rate, which measures the nominal trade weighted move in the CNY while also accounting for relative inflation, has appreciated by 53% over the same time frame. The real effective CNY appreciated by 14.0% over the year to June 2015, while USD/CNY is close to unchanged over that timeframe.

The above figures highlight that the movement in the USD/CNY rate is a poor proxy for the shift in Chinese competitiveness over the last year. The surge in the real effective CNY, which is a joint function of the flat USD/CNY and the steep appreciation of the US dollar against a wide range of both major & emerging market currencies, looks inappropriate given China's weak cyclical position.

In a world where the central banks administering the four SDR currencies have all expanded their balance sheets considerably since the GFC, the balance sheet of the People's Bank has contracted by almost 12% of GDP since early 2011, albeit from a much higher level. Little wonder then that the exchange rate has appreciated substantially over this period, despite the major contraction in China's current account surplus from above 10% of GDP in 2007 to around 2-3% of GDP in recent years.

In the last four quarters, the capital flow situation boiled down to huge trade surpluses being more than offset by considerable net outflows on the financial account. Foreign exchange reserves decreased by US$150bn in the second half of 2014, (–$US106bn in Q3 and –$US45bn in Q4) and they fell a further $US149bn in 2015H1 (–$US113bn in Q1 and –$US36bn in Q2) . We note that as RMB internationalisation proceeds, and the People's Bank participates in fewer FX transactions, private cross border flows are increasing, with bank–related flows an increasingly important channel for surplus recycling, alongside outward direct investment and a modest but rapidly growing trickle of portfolio flows. China now produces very detailed quarterly balance of payments data, but this report is not yet available for Q2. We can observe though that foreign currency deposits held at Chinese banks increased by $US88bn over the year to June but they fell by $US14bn in Q2 alone.

Figure 16: The exchange rate: broad & bilateral

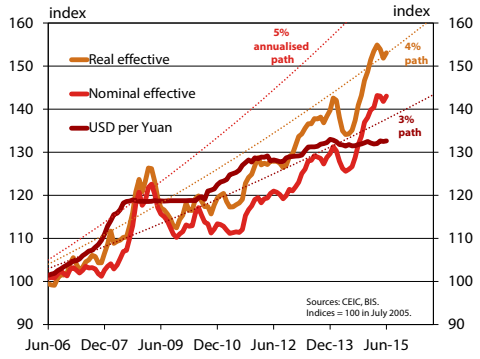


Figure 17: Relative central bank balance sheets

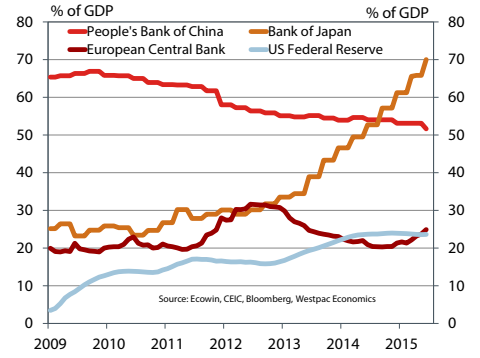
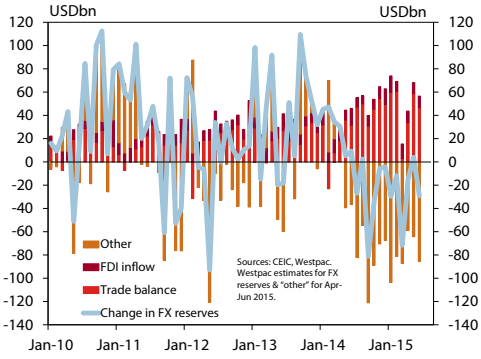


Figure 18: FX reserves & net capital flows by type



Heavy industry

As heavy industrial output (and investment in new capacity) is essentially a measure of 'derived demand' from other sectors, it ought to behave as a reactive variable in a medium term forecasting framework. However, when the time horizon is shorter, swings in heavy industrial activity can be responsible for much of the volatility observed in the aggregate data. Furthermore, with excess capacity now plaguing a range of basic materials, extractive and machinery sectors, capex is now forcibly decoupling - on the weaker side - from movements in aggregate demand.

As the major direct consumer of raw materials and a key provider of intermediate goods for use elsewhere in the supply chain, an understanding of how these aforementioned forces intersect in the heavy industrial complex is vital to a full comprehension of China's resource demand.

Total industrial value–added (IVA) expanded at a smoothed year–ended rate of 6.2% as of June. That compares to 7.6% at the end of 2014, 8.9% as of June '14, and 10.0% at the end of 2013. The growth rate of electricity output at each of those points was 3.9% (Jun '15) 2.7% (Dec '14); 7.2% (June '14); and 10.1% (Dec '13). The greater amplitude of the growth rates of power production are consistent with the fluctuations in the heavy industrial subset of the wider secondary sector. However, phases where heavy industrial output grows more swiftly than total IVA (figure 19) have become increasingly rare in recent years, just as total IVA out-growing GDP is becoming a rarity (figure 21). Those twin observations are indicative of the structural challenges - slower end-demand growth and excess capacity to service it - confronting certain sub-sectors. The rising proportion of firms now making losses, the well-entrenched deflationary pulse in producer prices and the ongoing slowdown in capex (figure 20) highlight the same basic issues. The slowdown in heavy industrial capex in the year to Jun '15 explained one-fifth of the economy-wide investment deceleration.

In downstream manufacturing, capital goods have been falling in price since late 2011; onshore sales of 'yellow goods' are significantly beneath the levels of a year ago; while domestic-made auto sales declined in June for the first time since early 2012.

Figure 19: Core & headline industrial production

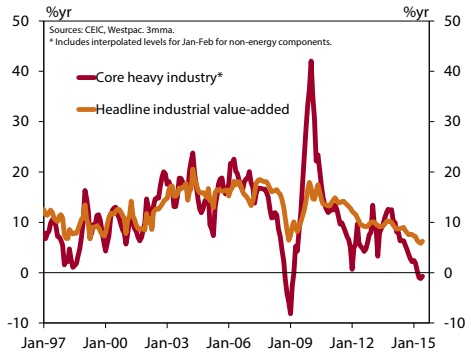


Figure 20: Heavy industry capex & the PPI

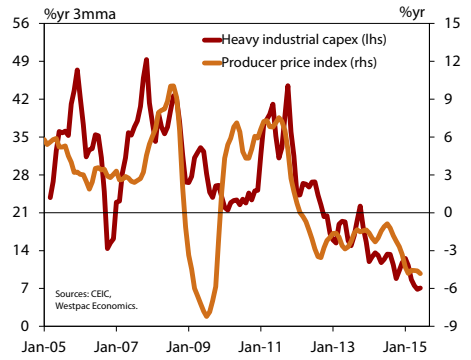
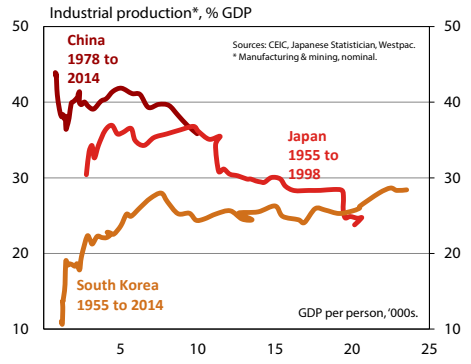


Figure 21: Industry share & living standards



The household sector

The major reference point for the ***CRQ's*** analysis of the Chinese household sector is the *Westpac MNI China Consumer Sentiment Survey.* The most prominent themes in late 2014 were deepening concerns with respect to job security, family finances and the housing market. These inter–related themes remain a source of anxiety in an absolute sense as of mid 2015, but the degree of pessimism expressed in relation to family finances and housing has lessened visibly.

Counter to that more positive observation, perceptions of job security have made virtually no net progress in the first seven months of this year. Further, more consumers have been nominating 'future loss of income or employment' as their main motivation for saving of late. Collectively, that implies there has been little cyclical improvement in labour market conditions since late last year, despite the gains made in other areas of the survey. We attribute the re-emergence of such concerns to the poor performance of the labour-intensive export sector in recent months. So, while demographic factors are preventing an untoward rise in the rate of *unemployment*, in absolute terms *job security,* and its concomitant, the degree of chutzpah that workers carry into wage negotiations, are both in short supply.

Expected spending on shopping and discretionary services had been in a clear downtrend dating back to the onset of the anti-corruption drive. This trend was closely mapped by the deceleration in retail sales. More recently, attitudes have been more positive, on balance, and retail sales have accordingly been able to stabilise amidst a resilient performance from national accounts consumption. Uses of household income (figure 24) remain cautious though, with savings running above long run average. Consumers' preferred investment vehicles have also tilted in a risk averse direction recently. This latter development is no doubt related, in part, to the equity market. See the dicussion on pages 14-17 for more on this issue.

Passenger car sales ended Q1 up 8.7%yr, but growth slowed to just 0.5% in Q2. While 18.3% of survey respondents plan to buy a car over the year ahead as of July, versus the long run average of 12.6%, automakers are probably not holding their breath.

Figure 22: Housing and auto purchases

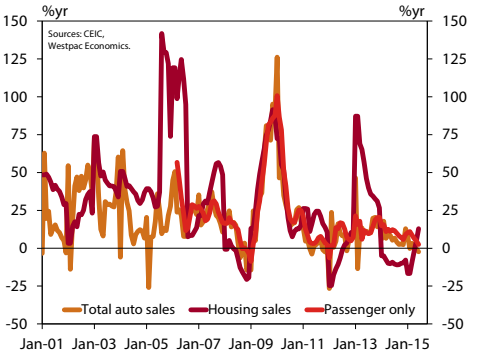


Figure 23: Consumer sentiment: income & jobs

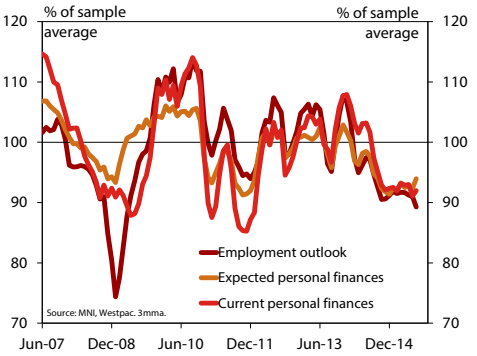


Figure 24: Uses of household income

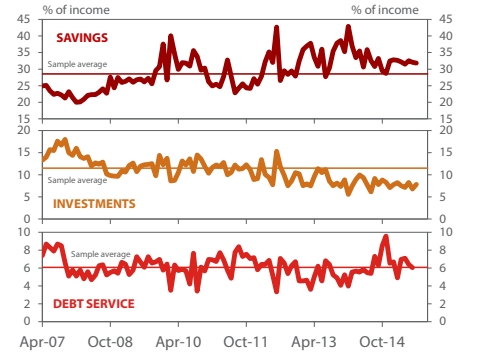


Table 1: General macroeconomic data

Quarterly

	Jun–12	Sep–12	Dec–12	Mar–13	Jun–13	Sep–13	Dec–13	Mar–14	Jun–14	Sep–14	Dec–14	Mar–15	Jun–15
Real GDP %yr	7.6	7.4	7.9	7.8	7.5	7.9	7.6	7.4	7.5	7.3	7.3	7.0	7.0
Nominal GDP %yr	10.2	9.1	10.4	10.2	8.6	11.2	10.2	7.9	9.0	8.5	7.7	5.8	7.1
Contributions to real GDP percentage points ytd													
Final consumption expenditure	4.7	4.2	4.4	4.3	3.4	3.5	3.7	5.5	4.0	3.6	3.7	4.5	4.2
Gross capital formation	4.0	3.9	3.2	2.3	4.1	4.3	4.2	3.1	3.6	3.0	3.6	1.2	2.5
Net exports	–0.9	–0.4	0.1	1.1	0.1	–0.1	–0.2	–1.2	–0.2	0.8	0.1	1.3	0.3
Secondary industry %ytd	8.4	8.2	8.2	7.8	7.6	7.9	7.9	7.3	7.4	7.4	7.3	6.4	6.1
Tertiary industry %ytd	7.5	7.7	8.0	8.3	8.3	8.4	8.3	7.8	7.9	7.9	8.1	7.9	8.4
Current Account %GDP 4qma	2.3	2.7	2.6	2.8	2.6	2.1	1.9	1.5	1.7	2.0	2.2	2.4	na
GDP deflator %yr	2.6	1.7	2.5	2.4	1.1	3.3	2.6	0.5	1.5	1.2	0.4	–1.1	0.1
Fixed investment deflator %yr	1.6	0.2	0.3	0.2	–0.1	0.0	0.9	1.1	0.6	0.4	–0.1	–0.9	–1.2
Land price index %yr	2.3	1.7	2.6	3.9	5.1	6.2	7.0	7.5	7.2	6.1	5.2	3.8	3.4
Consumer price index %yr	2.9	1.9	2.1	2.4	2.4	2.8	2.9	2.3	2.2	2.0	1.5	1.2	1.4
Non–food %yr	1.5	1.5	1.7	1.8	1.6	1.6	1.6	1.7	1.7	1.5	1.0	0.8	1.0
Central revenue 4qma %yr	14.7	10.9	12.8	10.7	10.1	10.8	10.2	10.8	10.8	9.7	8.7	7.3	7.5
Central expenditures 4qma %yr	18.1	18.2	15.1	11.6	10.8	7.5	11.2	11.3	13.4	14.1	8.5	7.6	7.1
Central operating position 4qma %GDP	–1.6	–2.1	–1.6	–1.7	–1.7	–1.4	–1.8	–1.8	–2.3	–2.4	–1.8	–1.9	–2.2
Money supply M2 %yr	13.6	14.8	13.8	15.7	14.0	14.2	13.6	12.1	14.7	12.9	12.2	11.6	11.8
Bank loans (stock) %yr	16.0	16.2	15.0	14.9	14.2	14.3	14.1	13.9	14.0	13.2	13.6	14.7	14.4
Total credit supply (new, rolling annual) %GDP	25.3	28.5	29.5	33.1	32.6	31.6	29.4	28.1	29.0	26.1	25.9	24.0	22.6

Table 1 continued on page 11

Table 1: General macroeconomic data

Quarterly

	Jun–12	Sep–12	Dec–12	Mar–13	Jun–13	Sep–13	Dec–13	Mar–14	Jun–14	Sep–14	Dec–14	Mar–15	Jun–15
Exports %yr	10.5	4.5	9.4	18.9	4.1	3.9	7.5	–4.7	5.0	13.0	8.6	10.0	–2.2
to G3	6.8	–4.9	–1.6	3.4	–4.9	2.6	9.4	2.8	9.3	10.5	3.8	7.6	–1.0
to Asia ex Japan	12.1	13.4	21.7	36.7	15.2	7.5	6.9	–10.3	2.8	16.2	13.3	9.9	–2.6
to Australia	15.1	7.6	12.4	5.7	–5.3	3.0	–1.5	1.1	4.8	4.1	5.3	14.4	4.2
to non–Asian emerging markets	16.7	11.7	10.2	22.2	0.4	–1.4	5.9	–3.3	3.9	14.6	10.0	16.6	–5.0
Imports %yr	6.5	1.7	2.7	9.4	5.2	8.4	7.2	3.3	1.5	1.2	–1.4	–17.9	–13.5
from G3	1.6	–0.9	–4.3	–0.8	–0.1	4.3	8.1	11.5	7.4	4.3	2.4	–11.8	–10.2
from Asia ex Japan	3.2	3.8	10.9	17.5	8.1	7.3	1.5	–4.7	1.7	3.5	–0.4	–14.1	–11.4
from Australia	19.0	–8.3	–8.1	7.5	9.1	19.0	33.5	24.8	2.4	–1.9	–20.5	–26.5	–30.9
from non–Asian emerging markets	24.6	4.9	–1.7	–0.9	–6.8	4.9	6.3	2.4	4.5	0.8	–4.4	–36.7	–27.6
Trade balance USDbn	68.8	79.5	83.3	43.5	65.7	61.5	90.5	16.6	85.9	128.1	149.5	123.7	139.5
Change in FX reserves USDbn	–65	45	26	131	54	166	159	127	45	–106	–45	–113	–36
Enterprise survey – net balance, 50 base													
Business conditions	63.7	61.1	61.8	62.6	57.1	56.3	58.1	55.3	55.4	54.9	54.5	52.8	51.8
Profitability	52.6	51.4	53.1	52.8	55.6	55.1	57.6	50.9	54.1	55.0	55.0	51.0	52.8
Domestic orders	50.2	47.4	47.7	48.8	50.3	48.2	49.4	44.4	48.5	46.9	46.5	42.5	46.3
Foreign orders	48.8	47.5	47.1	46.6	49.9	50.1	48.7	45.4	49.7	49.9	47.9	44.2	48.7
Banking climate – % of average													
Demand for loans	87.4	82.5	87.8	95.6	89.5	92.2	91.9	96.5	88.3	82.2	80.1	84.9	77.2
Ease of policy stance	121.8	130.2	134.5	140.2	142.2	127.7	131.5	118.7	129.1	142.6	138.4	134.1	106.3
Bankers' confidence level	107.2	77.1	101.2	132.6	117.7	112.0	130.9	124.1	98.6	108.5	96.4	87.2	78.6
Westpac MNI Consumer Sentiment* – % of average													
Headline composite	100.4	95.0	99.4	99.3	100.3	95.0	101.7	97.6	96.2	93.6	91.7	92.9	91.7
Expected family finances	99.3	98.1	101.8	100.7	101.9	102.9	102.7	104.2	98.5	94.0	91.4	93.3	92.3
House price expectations	95.8	102.2	100.5	102.6	103.1	102.6	102.7	102.5	106.5	107.8	106.5	108.5	107.4
Employment outlook	107.4	98.0	101.8	106.3	105.4	95.1	107.7	97.4	97.5	92.5	91.2	91.7	91.0

Sources: Westpac Economics, CEIC, MNI.
* Quarterly observations are the 3 month average.

Table 2: Resource related economic indicators

Monthly

	Jul–14	Aug–14	Sep–14	Oct–14	Nov–14	Dec–14	Jan–15	Feb–15	Mar–15	Apr–15	May–15	Jun–15
Industrial production %yr 3mma	9.0	8.4	8.0	7.5	7.6	7.6	7.3	7.2	6.4	6.1	5.8	6.2
Electricity	6.9	4.1	3.4	2.7	3.6	2.7	6.0	3.8	2.8	–0.1	2.5	3.9
Processed crude oil	3.6	3.9	4.9	6.3	6.6	5.7	7.5	5.4	5.5	4.8	8.2	7.2
Cement*	3.9	3.9	3.2	1.6	–0.7	–0.8	na	na	–21.2	–14.4	–11.6	–6.6
Steel products*	6.2	5.2	3.4	2.8	2.3	4.4	na	na	2.6	3.4	2.9	2.1
Non–ferrous metals*	7.0	8.2	9.2	8.1	7.9	10.3	na	na	17.3	19.9	21.1	23.5
Automobiles*	9.6	7.1	5.1	3.9	3.6	1.7	na	na	3.7	–0.6	–2.6	–5.2
Civilian ships*	–19.6	–16.5	–11.0	–7.8	–7.7	–20.3	na	na	26.9	11.0	7.0	–1.7
Metal cutting tools*	28.7	33.9	36.6	33.2	28.3	27.6	na	na	4.6	6.9	5.2	9.7
	Jul–14	**Aug–14**	**Sep–14**	**Oct–14**	**Nov–14**	**Dec–14**	**Jan–15**	**Feb–15**	**Mar–15**	**Apr–15**	**May–15**	**Jun–15**
Fixed asset investment %yr 3mma	16.8	15.6	13.5	12.9	12.9	13.3	13.3	13.4	13.6	12.2	10.9	10.4
Manufacturing, of which	14.1	13.8	11.3	10.0	10.3	13.1	13.3	12.9	10.5	9.9	9.9	9.3
Heavy industry	13.3	13.3	11.4	8.8	10.3	11.8	12.6	11.2	8.7	7.5	6.8	7.1
Hard infrastructure, of which	24.0	20.1	18.0	18.5	18.0	18.4	17.6	19.6	22.0	20.5	18.5	17.3
Highways	19.3	16.2	12.1	14.9	9.8	19.1	21.0	29.2	24.4	21.9	20.5	21.1
Railways	27.1	32.8	37.1	31.5	30.8	18.0	14.6	11.9	33.3	34.5	44.3	23.7
Utilities	16.3	14.7	18.1	20.5	18.9	13.9	15.3	18.2	21.9	20.5	18.1	15.7
Real estate, of which	11.6	11.4	10.1	10.1	9.3	5.8	5.4	6.3	9.1	5.8	3.2	2.1
Dwellings	10.8	9.9	7.9	7.2	6.7	4.0	3.9	5.2	6.9	3.5	0.6	0.7
Non–residential	13.3	14.8	15.3	16.8	15.2	9.7	8.4	8.8	14.0	10.9	10.3	5.1
Off–market urban construction	–18.4	–18.6	–15.7	–1.7	–18.3	–32.4	–27.7	–18.7	–5.5	–10.3	–20.9	–13.7
	Jul–14	**Aug–14**	**Sep–14**	**Oct–14**	**Nov–14**	**Dec–14**	**Jan–15**	**Feb–15**	**Mar–15**	**Apr–15**	**May–15**	**Jun–15**
Value of new project starts	16.2	17.7	16.3	12.1	10.3	11.5	8.1	3.7	2.3	8.8	9.9	–0.2
Number of new project starts	8.6	15.1	9.5	9.5	4.7	7.6	5.8	5.2	6.0	8.7	12.2	11.3
Local government projects	16.9	15.8	13.8	13.2	13.9	15.4	15.2	14.8	13.8	12.4	11.0	11.0
Central government projects	16.1	13.7	8.0	9.2	0.9	–10.4	–8.5	–2.7	10.5	8.3	7.7	–2.9
State owned enterprise investment	15.0	12.5	12.1	11.0	11.0	9.5	10.6	12.4	14.5	12.0	10.1	10.7

Table 2 continued on page 13. * Output for these sectors was not released for the months of January and February. As a consequence, we have entered na for those two months and reported the unsmoothed year–ended rate for March.

Table 2: Resource related economic indicators

Monthly

%yr 3mma unless otherwise specified	Jul–14	Aug–14	Sep–14	Oct–14	Nov–14	Dec–14	Jan–15	Feb–15	Mar–15	Apr–15	May–15	Jun–15
Volume of housing starts	–3.0	1.7	4.7	16.3	3.8	–4.8	–25.0	–20.5	–18.3	–17.4	–15.7	–14.2
Volume of housing sales	–9.1	–9.6	–13.0	–8.1	–7.7	–5.6	–10.5	–12.2	–11.4	–3.6	6.8	12.7
Value of housing sales – Nationwide	–10.0	–10.2	–10.8	–10.6	–10.1	–9.1	–11.4	–13.8	–14.2	–9.4	–2.1	5.3
Eastern provinces	–15.8	–16.0	–16.3	–15.8	–15.1	–13.6	–13.6	–13.8	–13.0	–8.4	–0.6	8.8
Central provinces	2.2	1.6	0.1	–1.0	–1.9	–2.2	–9.8	–16.8	–19.2	–12.3	–3.6	1.7
Western provinces	–1.9	–2.4	–3.2	–2.7	–2.1	–1.7	–6.1	–10.5	–12.7	–9.5	–5.1	–1.6
Volume of land sales	–1.5	0.5	–1.5	31.0	6.7	7.6	–35.8	–24.4	–32.4	–43.5	–41.7	–44.5
70 city *new* dwelling prices net % rising m–o–m	–88.6	–95.7	–98.6	–100.0	–97.1	–91.4	–88.6	–90.0	–50.0	–41.4	–32.9	–2.9
70 city *secondary* dwelling prices net % rising m–o–m	–91.4	–95.7	–100.0	–90.0	–75.7	–75.7	–78.6	–75.7	–48.6	–7.1	17.1	32.9
Auto sales, of which	6.8	5.3	4.4	3.1	2.5	6.0	7.6	6.8	3.6	0.9	0.8	–1.1
passenger cars	11.7	9.9	8.2	7.1	5.8	9.0	10.3	10.9	8.7	6.5	4.8	0.5
Excavator sales	–27.5	–26.4	–29.5	–31.4	–33.9	–34.9	–31.0	–43.3	–45.4	–49.7	–36.5	–33.6
Terrestrial freight	8.1	8.1	8.0	7.8	7.6	7.3	7.3	9.8	7.7	6.7	2.1	1.7
Aquatic freight	19.3	21.2	21.1	23.0	21.8	22.5	18.2	13.0	5.2	1.2	0.8	1.6
International air freight	6.8	6.6	5.9	6.3	5.5	7.3	8.0	13.7	11.0	9.3	3.7	5.8
	Aug–14	Sep–14	Oct–14	Nov–14	Dec–14	Jan–15	Feb–15	Mar–15	Apr–15	May–15	Jun–15	Jul–15
Manufacturing PMI – index – of which	51.1	51.1	50.8	50.3	50.1	49.8	49.9	50.1	50.1	50.2	50.2	50.0
Output	53.2	53.6	53.1	52.5	52.2	51.7	51.4	52.1	52.6	52.9	52.9	52.4
New orders	52.5	52.2	51.6	50.9	50.4	50.2	50.4	50.2	50.2	50.6	50.1	49.9
New export orders	50.0	50.2	49.9	48.4	49.1	48.4	48.5	48.3	48.1	48.9	48.2	47.9
Raw material inventories	48.6	48.8	48.4	47.7	47.5	47.3	48.2	48.0	48.2	48.2	48.7	48.4
Finished goods inventories	48.1	47.2	47.9	47.2	47.8	48.0	47.0	48.6	48.0	47.5	47.7	47.4
Purchases of inputs	51.9	51.2	50.7	50.5	50.1	49.6	49.4	49.7	50.1	51.0	50.9	50.3
Imports	48.5	48.0	47.9	47.3	47.8	46.4	47.5	48.1	47.8	47.6	48.0	47.8
New orders to finished goods inventories ratio	1.09	1.11	1.08	1.08	1.05	1.05	1.07	1.03	1.05	1.07	1.05	1.05

Sources: Westpac Economics, CEIC.

China's equity market & the real economy

Equities & the household sector

The July edition of the Westpac MNI China Consumer Sentiment Survey was conducted whilst the Chinese equity markets was in free fall to its early July trough (figure 25). This accident of timing transformed the July survey into a near-perfect experiment testing the importance of the equity market for the collective consumer psyche. Ergo, the July survey can be interpreted as a referendum on the question "Is the equity market an important factor in the collective psyche of Chinese households?" The fact that the survey's headline indicator increased strongly in the month, alongside broadly positive details, indicates that the answer to that hypothetical question is a decisive "no".

The fact that the household sector offered a collective shrug at the stock market turmoil of June/July is internally consistent with the weak state of consumer confidence reported during the market's boom phase in 2014 and early 2015. It seems that both dramatic gains and spectacular busts in equities can pass by relatively unheeded by the overwhelming majority of Chinese households. In short, there was no discernible wealth or confidence effect from the upswing in the equity market, so there was nothing to unwind when the bust arrived.

In the year to June 2015, despite the massive stock price appreciation in 2014, the low inflation adjusted returns paid by deposits, the poor performance of the housing market and a string of interest rate cuts, an average of just 5% of respondents to the survey gauged that the stock market was the "wisest place for their savings" over that period (figure 26). That compares to the 17% that nominated housing; the 37% that nominated bank deposits; and the 20% advocating for wealth management products (which have had reputational issues of their own). Those relativities are reflected in the fact that savings deposits account for approximately 54% of GDP, while household equity holdings account for less than one third of that amount.

All of the above should go a long way towards proving the point that the gyrations of the equity market should not be of primary concern to those with an interest in Chinese consumer behaviour.

Figure 25: Stocks & the July surveying period

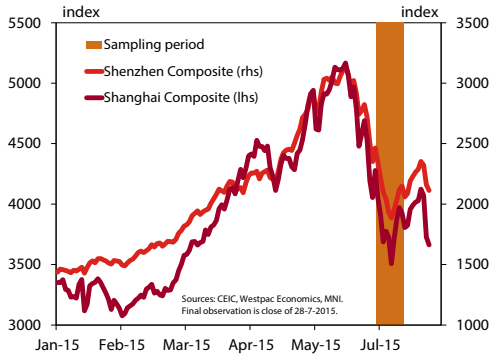


Figure 26: 'Wisest place for savings": year to Jun-15

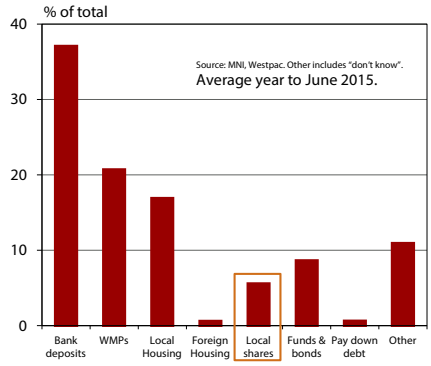
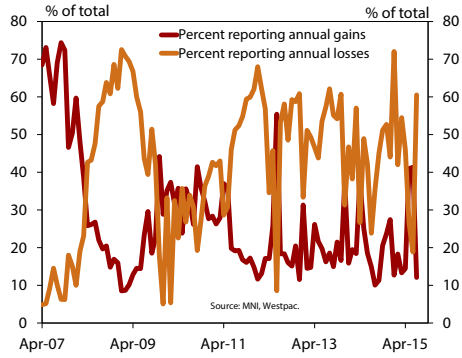


Figure 27: Self-declared trailing profit or loss



Equities & the financing of business

The market crunch will no doubt scupper, for now, the plans of firms who were hoping to raise funds directly through this channel. This will be a blow for those firms looking towards a capital-raising to lower their leverage ratios. However, even in the midst of the boom, equity was a small proportion of total financing for China Inc., never exceeding 5%, so from an aggregate point of view (figures 28 & 29) this can be put down as an inconvenience, not a major impost.

Further to the above points, contrary to western practice, loan covenants or 'triggers' linked to stock prices are essentially non-existent in China. As the stock market has historically exhibited only the most tenuous link to underlying profitability and the economy at large it would be irrational for financiers to link lending decisions to its gyrations, or for individuals firms to be held accountable for the same. Access to traditional forms of finance should thus be relatively unaffected, although on this point we note that demand for credit is presently weak, which is limiting the impact of monetary policy easing to date (see page 6).

Anecdotes suggest that even if traditional covenants are rare, some firms without access to traditional collateral have apparently pledged shares in exchange for financing from 'shadow' banks. This issue comes back to the highly unbalanced nature of the equity price boom itself. Highly speculative start-up ventures were bid up to extravagant price-to-earnings (P-E) ratios in the lead-up to the crash, but blue chips with an actual historical record of profitability and a relatively transparent balance sheet and operating model (such as the banks) continued to trade at rather unflattering P-E ratios. Couple this obviously vulnerable micro pricing constellation to the rapid increase in margin loans set against these stretched valuations and you have a recipe for major volatility.

Taking a step back, figure 30 depicts Chinese market capitalisation to GDP against living standards, with Japan and Korea as comparators. This style of presentation highlights the modest nature of the 2014-15 episode versus 2007, as well as the volatile boom-bust nature of equity markets over the course of the economic development process and the financial maturation that comes with it.

Figure 28: Total financing by type, stock, % share

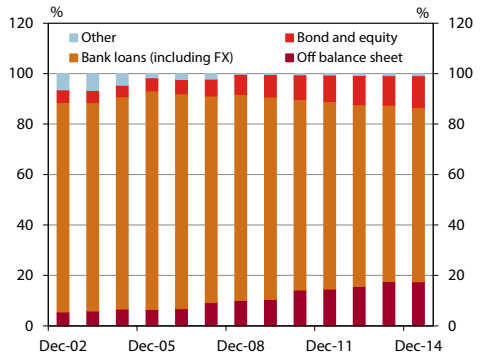


Figure 29: Total financing by type, stock, % of GDP

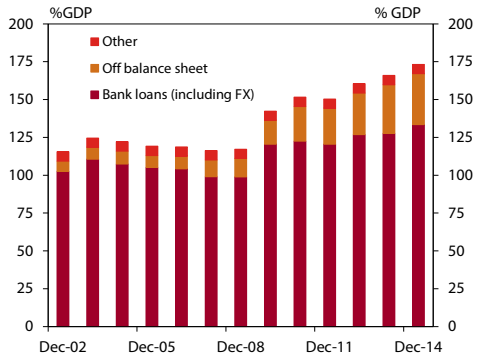
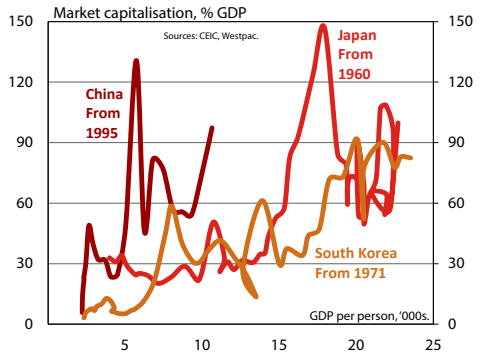


Figure 30: Market cap % of GDP & living standards



Equities & structural change

The final point on the previous page referenced the linkage between economic development and financial maturation. This page and the next will draw out that theme with reference to a) the changing structure of the real economy as China attempts to navigate the middle income phase of its development, and b) the interaction between these factors and financial reform and maturation, with reference to the role of the equity market.

Figure 31 depicts the share of financial services in GDP in a sample of East Asian economies. The history traced by Japan and Korea shows that that financial services become increasingly more important to overall economic activity right up to the low reaches of high income level around the $20k of GDP per head mark, at which point they account for around 6% of GDP. Interestingly though, China has deviated well above the path traced by Japan and Korea in this regard, and is presently residing above 7% of GDP at $10k GDP per head. That is despite the fact that it is widely ackowledged that the share of manufacturing in Chinese GDP has been unusually high and service sector activity accordingly low.

The key to understanding these apparently contradictory points is that the provision of financial services encompasses both investment and savings decisions, the management of assets and the creation of liabilities, and China has been remarkably adept at generating both over the course of its high growth era. China's gross saving generation as a share of GDP since WTO entry has been unprecedented for a large non-oil exporting economy and it has managed to put a very large proportion of those savings to work at home in high yielding investments. This has created a virtuous circle of wealth creation, which spilled back into high demand for the services of the financial system. China has accordingly achieved a much greater degree of financial deepening at its current stage of development than relevant peer economies. Looking ahead, as the underlying growth rate slows and both investment and savings shares decline (the other side of the rebalancing coin regarding consumption), financial services may rise no faster than overall GDP for some years. However, within the system household liability generation will become more important, and corporate debt liabilities less so.

Figure 31: Financial services, % of GDP

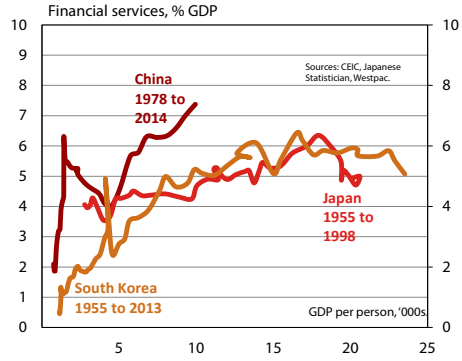


Figure 32: Structural change, selected industries

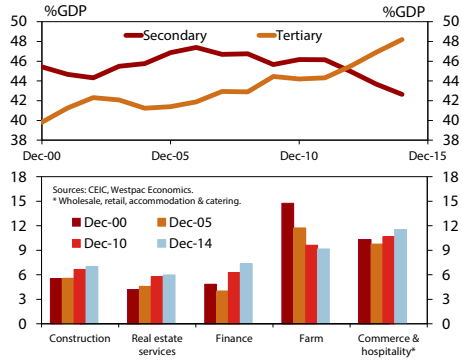
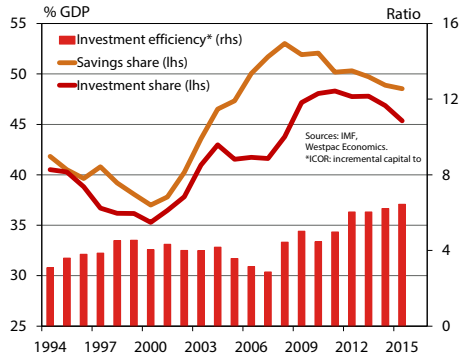


Figure 33: The investment-led model has matured



Equities & financial reform

This page links the aforementioned strands of argument together under the financial reform banner in both its domestic and international aspects. Consider figure 34, which presents a stylised view of the debt load carried by various segments of the Chinese economy. Note on the previous page the discussion was general and considered financial 'liabilities', whereas figure 34 considers debt alone, which is a subset of total liabilities. The concern for China is that the structure of its total liabilities is far too skewed towards debt, and the debt itself is too narrowly held. Faced with a stylized situation like this, in the abstract, one might advice state owned firms to privatise through IPO (or sell/release more shares if already listed) and pay down debt with the proceeds; and local government to conduct asset sales and use those proceeds to also pay down debt. A side element would encourage local governments to refinance bank debt tied to individual projects with bond financing tied to general revenues.

These points are, in fact, a quick summation of the Chinese leadership's basic plan to rebalance the economy's liability stock in a fashion that better suits the assets held by the system's biggest borrowers, while tilting the financial system in a direction more amenable to the middle income phase of development. This ties in with the objective of replacing the old monetary policy regime (a hybrid mixing monetary aggregate targeting with an FX anchor) with the favoured high income economy method of short run interest rate setting that transmits through a floating exchange rate and the yield curve.

These desires explain why the equity market was given policy support in the first place, which is what jolted it higher over the course of 2014 despite the weak performance of the real economy. If a large and sustained increase in the supply of equity liabilities is to absorbed, it is best to encourage investors with a strong positive price signal. Bringing in new investors, such as onshore insurers and offshore fund managers, was another element of the plan. There has been a sharp increase in inward portfolio quotas over the last year (figure 36). Greater openness to inbound investment has also extended to the fixed income sphere, encompassing the interbank and sovereign, semi-sovereign and corporate bond markets.

Figure 34: Debt by sector in China: stylized facts

Sector	Characterisation of debt load
Urban households	Low – mortgage exposure < 20% of GDP
Rural households	Very low - property rights & collateral issue
State owned firms	**Too much – ease of access to banks**
Private firms	Low – difficulty of access to banks
Central government	Low – but has huge contingent liabilities
Local government	**Too much – vertical fiscal imbalance & stimulus era hangover.**
The nation	**Huge international creditor**

Source: Westpac Economics

Figure 35: Financial liability stocks by country

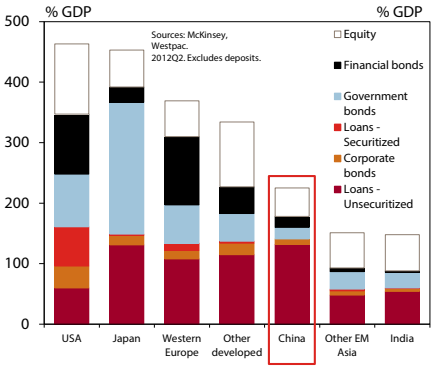
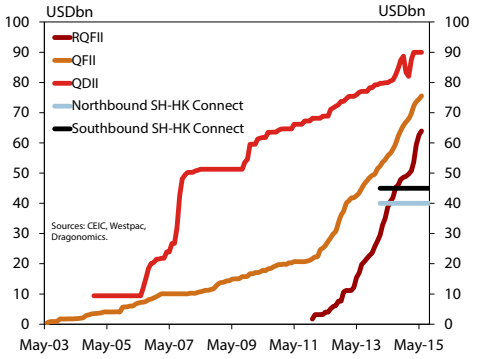


Figure 36: Portfolio flow quotas by program



Steel

- Steel prices in China continued to fall in Q2 and ended the quarter 35% below the peak recorded during the GFC. The drop was aided by another weak quarter for China's residential construction sector and slowing auto manufacturing growth.
- Prices for all steel products fell in Q2, led by plate, which was down 30%yr to average RMB2404. Hot-rolled sheet fell 29%yr to RMB2425 and rebar fell 25% to RMB2435.
- China's steel production fell 1%yr in H1 2015 to 408 Mt, driven by the central regions of Hubei, Hunan and Henan, where year-on-year output fell 4%, 4% and 1%, respectively. Output grew

Figure 37: Benchmark steel prices

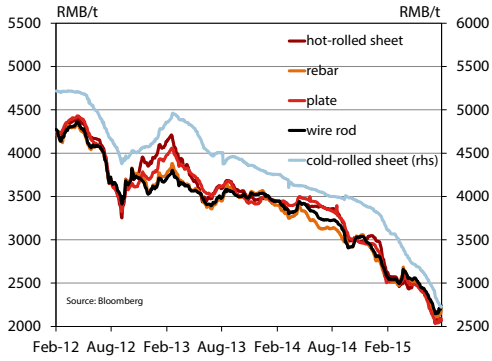


Figure 38: Crude steel output: level & growth

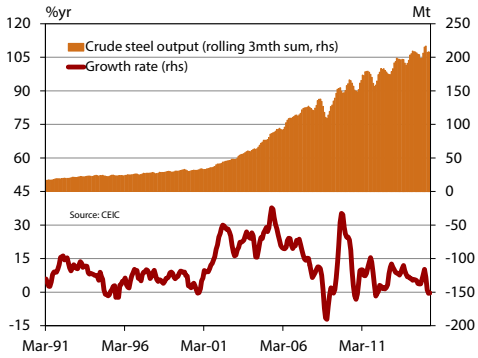


Figure 39: The rebar price and input costs

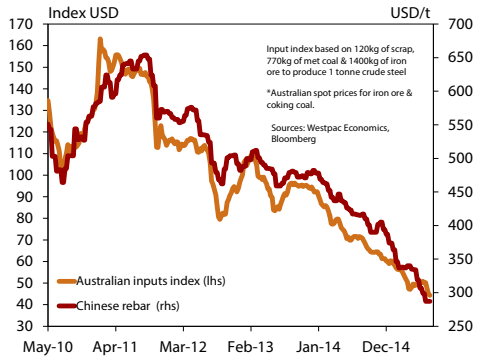


Table 3: Steel prices (quarterly averages).

Domestic RMB/t	Mar–13	Jun–13	Sep–13	Dec–13	Mar–14	Jun–14	Sep–14	Dec–14	Mar–15	Jun–15
Rebar	3749	3527	3507	3527	3348	3258	3078	2940	2577	2435
Hot–rolled sheet	4043	3623	3609	3489	3399	3392	3272	3008	2636	2425
Cold–rolled sheet	4865	4697	4460	4342	4214	4096	4001	3898	3582	3160
Plate	3934	3676	3599	3455	3433	3448	3270	2962	2588	2404
Wire rod	3697	3526	3509	3519	3394	3347	3155	2952	2605	2471
Benchmarks USD/t										
Rebar benchmarker	503	476	474	477	454	431	416	392	344	314
HRC benchmarker	545	493	494	480	466	454	450	410	359	325
CRC benchmarker	647	629	613	611	597	562	552	534	489	424

Source: Bloomberg.

modestly in other key producing regions, with Hebei, Jiangsu and Liaoning recording gains of 1%yr over the same period.

- In response to persistent weakness in the construction sector China's rod and bar output fell by 9%yr in H1 2015. However, production of hot and cold rolled sheet increased by 7%yr over the same period.
- Steel exports increased by 28%yr to 52 Mt in H1 2015. Around 13% of China's steel production was exported (up from 10% in 2014). In response, the EU, India, the US and Canada implemented additional duties on Chinese steel exports or initiated dumping investigations.

Figure 40: Steel end–use by sector

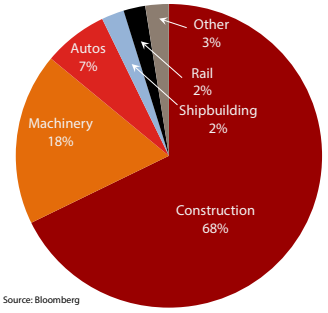


Figure 41: Steel inventories by product type

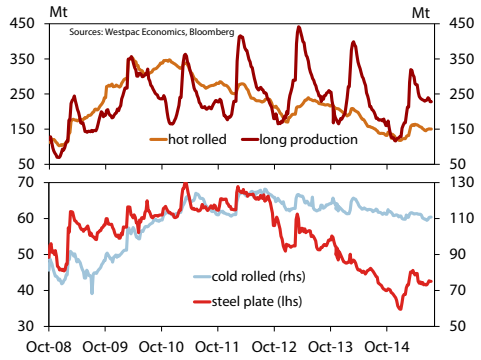


Figure 42: Steel inventory–to–sales scatter plot

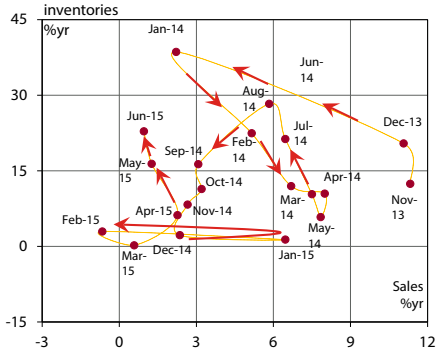


Figure 43: Steel demand per head

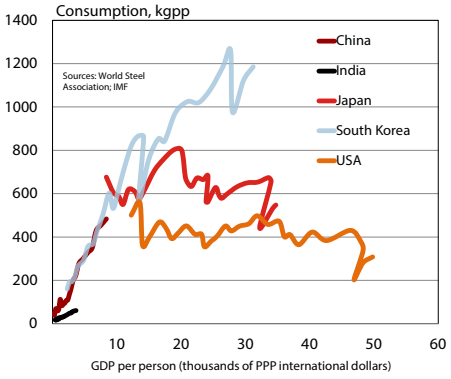
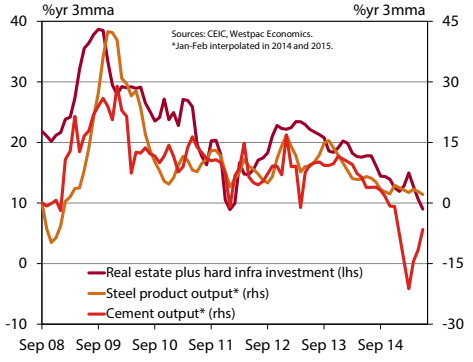


Figure 44: Construction, cement and steel



Iron ore

- The price of iron ore fluctuated significantly during Q2. It averaged US$59 (CFR) a tonne, down 6%qtr and 43%yr. On 8 July the spot price fell 10.1% (US$5.25) to US$44.6/t. The price subsequently recovered to hover around US$49/t through the remainder of July.
- China's iron ore port stocks fell sharply during Q2 to finish at 74.1 Mt, down 21%qtr and 30%yr. The drawdown in China's port stocks provided support to prices through May and early June.
- China's imports of iron ore fell 4%yr in Q2 to 226 Mt with import values down 48%yr to US$13 billion. Iron ore imports from Australia increased in Q2, despite the overall decline in

Figure 45: Iron ore prices: spot and forward

Figure 46: Iron ore prices and rebar steel

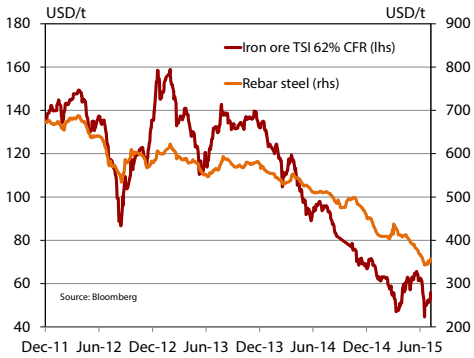


Figure 47: Port inventories versus end demand

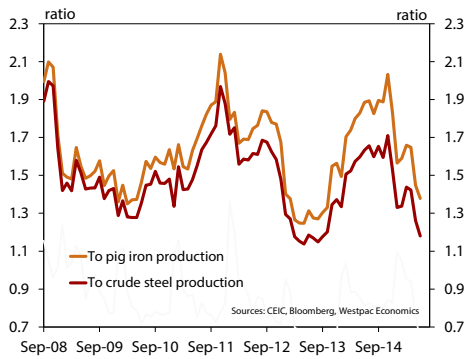


Table 4: Iron ore prices (USD/t, 62% ferrous metal content unless otherwise indicated).

TSI spot price, CFR	Mar–13	Jun–13	Sep–13	Dec–13	Mar–14	Jun–14	Sep–14	Dec–14	Mar–15	Jun–15
Quarter average	148.2	125.8	132.6	134.9	120.4	102.7	90.3	74.4	62.5	58.5
Quarter end	137.3	116.5	131.4	134.2	116.8	93.8	78.1	71.3	51.4	59.4
Quarter high	158.9	141	142.8	139.7	135	119.4	98	84.17	71.49	65.6
Quarter low	132.9	110.4	116.9	131.2	104.7	89.0	78.0	66.8	51.4	47.1
TSI in CNY terms, CFR	922.4	774.3	812.0	821.4	734.5	639.7	556.9	457.3	389.6	362.8
IODEX Aust FOB	140.5	117.9	122.2	122.6	110.8	93.9	81.4	66.1	57.6	53.2
IODEX Brazil FOB	129.0	106.5	106.9	107.2	95.9	80.4	67.3	54.3	50.9	46.5

Sources: Bloomberg; Platts. CFR is cost including freight. FOB is free on board.

volumes, and were up 6%yr to 147 Mt. As a result Australia's share of China's seaborne market increased to 65% from 59% a year ago.

- Brazil's exports to China were steady in Q2 at 42 Mt, which equates to a 19% market share.
- Brazil's export potential received a boost in Q2 following an announcement from China's Transport Ministry that Vale's 400 000 dwt vessel, the 'Valemax', will be permitted to dock at the Qingdao, Dalian, Tangshan and Ningbo ports. Vale estimates that the Valemax will reduce shipping costs by US$4–6/t. Over the last year, Australia's freight advantage averaged US$8/t, so this is a material development.

Figure 48: Chinese import volumes by source

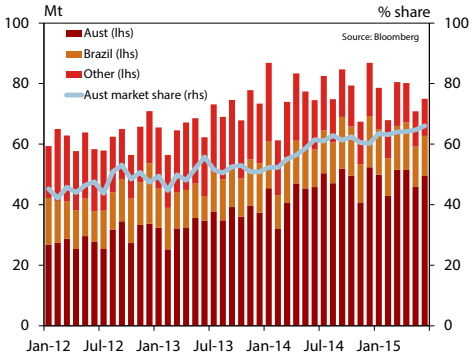


Figure 49: Australian iron ore exports to China

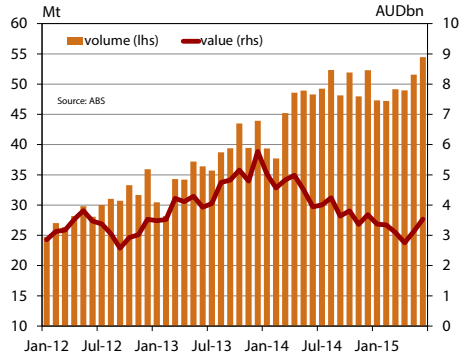


Figure 50: Chinese imports, unit values & prices

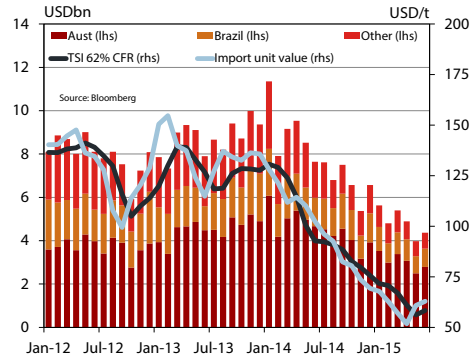


Figure 51: World trade in iron ore – seaborne

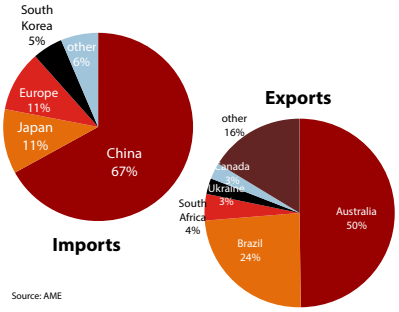
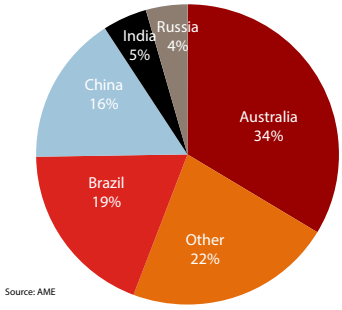


Figure 52 : Shares of world iron ore output



- China's imports of iron ore from minor producers (countries other than Australia and Brazil) fell by 37%yr to 37 Mt in Q2. As a result, their share of China's iron ore imports fell to 16% (from an average of 24% in 2014).
- China's domestic iron ore production fell by 11%yr to 350 Mt in Q2 as high cost domestic concentrate continues to be displaced by low cost seaborne iron ore.
- Australia's iron ore export volumes to China increased 6%yr to 155 Mt in Q2 while values decreased 30%yr to $A9.4 billion.

Figure 53: China's total iron ore supply

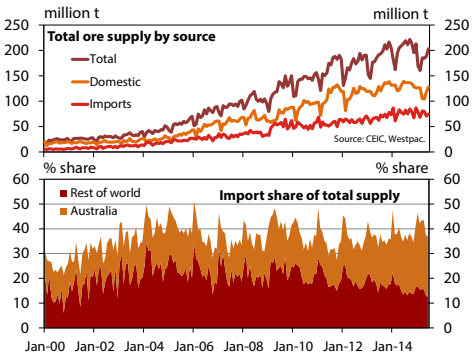


Figure 54: Chinese iron ore miners' margins

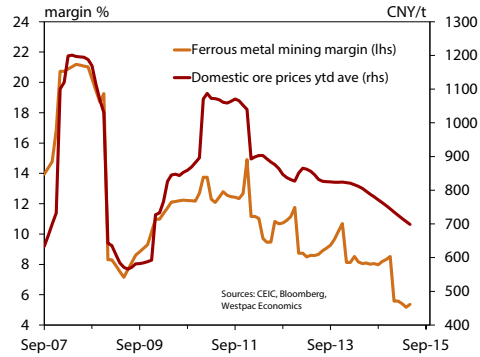


Figure 55: Chinese output, imports & stocks

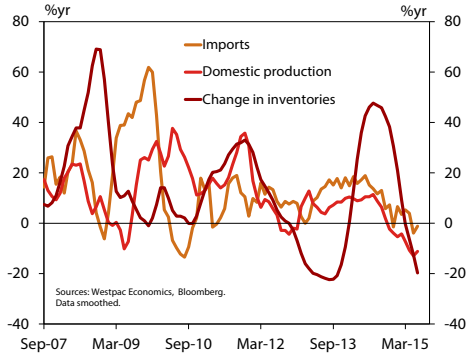


Figure 56: Chinese iron ore miners: loss–makers

Figure 57: Seaborne iron ore cost curve

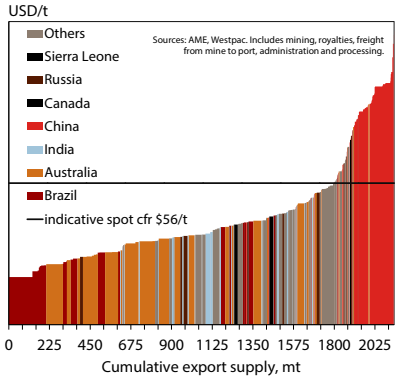


Table 5: Iron ore & metallurgical coal summary data

Iron ore		unit	Mar–13	Jun–13	Sep–13	Dec–13	Mar–14	Jun–14	Sep–14	Dec–14	Mar-15	Jun-15
China imports		Mt	186.5	198.0	216.7	219.1	222.0	235.3	242.1	233.6	227.1	226.0
	Australia	Mt	89.8	102.6	111.8	112.9	118.2	138.2	149.4	142.7	144.4	146.8
	Brazil	Mt	38.4	32.1	40.5	44.4	41.6	38.9	44.7	45.8	41.8	42.3
	value	USDbn	24.2	26.3	26.3	28.1	28.4	25.7	21.9	18.5	15.8	13.2
Raw production *		Mt	287.4	356.6	387.0	405.4	304.2	393.7	410.6	389.3	280.6	350.2
Iron ore stocks at ports, end of qtr		Mt	68.1	71.5	70.1	81.3	103.8	105.7	103.2	95.2	93.3	74.1
	weeks of imports	weeks	4.8	4.7	4.2	4.8	6.1	6.2	6.1	5.6	5.5	4.4
Australian exports to China		Mt	92.9	107.9	113.8	126.8	122.2	145.8	149.7	152.2	143.7	155.0
	value	AUDbn	11.2	12.3	13.6	15.6	14.4	13.4	11.9	10.9	9.8	9.4
Metallurgical coal												
China imports		Mt	17.2	18.1	19.4	20.7	13.0	18.1	13.4	18.0	10.9	10.7
	value	USDmn	2431	2498	2414	2418	1634	1812	1270	1736	980	883
Australian exports to China		Mt	9.1	9.8	12.4	14.0	10.1	11.6	11.2	13.4	7.7	10.8
	value	AUDmn	1284	1296	1547	1823	1248	1238	1144	1513	956	1320

Sources: Bloomberg, ABS, IHS, CEIC. * Raw mine output with a low iron content.

Metallurgical coal

- Metallurgical coal prices declined rapidly in Q2. Lower import demand from China was the key driver, as steel mills reduced their output while simultaneously utilising more domestic coal. Low volatility HCC CFR China averaged US$95/t in Q2, down 24%yr and 15%qtr.
- Australian benchmark prices for high-quality metallurgical coal delivered in Q3 2015 settled at US$93/t, 15% (US$16.50) lower than in Q2.
- Australia and China signed a Free Trade Agreement in Q2. Under the agreement the 3% tariff on metallurgical coal imports from Australia will be removed immediately.
- China's total metallurgical coal imports fell

Figure 58: Met coal spot prices

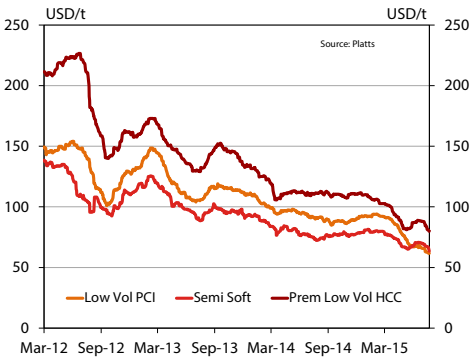


Figure 59: World trade in met coal

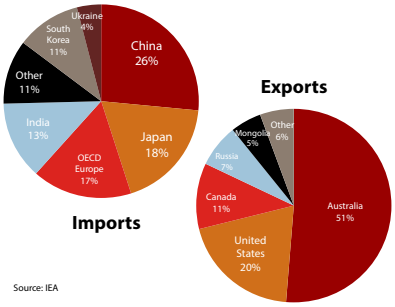


Figure 60: Met coal use and supply by country

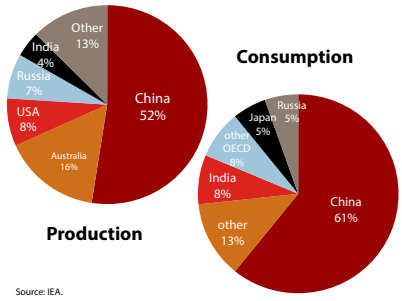


Table 6: Metallurgical coal prices (quarterly average spot prices).

	unit	Mar–13	Jun–13	Sep–13	Dec–13	Mar–14	Jun–14	Sep–14	Dec–14	Mar–15	Jun–15
Prem Low Vol HCC CFR China	USD/t	179.7	155.0	154.7	156.3	135.0	124.3	123.3	121.8	111.8	94.5
Low Vol PCI CFR China	USD/t	154.9	127.2	125.9	129.0	115.9	108.7	102.1	101.3	99.9	81.0
Semi Soft CFR China	USD/t	132.6	114.5	109.1	110.9	101.1	92.8	87.7	89.7	86.6	76.9
Prem Low Vol HCC FOB Aust	USD/t	165.9	141.5	140.9	140.5	120.6	111.4	110.7	110.0	104.0	86.8
Prem Low Vol HCC FOB Aust	AUD/t	159.6	142.6	155.4	155.3	133.3	123.1	122.4	121.5	114.9	95.9

Source: Platts. CFR is cost including freight. FOB is free on board. HCC is hard coking coal.

by 41%yr to 11 Mt in Q2. Total imports in the month of May were the lowest since the GFC. It is reported that some large steel mills intend to stop importing metallurgical coal in the short term because they have ample stocks and they expect further price declines.

- Of China's major suppliers, Mongolia was hardest hit by the large decline in imports in Q2. China's imports from Mongolia declined by 43%yr to a mere 3 Mt. Imports from Australia declined by a relatively smaller 36%yr to 5.5 Mt.
- Australia exported 10.8 Mt of metallurgical coal to China in Q2, down 7%yr (noting time lags between the respective customs data). The value of these exports increased 7%yr to $A1.3 billion, partly reflecting currency depreciation.

Figure 61: Chinese met coal import volumes

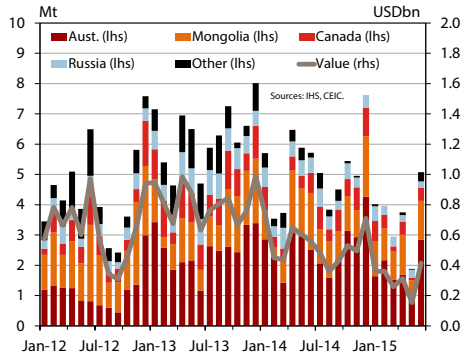


Figure 62: Aust met coal exports to China

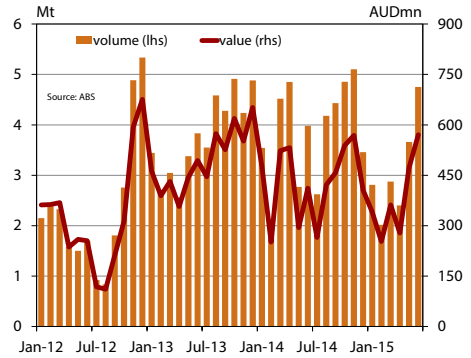


Figure 63: Australian met coal exports: total

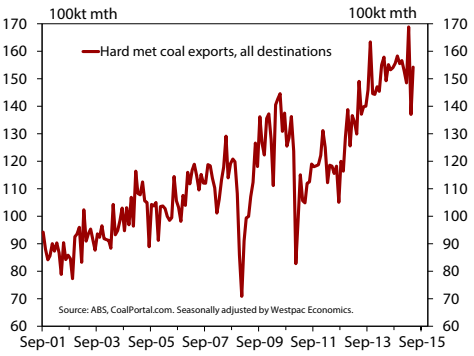


Figure 64: Seaborne met coal cost curve

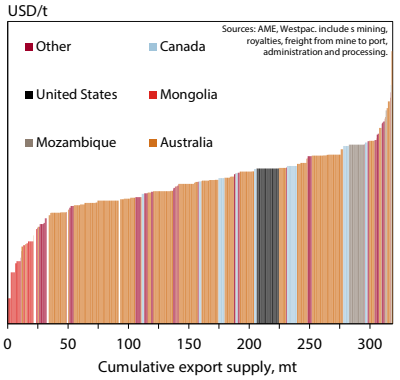
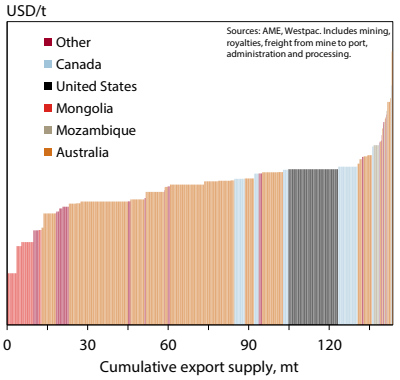


Figure 65 : Seaborne hard coking coal cost curve



Developments in China's energy policy

- Australia and China signed a Free Trade Agreement in June. Under the agreement tariffs will be removed from almost all resource and energy products. The 3% tariff on metallurgical coal will be removed immediately and the 6% tariff on thermal coal will be phased out over two years.
- As part of China's COP21 commitments, Premier Li Keqiang promised that China would reduce the emissions intensity of its economy by 60–65% from 2005 levels and increase the share of non-fossil fuels in total primary energy consumption to 20% by 2030. The government has estimated that it will cost more than US$6.6 trillion to meet these goals.
- China and India reached an agreement on climate change during Narendra Modi's visit to Beijing in May. Under the agreement, China and India will enhance bilateral co-operation on clean energy technology, energy efficiency, energy conservation, renewable energy, sustainable transportation and low carbon urbanisation.
- The National Energy Administration (NEA) released an action plan for the clean and efficient use of coal between 2015 and 2020. The plan includes increasing coal quality, retrofitting coal-fired power plants, industrial boilers and coal chemical operations, and controlling residential use. To improve coal quality, China will invest in large-scale washing capacity to ensure that 70% of raw coal is washed by 2017 and more than 80% by 2020, up from around 40% currently.
- It is reported that the National Development and Reform Commission (NDRC) is considering the sale of China National Petroleum Corporation and China Petrochemical Corporation's oil and gas pipelines. These assets would be turned into independent businesses as part of plans to improve market competition, and enhance efficiency and transparency.
- In early July the Shanghai Petroleum and Gas Exchange was launched to promote market-based pricing and structural reform. The NDRC and NEA will oversee the exchange, which will focus on both pipeline gas and LNG. Around 40% of gas is presently sold at market prices.
- The State Council approved the merger of China Power Investment Corporation and State Nuclear Power Technology Corporation to form the State Power Investment Corporation. The newly merged company has an installed generation capacity of 98 GW.

Electricity trends

- China generated 1.4 trillion kWh of electricity in Q2, up 3.9%yr and 5.2%qtr. Electricity generation increased in May and June in the lead-up to summer when consumption typically peaks. Strong growth in hydro generation, up 12%yr, squeezed out thermal needs, leading to a 0.6%yr decline from that source.
- According to the China Electricity Council, investment in new electricity generation capacity is largely being directed to thermal plants. As at the end of May, 172 GW of new capacity was under construction. This included 108 GW of thermal power, 36 GW of nuclear, 19 GW of wind power and 3.6 GW of hydropower.
- The growth of investment in new electricity generation capacity increased 2.8%yr in Q2, driven by a 15%yr increase in thermal generation investment. Investment in hydro and nuclear power declined by 21%yr and 18%yr, respectively.
- China's electricity consumption increased 1.6%yr to 1.4 trillion kWh in Q2. Consumption in the secondary industry declined 0.4%yr due to weakness in manufacturing activity as the economy shifts away from energy-intensive sectors. Tertiary and residential electricity use increased by 9%yr and 7%yr, respectively.

Figure 66: World energy consumption

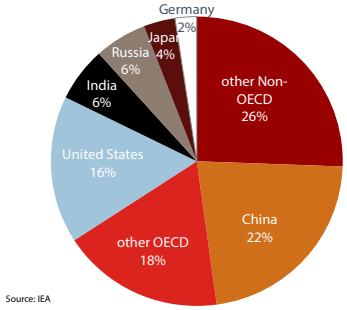


Figure 67: World energy production

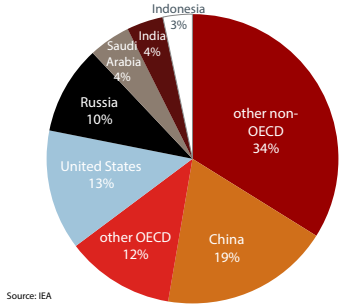


Figure 68: Chinese electricity output by source

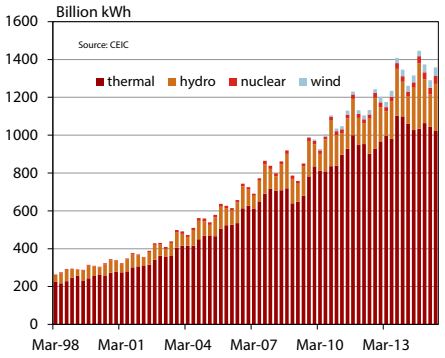


Figure 69: Chinese electricity use by sector

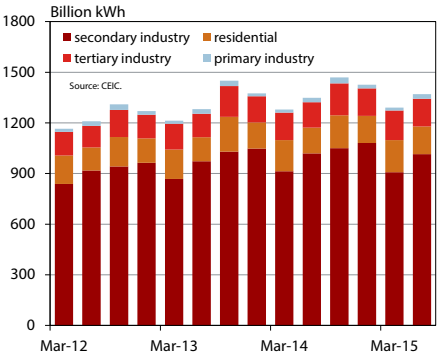


Figure 70: Chinese electricity growth: broad source

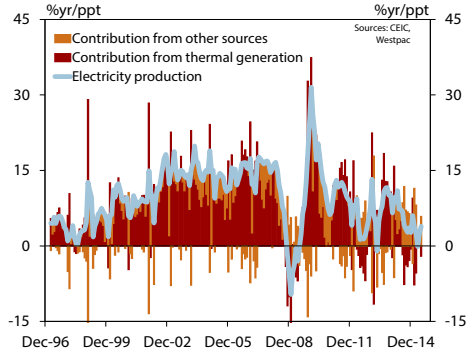
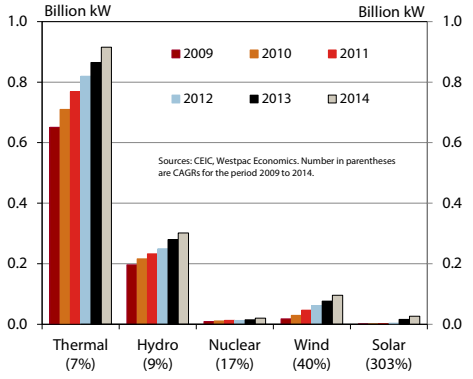


Figure 71: China's generating capacity by type



Thermal coal

- Key thermal coal FOB prices continued to decline in Q2 due to weak Chinese import demand and ongoing oversupply. Newcastle spot prices declined 8.3%qtr, Qinhuangdao (QHD) by 14%qtr, Baltic 3.1%qtr and Richard's Bay 0.5%qtr.
- China released its Clean Coal Action Plan 2015–2020, which is aimed at increasing coal quality and retrofitting existing coal-fired facilities.
- Australia and China signed a Free Trade Agreement in Q2. Under the agreement the 6% tariff on thermal coal imports from Australia will be phased out over two years.
- Reduced demand and government directives to reduce production contributed to lower

Figure 72: Thermal coal prices

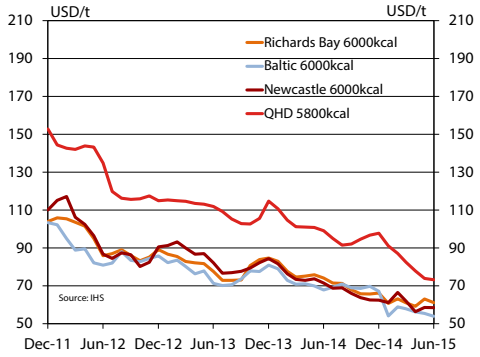


Figure 73: Thermal coal stocks: ports & generators

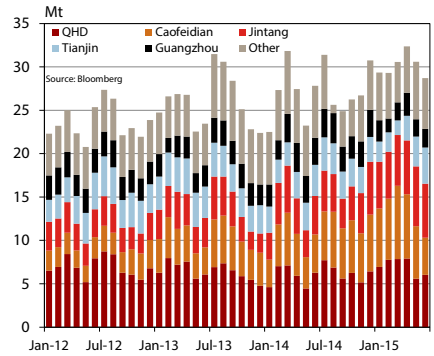


Figure 74: Export thermal coal cost curve

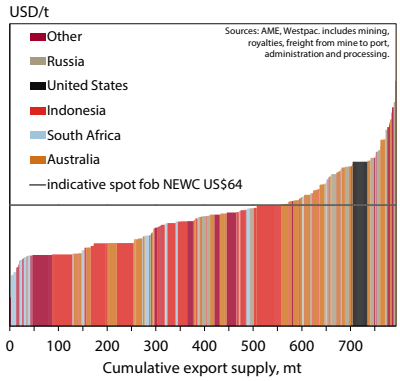


Table 7: Thermal coal prices (USD/t, NAR unless otherwise indicated).

Quarterly averages	Mar–13	Jun–13	Sep–13	Dec–13	Mar–14	Jun–14	Sep–14	Dec–14	Mar–15	Jun–15
QHD 5800kcal	114.9	112.8	105.8	106.1	105.8	100.3	92.8	96.1	87.4	74.9
QHD 5800kcal RMB/t	715.2	694.4	647.8	646.8	645.2	624.8	571.9	590.5	544.9	464.3
Newcastle 6000kcal	91.3	85.4	77.1	82.0	77.4	72.7	68.0	63.0	63.0	57.8
Newcastle 6000kcal AUD/t	88.0	86.7	84.3	88.6	86.5	77.9	73.5	73.7	80.1	74.4
Richards Bay 6000kcal	84.8	80.5	73.0	83.1	78.7	75.0	70.2	65.8	61.5	61.2
Baltic 6000kcal	82.0	75.5	71.4	78.2	74.3	69.4	69.7	68.7	56.9	55.2

Sources: IHS. NAR stands for net as received.

output in H1 2015 from Shenhua and China Coal, two of China's largest coal producers. Shenhua's output declined 10%yr to 139 Mt in H1. China Coal's output fell 22%yr to 46 Mt.

- China's thermal coal imports declined 31%yr to 40 Mt in Q2 as a joint function of low domestic prices, reduced industrial activity, increased regulatory measures and strong hydropower output. Imports from Indonesia were the most affected, declining 33%yr to 17 Mt. Imports from Australia declined by a lesser 17%yr to 13 Mt.
- Australia's exports to China declined by 23%yr to 10 Mt in Q2. The value of these exports declined 27%yr to $A635 million.

Figure 75: Thermal coal imports

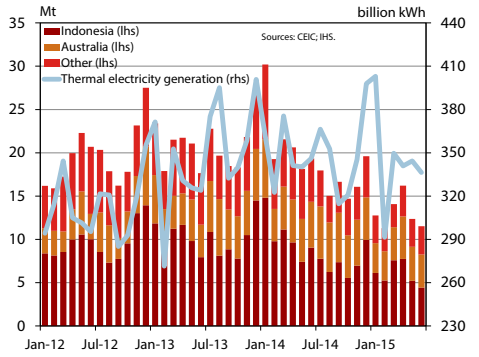


Figure 76: Aust thermal coal exports to China

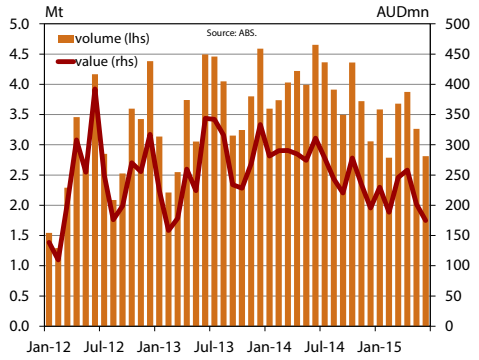


Figure 77: Capex: coal mining vs power generation

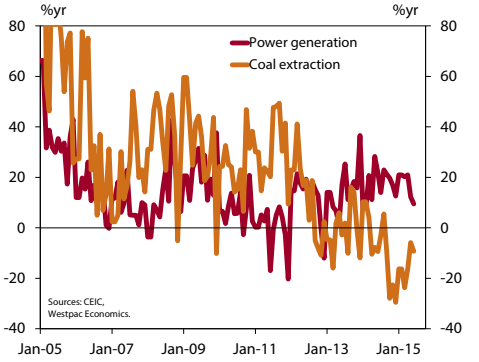


Figure 78: Thermal coal use and supply by country

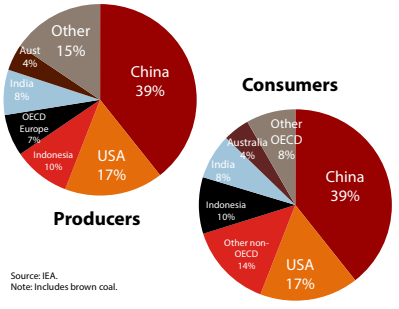


Figure 79: World trade in thermal coal

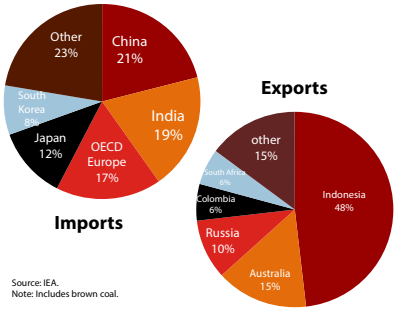


Table 8: Thermal coal summary data

		unit	Mar–13	Jun–13	Sep–13	Dec–13	Mar–14	Jun–14	Sep–14	Dec–14	Mar–15	Jun–15
China imports		Mt	62.8	60.5	60.9	67.6	71.0	58.1	49.7	50.4	38.1	40.1
	Indonesia	Mt	33.1	29.4	27.8	32.8	35.7	26.1	21.4	22.5	19.0	17.4
	Australia	Mt	12.9	12.2	17.0	15.9	15.4	15.2	17.5	15.1	10.6	12.6
	value	USDmn	4846	4679	4647	4973	5145	4069	3346	3156	2255	2244
End of quarter stocks at ports		Mt	26.8	31.5	25.1	22.5	27.5	31.4	26.3	29.4	32.4	27.8
	weeks of imports		5.5	6.8	5.4	4.3	5.0	7.0	6.9	7.6	11.0	9.0
Australian exports to China		Mt	7.9	11.3	11.7	11.6	11.4	12.9	11.8	11.1	10.0	9.9
	value	AUDmn	561.7	827.6	892.2	830.4	862.3	870.2	741.8	708.0	664.3	634.7

Sources: ABS, Bloomberg, IHS.

Oil

- World oil prices increased throughout April and May in response to growing demand in Asia, the beginning of the driving season in the US and expectations of slower production growth. Prices then proceeded to declined again in June and July as output continued to outpace expectations and sanctions on Iran were lifted, creating the potential for further supply gains.
- In Q2, WTI prices averaged US$57.80/bbl (up 19%qtr), Brent around US$63.5/bbl (15%qtr) and Tapis around US$64.60/bbl (15%qtr).
- China's benchmark gasoline and diesel prices were adjusted four times in Q2. Gasoline and diesel prices ended the quarter 8% and 9% higher than in Q1, respectively.

Figure 80: Oil prices

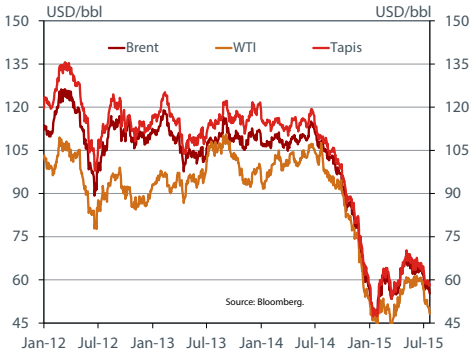


Figure 81: Oil use by sector: China & the World

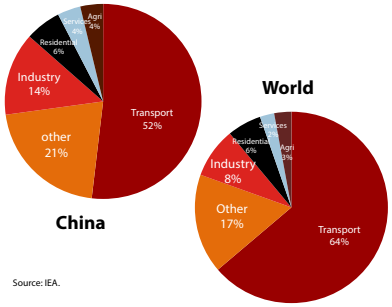


Figure 82: Oil use and supply by country

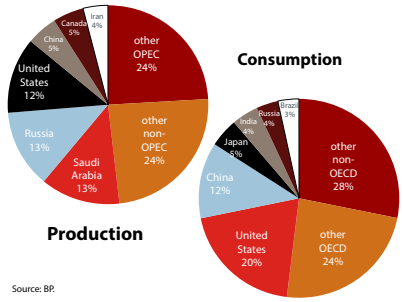


Table 9: Crude oil spot prices (USD/bbl, quarterly).

Brent	Mar–13	Jun–13	Sep–13	Dec–13	Mar–14	Jun–14	Sep–14	Dec–14	Mar–15	Jun–15
Quarter average	112.6	103.3	109.7	109.4	107.9	109.8	103.5	77.1	55.1	63.5
Quarter end	110.0	102.2	108.4	110.8	107.8	112.4	94.7	57.3	55.1	63.6
Quarter high	118.9	111.1	116.6	112.6	111.2	115.1	112.3	94.2	62.6	67.8
Quarter low	107.5	97.7	103.0	103.5	105.8	104.8	94.7	57.3	46.6	55.0
Tapis										
Quarter average	118.3	108.9	115.9	117.2	114.3	115.0	106.2	79.5	56.1	64.6
Quarter end	116.0	109.7	114.5	120.7	113.2	117.0	100.2	58.6	55.9	63.3
Quarter high	125.2	116.1	122.2	121.7	118.6	119.4	115.0	98.4	64.2	70.3
Quarter low	113.7	103.8	109.1	110.8	111.7	110.1	98.7	58.6	47.4	56.8
West Texas intermediate										
Quarter average	94.3	94.1	105.8	97.6	98.7	103.1	97.6	73.2	48.5	57.8
Quarter end	97.2	96.6	102.3	98.4	101.6	105.4	91.2	53.3	47.6	59.5
Quarter high	97.9	98.4	110.5	104.1	104.9	107.3	107.6	91.0	53.5	61.4
Quarter low	90.1	86.7	98.0	92.3	91.7	99.4	91.2	53.3	43.5	49.1

Source: Bloomberg.

- After falling to a 16 month low in May, China's crude oil imports increased 27%mth in June to 29 Mt, challenging the US as the world's largest importer as the first half closed.
- China's imports of crude oil increased 7.5%yr to 83 Mt in Q2 as a whole. Imports from Russia and Saudi Arabia increased by 38%yr and 19%yr to 11 Mt and 14 Mt, respectively. Lower imports from Oman (down 24%yr) and Angola (10%yr) were offset by 'other' (up 15%yr to 35 Mt).
- China's imports of crude oil from Australia declined 22%yr to 557 kt in Q2, while import values declined 53%yr to US$269 million.

Figure 83: Chinese oil import volumes

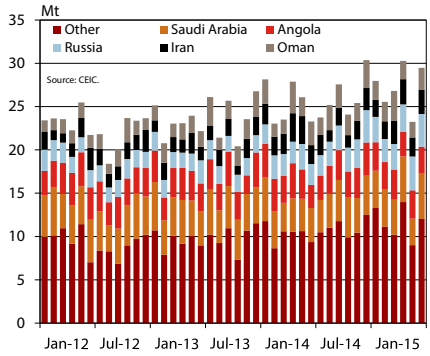


Figure 84: Chinese imports of Australian oil

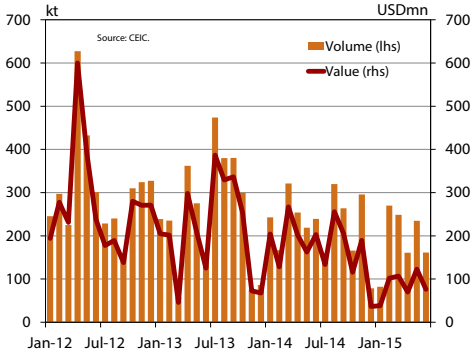


Figure 85: World trade in oil

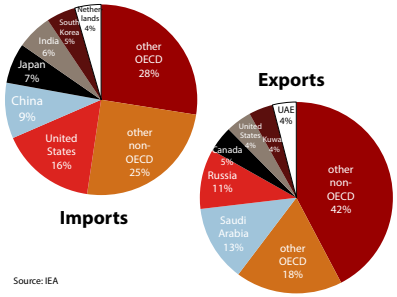


Figure 86: Automobile penetration

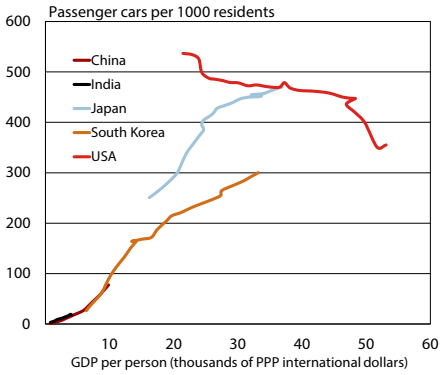


Figure 87: Oil demand per capita

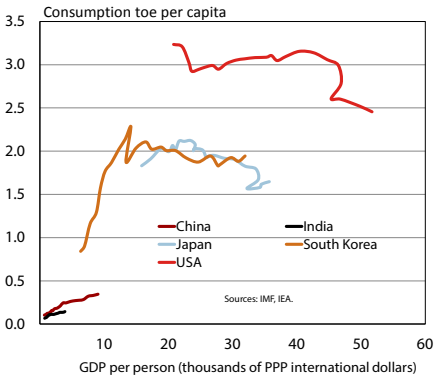


Table 10: Oil and gas summary data

Oil		unit	Mar–13	Jun–13	Sep–13	Dec–13	Mar–14	Jun–14	Sep–14	Dec–14	Mar–15	Jun–15
China imports		Mt	69.0	69.2	73.2	70.8	74.7	77.2	76.5	79.9	80.3	83.0
	Saudi Arabia	Mt	14.0	13.0	13.9	13.0	12.7	11.5	12.4	13.1	12.8	13.6
	Angola	Mt	9.7	10.4	10.5	9.4	10.7	10.2	9.5	10.4	9.9	9.2
	Russia	Mt	6.0	6.4	6.1	6.0	7.5	7.8	8.0	9.8	8.6	10.9
	Iran	Mt	5.0	5.5	5.5	5.4	6.9	8.7	5.8	6.1	6.7	7.9
	Oman	Mt	5.6	5.7	6.8	7.4	6.0	8.5	7.6	7.7	7.8	6.5
	other	Mt	28.7	28.2	30.4	29.5	31.0	30.5	33.3	32.9	34.6	35.0
China production												
	Crude	Mt	17.7	52.3	51.4	53.2	51.3	52.2	52.0	53.9	52.2	53.8
	Gasoline	Mt	8.3	24.0	24.0	25.4	26.6	26.9	26.8	28.7	28.7	30.6
	Diesel	Mt	14.8	42.1	42.7	44.0	42.3	42.9	43.5	46.0	43.8	45.6
Chinese imports from Australia		kt	531.9	798.3	1233.7	461.8	730.9	711.9	744.2	540.3	600.4	557.2
	value	USDmn	452.6	630.8	1052.3	393.3	599.8	567.1	594.8	342.1	247.3	269.1
Gas												
China pipeline imports		Mt	4.5	4.9	5.2	5.4	4.9	5.9	6.0	6.2	6.7	5.7
China LNG imports		kt	4180	4160	4560	5140	5629	4297	4811	5155	5127	4392
	Qatar	kt	1932.7	1432.2	1618.3	1784.8	2570.0	1380.5	1328.7	1458.3	1322.7	711.3
	Australia	kt	842.3	974.2	833.9	906.2	842.5	904.6	1162.2	902.1	1093.8	1286.3
	Indonesia	kt	362.8	788.4	605.5	676.6	617.4	608.3	676.3	652.9	672.4	745.3
	Malaysia	kt	648.4	645.3	679.0	685.0	842.9	698.1	622.6	829.4	820.0	1128.4
	other	kt	393.9	319.8	823.3	1087.4	756.2	705.2	1021.0	1311.7	1218.4	521.1
China production		Bcm	9.9	26.9	26.4	30.2	32.3	29.0	29.2	33.5	33.6	29.2
Chinese imports from Australia		kt	842.3	974.2	833.9	906.2	842.5	904.6	1162.2	902.1	1093.8	1286.3
	value	USDmn	143.4	182.9	145.7	159.6	146.4	159.7	239.1	173.1	270.9	433.3

Source: CEIC .

Gas

- LNG import values decreased by 21%yr in Q2 and pipeline values were down by 17%yr.
- As part of efforts to promote market-based pricing in China's gas industry, the Shanghai Petroleum and Gas Exchange was launched in July. It is expected that 5–6 bcm of gas futures contracts will be exchanged through the platform in H2 2015.
- China's gas consumption increased by 2.1%yr to around 91 bcm in H1 2015.
- China began construction of its part of the 'Power of Siberia' gas pipeline that will run almost 4000 kilometres from Heilongjiang province to Shanghai.

Figure 88: Gas unit values in China

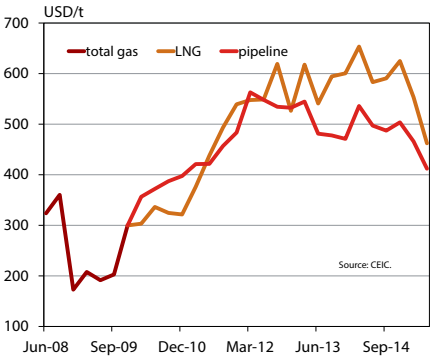


Figure 89: Gas use by sector: World

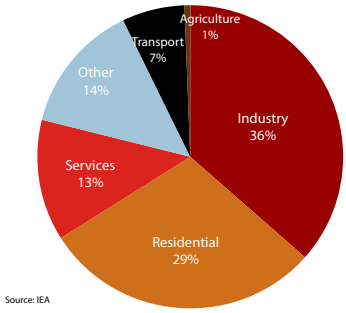


Figure 90: Gas use by sector: China

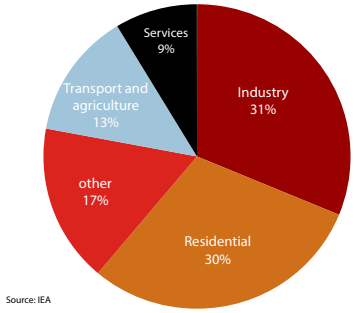


Figure 91: Gas demand per capita

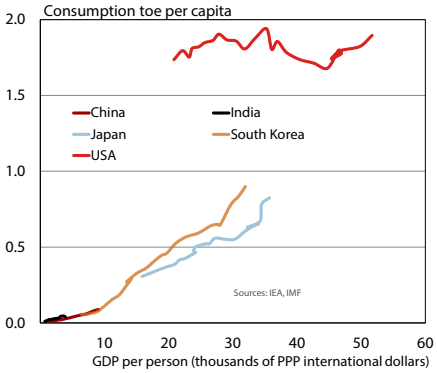
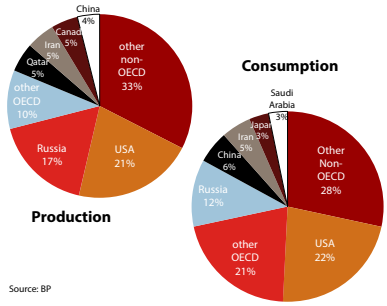


Figure 92: Gas use and supply by country



- China's LNG imports increased by 2%yr to 4.4 Mt in Q2. Pipeline imports declined by 3.9%yr to 5.7 Mt. LNG imports from Malaysia increased 62%yr to 1.1 Mt, with lower prices arguably lifting demand from that source, while imports from Qatar declined 48%yr to 711 kt.
- LNG imports from Australia increased 42%yr to 1.3 Mt in Q2. The value of these imports increased 171%yr to US$433 million. The Queensland Curtis LNG project began operation in Q2 and is expected to provide China with up to 3.6 Mt of LNG a year for the next 20 years. China National Offshore Oil Corporation (CNOOC) is the second largest investor in the project.

Figure 93: China's gas imports by type

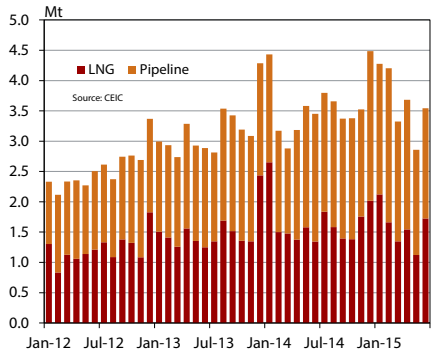


Figure 94: Chinese LNG imports by source

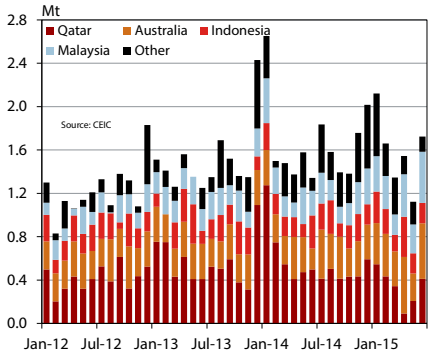


Figure 95: Chinese LNG imports from Australia

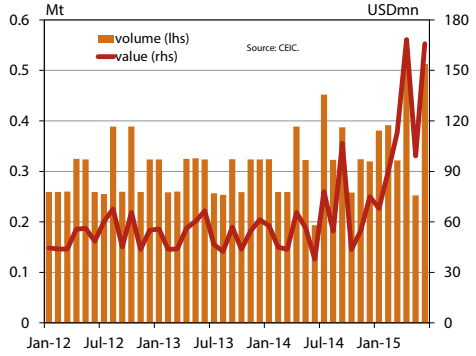


Figure 96: World gas exports by country

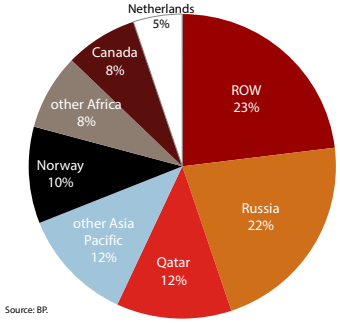
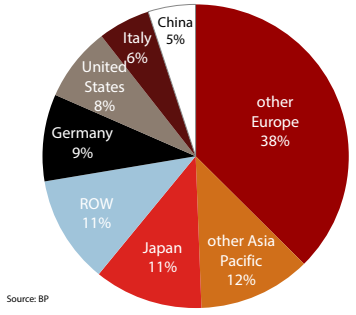


Figure 97: World gas imports by country



Uranium

Figure 98: Uranium prices

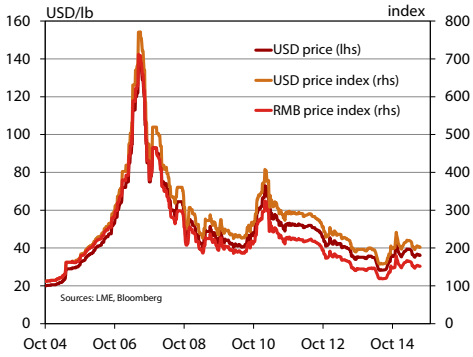


Figure 99: China's uranium imports

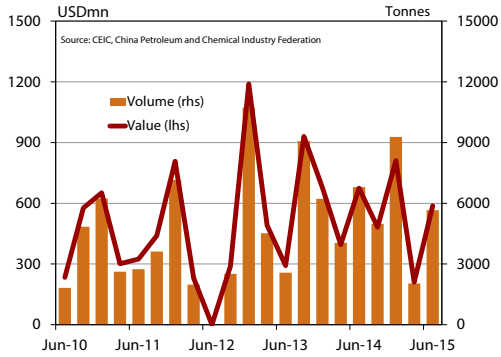


Figure 100: Global uranium output & reserves

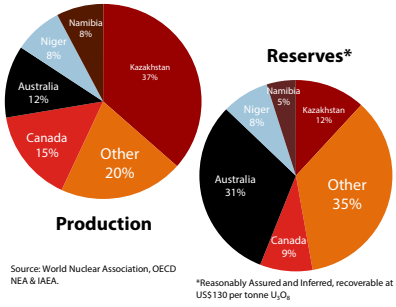


Figure 101: Uranium use by country

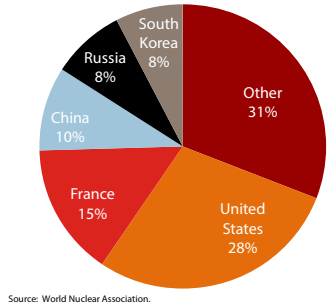


Table 11: Uranium summary data.

	Units	Jun–13	Sep–13	Dec–13	Mar–14	Jun–14	Sep–14	Dec–14	Mar–15	Jun–15
Uranium spot price U_3O_8	USD/lb	41	35	35	35	29	32	37	38	36
China nuclear power output	bn kWh	24	30	30	27	28	38	37	35	42
Investment in nuclear	RMBbn	14	15	20	11	13	14	19	10	11
China uranium imports	t	2567	9069	6216	4045	6801	4985	9281	2041	5659
Value	USDmn	292	931	677	396	675	482	810	210	587

Source: CEIC, Cameco, The Ux Consulting Company, Trade Tech.

- The bearish market sentiment that has pushed commodity prices lower in 2015 has had little impact on uranium due to its relatively tighter market balance. Nevertheless, the average uranium spot price fell 5%qtr in Q2 to US$36/lb.
- China's nuclear power generation has grown substantially in the past 12 months following a period of heavy investment. Nuclear power output increased 48%yr to 42 billion kWh in Q2.
- Investment in new nuclear power generating capacity in China is starting to taper. In Q2 total investment decreased 18%yr to RMB11 billion.
- China's uranium imports totalled 5659 tonnes in Q2, worth US$587 million. Those figures are down 17%yr and 13%yr, respectively.

Figure 102: Chinese nuclear generation growth

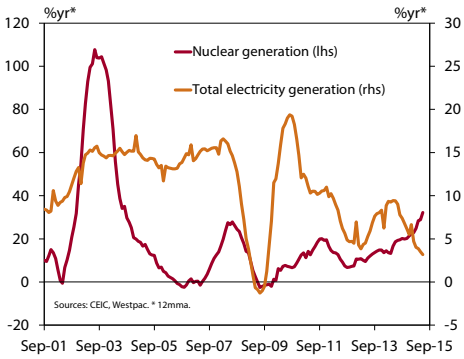


Figure 103: New capacity: planned & underway

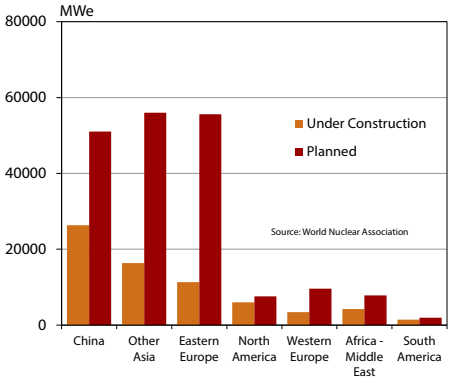


Figure 104: Chinese nuclear generation capacity

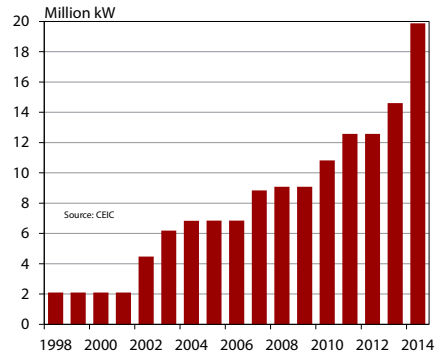


Figure 105: China's nuclear construction spending

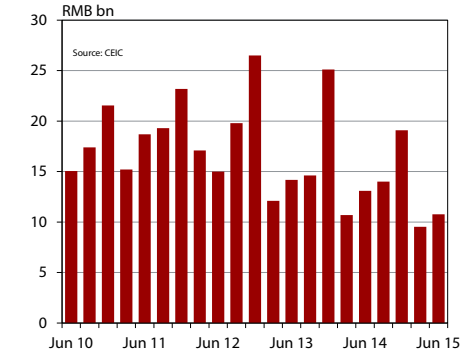
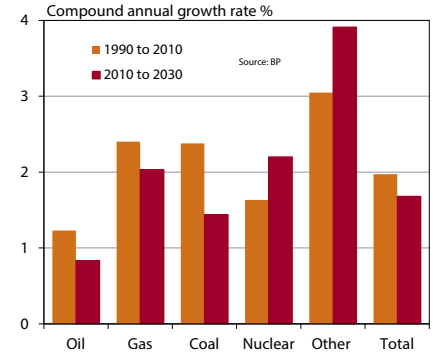


Figure 106: Growth in world energy by source



Gold

- Lower gold consumption and expectations that the US Federal reserve will raise interest rates later this year, which has led the US dollar higher, contributed to a decline in average gold prices in Q2. Even the recent turmoil in Europe did little to assist gold prices.
- In Q2 LBMA gold prices averaged US$1194 an ounce, down 2.1%qtr. On 20 July the gold price hit a 5½ year low of US$1096/oz.
- On 17 July the Chinese Government announced its gold reserves had increased by 60% to 1658 tonnes since it last released data on its holding in 2009. While that is a substantial increase, the announcement fell well short of analysts' expectations. Shortly after the announcement, trading on the Shanghai Gold Exchange surged.
- ETF stockholdings decreased 0.6%qtr and 7.3%yr as of the end of June, to 1594 tonnes. Lower ETF holdings suggest a possible decline in interest amongst investors in gold backed financial assets.
- According to the World Gold Council, world gold consumption declined 5%yr in Q1 2015 to 854 tonnes. Jewellery accounted for 45% of total gold consumption in Q1 2015. China's bar and coin consumption increased 3%yr to 60 tonnes, while its jewellery consumption decreased 10%yr to 213 tonnes.

Figure 107: Gold prices, London & Shanghai

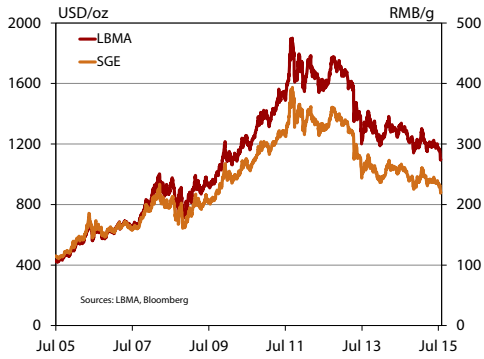


Figure 108: Chinese gold imports via Hong Kong

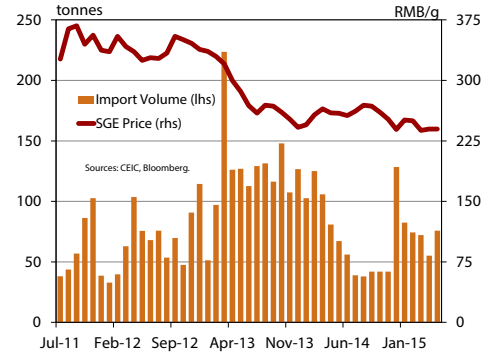


Table 12: Gold prices (USD/oz unless specified otherwise)

LBMA spot prices	Mar–13	Jun–13	Sep–13	Dec–13	Mar–14	Jun–14	Sep–14	Dec–14	Mar–15	Jun–15
Quarter average	1632	1417	1330	1272	1292	1290	1282	1201	1219	1194
Quarter end	1597	1235	1329	1206	1295	1317	1225	1185	1184	1172
Quarter high	1693	1600	1418	1353	1383	1328	1339	1249	1302	1226
Quarter low	1565	1201	1223	1189	1201	1244	1208	1141	1150	1172
Shanghai avg RMB/g	329	286	265	251	256	259	255	238	246	239
Shanghai avg USD/g	53	46	43	41	42	41	41	39	39	38

Sources: LBMA, Bloomberg.

- China's reported gold imports via Hong Kong were down 25%yr to 360 tonnes for the first five months of 2015. The decline in imports is likely due to the increase in direct gold imports to China, which are not published at present.
- According to the World Metal Statistics gold mine production in China increased 9.6%yr in the first four months of 2015 to 148 tonnes. Chinese companies are seeking global partnerships to expand their resource base.
- Australia's gold export volumes to China were similar to Q2 2014 at 40.1 tonnes but the value increased 11%yr to $A1977 million, reflecting the lower Australian dollar.

Figure 109: Australian gold exports to China

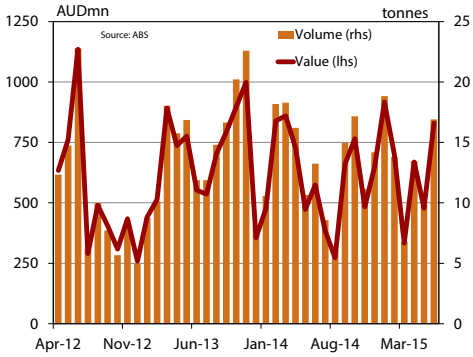


Figure 110: Gold exchange traded funds

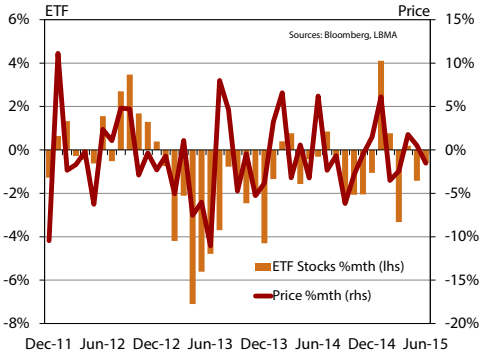


Figure 111: Gold output by country

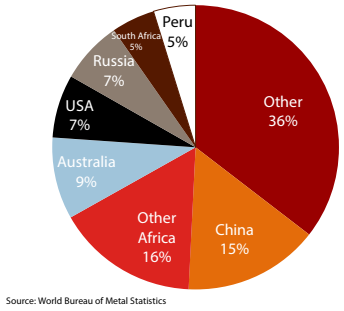


Figure 112: Gold fabrication cons. by country

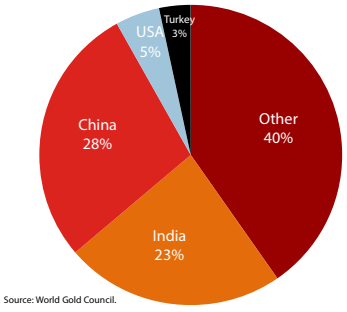


Figure 113: Gold end–use by sector

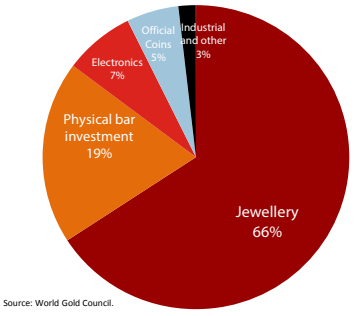


Table 13: Gold and silver summary data

Gold		unit	Mar–13	Jun–13	Sep–13	Dec–13	Mar–14	Jun–14	Sep–14	Dec–14	Mar–15	Jun–15
China imports (via Hong Kong)		t	371.9	365.7	377.0	381.9	333.5	204.1	118.9	389.1	229.0	na
Domestic production		t	90.3	90.3	115.0	120.3	96.4	104.8	140.7	100.2	110.7	na
Australian exports to China		t	36.9	44.5	43.3	50.9	47.0	40.1	29.7	42.5	39.4	40.1
	value	AUDmn	1845.3	2064.1	2032.0	2254.3	2175.8	1773.9	1317.2	1899.8	1950.0	1976.6
Silver												
China imports		t	83.6	85.5	99.9	78.1	67.8	90.5	83.7	76.3	117.7	217.0
Domestic production		t	977	977	977	977	918	918	918	918	918	na

Sources: CEIC, ABS, World Metal Statistics.

Silver

Figure 114: Silver prices, London & Changjiang

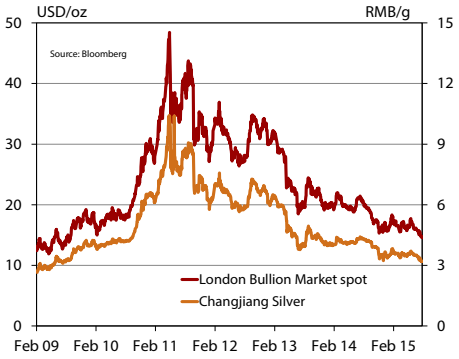


Figure 115: Silver output & fabrication demand

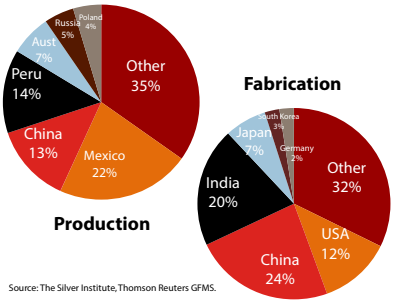


Figure 116: Chinese silver import volumes: annual

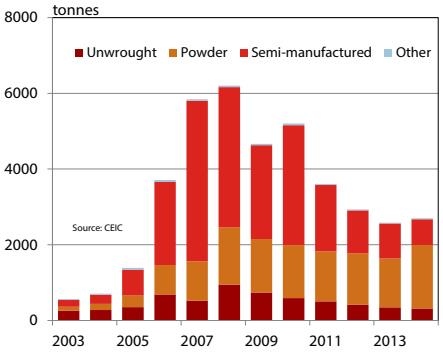


Figure 117: Silver end–use by sector

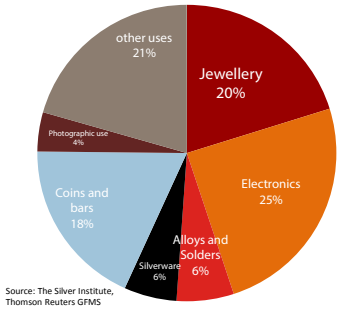


Table 14: Silver prices (USD/oz unless specified otherwise)

LBMA spot prices	Mar–13	Jun–13	Sep–13	Dec–13	Mar–14	Jun–14	Sep–14	Dec–14	Mar–15	Jun–15
Quarter average	30.1	23.2	21.5	20.8	20.5	19.7	19.7	19.7	16.6	16.5
Quarter end	28.5	19.7	21.7	19.5	19.8	21.0	17.0	15.7	16.7	15.7
Quarter high	32.3	28.0	24.5	22.8	22.0	21.1	21.4	21.4	18.3	17.7
Quarter low	28.4	18.5	18.9	19.1	19.2	18.8	17.0	17.0	15.5	15.7
Changjiang RMB/g	6.11	4.72	4.28	4.24	4.15	4.15	4.22	3.59	3.58	3.54
Changjiang USD/g	0.98	0.76	0.70	0.70	0.68	0.67	0.68	0.59	0.57	0.57

Sources: LBMA, Bloomberg.

Copper

- The average LME copper price increased 3.9%qtr to US$6043/t in Q2. Prices declined in July though, mainly due to mounting concerns over China's demand amidst bearish sentiment stemming from the stock market turmoil. At the end of July the LME traded at US$5200/t while the SHFE traded at RMB 39,850.
- LME copper inventories at the end of June were 313 kt, down slightly from Q1 but up 102%yr. SHFE inventories were down 54%qtr to 113 kt but they were still up 43%yr.
- The International Copper Study Group expects a copper surplus in 2015. According to their April report, world consumption is forecast to be flat in 2015 at 23 Mt. China's apparent use is expected to rise just 1% to around 11 Mt.

Figure 118: Copper prices, London & Shanghai

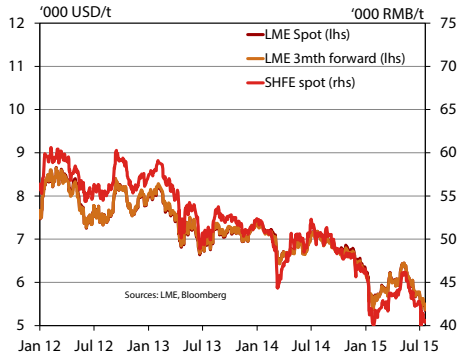


Figure 119: LME prices & inventories

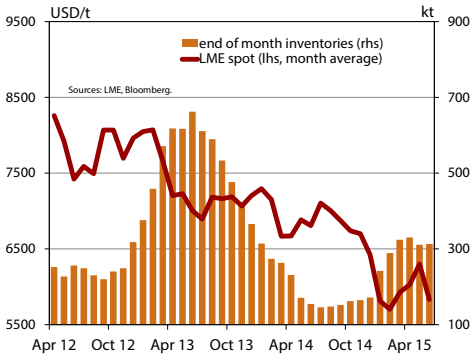


Figure 120: Copper use and supply by country

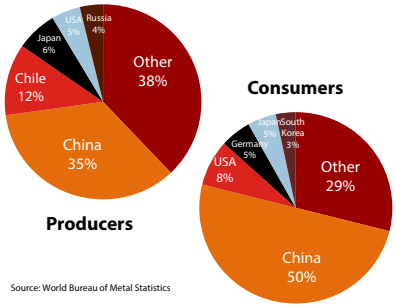


Table 15: Copper prices (USD/t unless specified otherwise)

LME spot prices	Mar–13	Jun–13	Sep–13	Dec–13	Mar–14	Jun–14	Sep–14	Dec–14	Mar–15	Jun–15
Quarter average	7931	7148	7073	7153	7041	6787	6994	6624	5818	6043
Quarter end	7583	6751	7291	7395	6636	6955	6736	6359	6051	5721
Quarter high	8243	7547	7341	7395	7440	7035	7184	6860	6309	6448
Quarter low	7539	6638	6719	6939	6435	6600	6736	6306	5391	5646
3 Month forward	7964	7180	7096	7161	7008	6757	6976	6568	5790	6046
Shanghai avg RMB/t	57189	52778	51690	51545	49731	49328	50273	47525	42391	44074
Shanghai avg USD/t	9161	8473	8438	8465	8164	7915	8156	7729	6799	7104

Sources: LME, Bloomberg.

- China's refined copper production decreased 7%yr in Q2 to 1.95 Mt. The provinces of Jiangxi and Anhui were the highest producing regions during H1 2015, with 718 kt and 663 kt, respectively.
- In Q2 China's total copper imports increased 4.4%yr to 1774 kt. Imports from Chile totalled 558 kt, up 3.6%yr. Chile remains the principal single source of China's copper imports with a 31% market share.
- Australia's copper export volumes increased 0.7%yr to 124 kt in Q2. Export values increased 7.1%yr to $A944 million.

Figure 121: Chinese copper import volumes

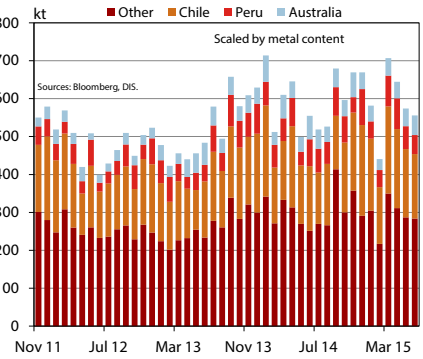


Figure 122: Australian copper exports to China

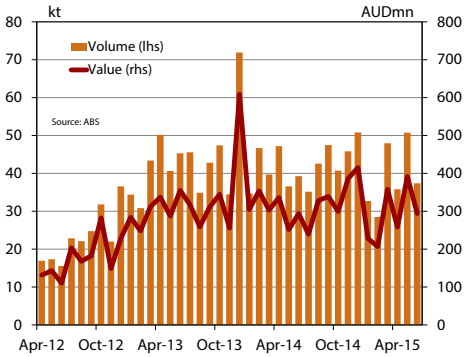


Figure 123: Copper end–use by sector

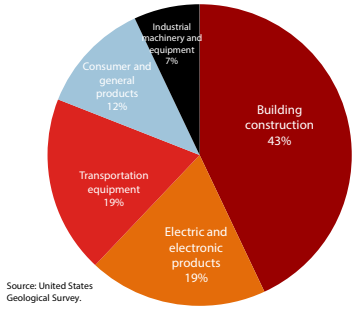


Figure 124: Copper demand per capita

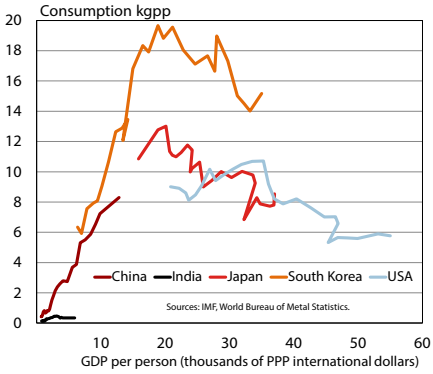


Figure 125: Copper output by Chinese province

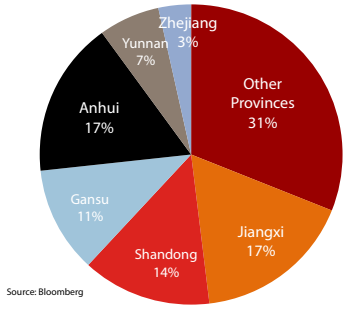


Table 16: Copper summary data

	unit	Mar–13	Jun–13	Sep–13	Dec–13	Mar–14	Jun–14	Sep–14	Dec–14	Mar–15	Jun–15
China imports	kt	1356	1380	1731	1819	1836	1699	1725	1935	1729	1774
Australia	kt	97	157	135	128	165	144	140	152	116	142
Chile	kt	436	383	519	574	542	538	438	629	569	558
Peru	kt	171	120	200	213	182	182	196	205	172	192
other	kt	652	720	877	904	946	834	950	949	872	883
Refined production	kt	1484	1693	1715	1909	1651	1823	2027	2321	1834	1951
World stocks	kt	1297	1319	1107	902	899	694	706	765	1027	na
weeks of stocks	weeks	3.4	3.3	2.7	2.1	2.2	1.6	1.6	1.7	2.5	na
Australian exports to China	kt	109	142	123	154	121	123	125	137	109	124
value	AUDmn	844	991	888	1209	962	882	907	1101	793	944

Sources: Bloomberg, World Metal Statistics, ABS.

Aluminium

- In Q2 LME aluminium spot prices averaged $US1765 a tonne, down 2%qtr, due to an ongoing global market surplus. Despite this apparent excess supply LME stocks fell by 9%qtr to 3574 kt. Prices dropped significantly towards the end of the quarter, with prices at the end of June and early July around 16 month lows. The SHFE average price increased 1%qtr to RMB 12,964 in Q2, although it reached historical lows in July of RMB 12,040.
- China's aluminium production increased by 39%yr to 8 Mt in Q2. Around 27% of production came from Shandong, where significant new capacity came on line, increasing Q2 production by 284%yr. Production also grew strongly in far inland Xinjiang, up 36%yr.

Figure 126: Aluminium prices, LME & Shanghai

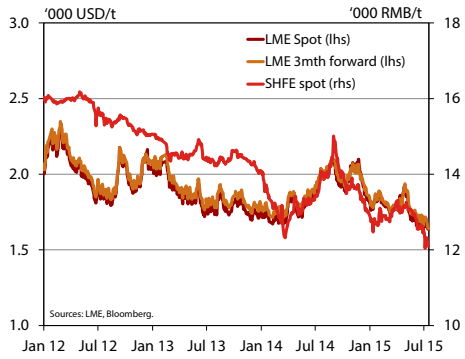


Figure 127: LME prices & inventories

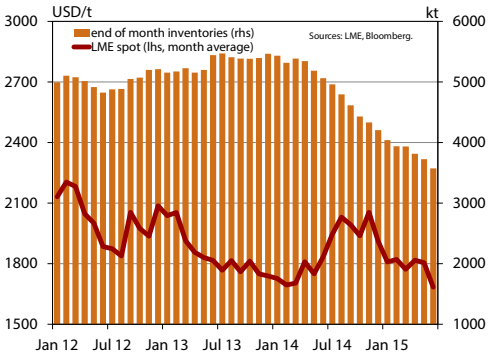


Figure 128: Aluminium use & supply by country

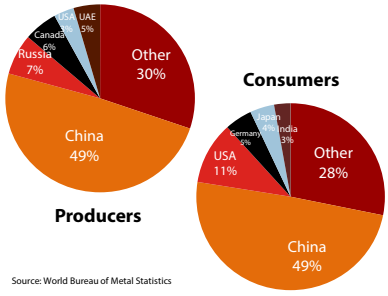


Table 17: Aluminium and Alumina prices (USD/t unless specified otherwise)

LME spot prices	Mar–13	Jun–13	Sep–13	Dec–13	Mar–14	Jun–14	Sep–14	Dec–14	Mar–15	Jun–15
Quarter average	2003	1835	1781	1769	1708	1798	1987	1966	1800	1765
Quarter end	1882	1731	1803	1765	1731	1851	1935	1832	1789	1647
Quarter high	2123	1939	1877	1849	1768	1871	2114	2099	1872	1919
Quarter low	1868	1720	1730	1695	1642	1715	1838	1828	1742	1642
3 Month forward	2042	1870	1827	1815	1752	1836	2008	1974	1813	1787
Shanghai avg RMB/t	14722	14551	14363	14353	13168	13133	14069	13507	12849	12964
Shanghai avg	2358	2336	2345	2357	2158	2107	2283	2197	2061	2090
Aust FOB Alumina	341	327	318	323	328	317	323	355	342	337
China Alumina RMB/t	2571	2513	2500	2504	2438	2353	2439	2732	2624	2439

Sources: LME, Bloomberg.

- Strong growth in domestic production at a time of modest local needs contributed to a steep rise in China's aluminium exports. Exports of unwrought aluminium and aluminium products exports grew 28%yr in Q2, to 1.3 Mt.
- China's aluminium imports were 46 kt in Q2, down 52%yr, as domestic production continued to displace imports. In Q2 imports from Australia were 2.7 kt, which reduced Australia's share of total imports to 6%, from 22% in Q1.
- Australia's aluminium exports to China dropped 67%yr, to 3.3 kt in Q2 and export earnings fell by 57%yr to $A9 million.

Figure 129: Chinese aluminium import volumes

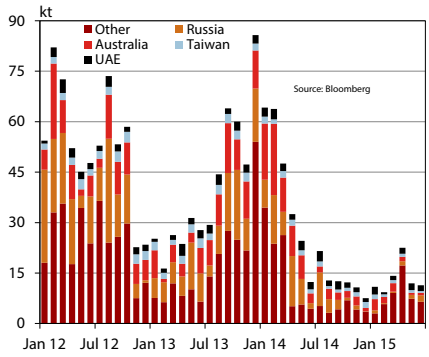


Figure 130: Australian aluminium exports to China

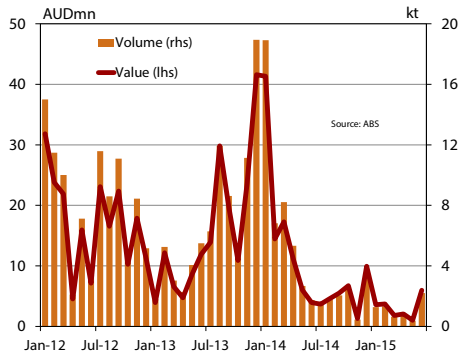


Figure 131: Aluminium end–use by sector

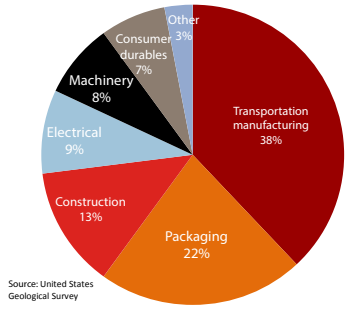


Figure 132: Aluminium demand per head

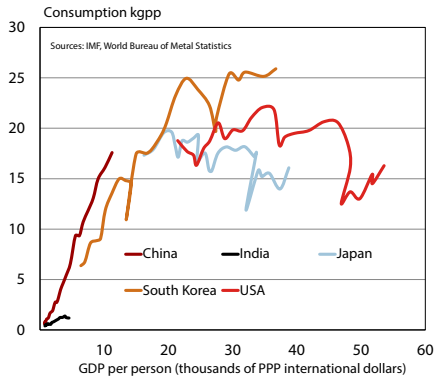
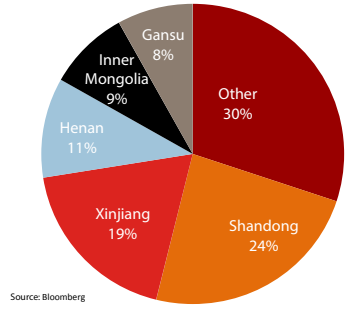


Figure 133: Aluminium output by province



Alumina

- Low aluminium prices and reduced smelting margins led to lower alumina prices in Q2 (FOB Australia). Prices dropped 2%qtr and averaged $US337 a tonne, highlighting the uncertainty in China's domestic alumina market and recent increases in domestic supply.
- China's alumina imports totalled 1041 kt in Q2, down 19%yr due to higher domestic supply and moderate consumption growth.
- Alumina imports from Australia decreased 15%yr to 555 kt. Even so, Australia remained the principal source of China's alumina imports.

Figure 134: Alumina prices

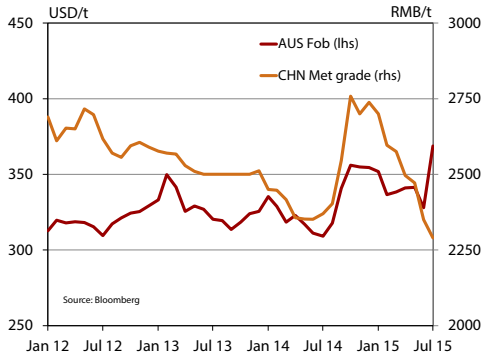


Figure 135: World alumina trade

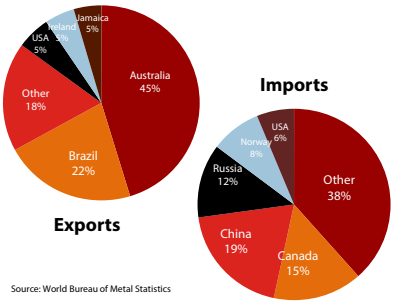


Figure 136: China's alumina imports

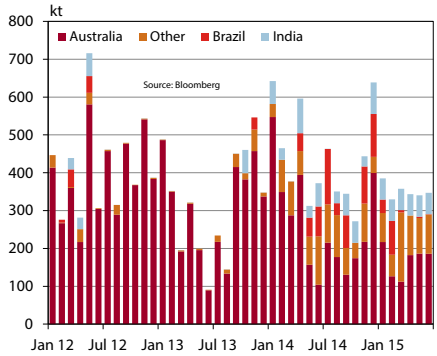


Figure 137: World alumina output

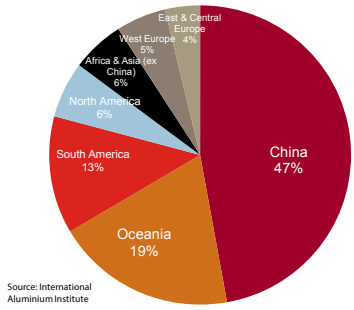
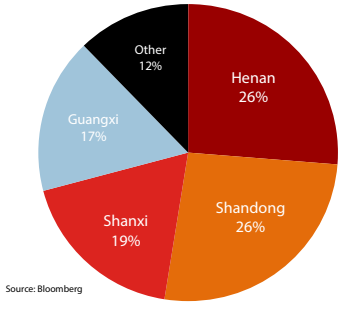


Figure 138: China's alumina output by province



Bauxite

- China imported 12.6 Mt of bauxite in Q2, up 91%yr. The market continues to adjust to the prohibition on Indonesian exports, which has removed the historically largest source of imports from the equation since early 2014 (see figure 139), at a time of strongly expanding aluminium production in China.
- Imports from Australia were up 23%yr in Q2 to 4.5 Mt. Imports from Malaysia have increased considerably over the last year, from 154 kt in Q2 2014 to 5.5 Mt in Q2 2015. In Q2 Malaysia became the principal source of China's bauxite imports, with a market share of 44%, despite having been a negligible provider when Indonesia was still a participant in the trade.
- China continued to invest in developing its domestic bauxite reserves, utilising lower grade deposits to increase domestic supply.
- Bauxite exports from Australia were up to 5 Mt in Q2, an increase of 30%yr. Earnings from bauxite exports increased further, by 82%yr to $A257 million. Export volumes reached a historic high of 2 Mt for the month of May alone.

Figure 139: China's bauxite import by source

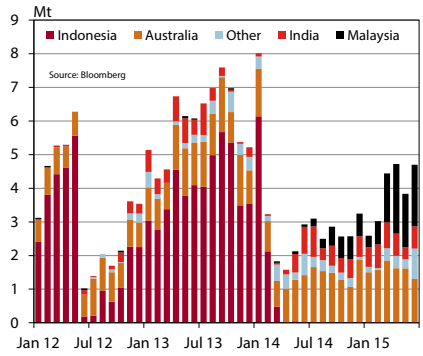


Figure 140: Australia's bauxite exports to China

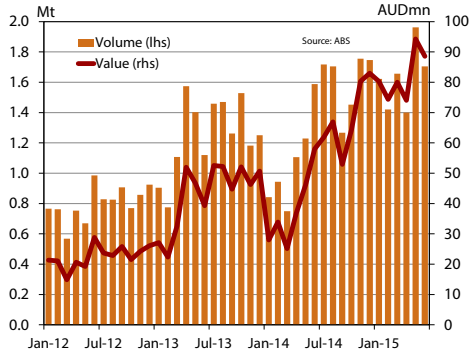


Figure 141: World bauxite output

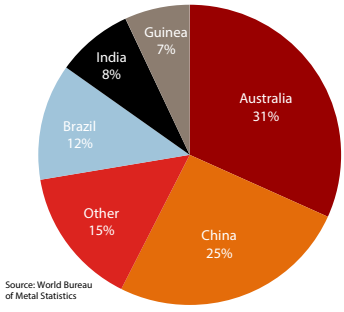


Figure 142: World bauxite trade

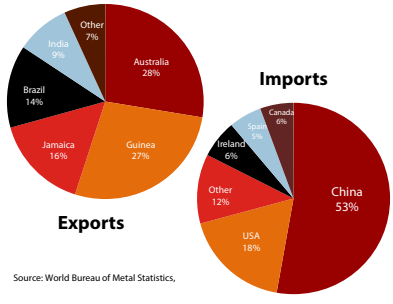


Table 18: Aluminium, alumina and bauxite summary data

Aluminium		unit	Mar–13	Jun–13	Sep–13	Dec–13	Mar–14	Jun–14	Sep–14	Dec–14	Mar–15	Jun–15
China imports		kt	67.8	82.8	137.7	193.0	175.5	96.1	51.5	30.5	34.4	45.9
	Australia	kt	14.5	14.3	31.7	31.5	48.0	18.9	7.0	5.6	7.7	2.7
	India	kt	0.0	2.9	13.1	17.7	19.1	0.7	0.8	1.6	6.6	2.0
	Russia	kt	18.1	28.1	28.9	46.1	29.6	24.2	16.9	2.1	1.5	4.3
	other	kt	35.2	37.6	64.0	97.7	78.8	52.3	26.8	21.2	18.6	36.8
Refined production		kt	5215	5365	5626	5839	5755	5747	6045	6393	7205	8010
World stocks		kt	7400	7439	7089	7171	7356	7185	6738	6428	4807	na
	weeks of stocks	weeks	8.7	8.4	7.9	8.0	8.2	7.6	7.0	6.4	4.6	na
Australian exports to China		kt	10	12	28	35	34	10	5	6	3	3
	value	AUDmn	23	25	62	76	73	21	14	18	9	9
Alumina												
China imports		kt	1034.9	612.5	829.3	1354.4	1483.7	1280.7	1158.1	1353.9	1072.3	1041.1
	Australia	kt	1028.5	602.7	766.5	1177.0	1183.7	654.9	523.0	790.7	455.4	554.5
	Chinese production	Mt	10.3	11.0	11.6	11.2	11.2	11.5	11.7	12.6	13.3	14.2
Bauxite												
China imports		Mt	14.0	19.0	21.1	17.6	13.1	6.6	8.4	8.4	10.1	12.6
	Australia	Mt	2.7	4.0	4.2	3.4	3.1	3.7	4.7	4.2	4.9	4.5
	Indonesia	Mt	9.2	12.4	14.7	12.4	8.7	0.1	0.0	0.0	0.0	0.0
Australian exports to China		Mt	2.8	4.1	4.2	4.0	2.5	3.9	4.7	5.0	5.3	5.1
	value	AUDmn	82.0	138.0	149.5	149.0	87.0	140.9	181.7	227.5	266.1	256.9

Sources: Bloomberg, World Metal Statistics, ABS.

Nickel

- The LME nickel price averaged US$13,008 in Q2, down 9%qtr, because of historically high inventories, an oversupply of refined nickel and generally bearish commodity market sentiment.
- LME stocks reached a record high of 470 kt in early June despite a long held consensus of an aggregate shortage in the wake of the Indonesian unprocessed ore ban.
- China's port stocks of nickel ore remained around 18 Mt at the end of Q2. In contrast to the uplift in LME *warehouse* stocks, China's *port* stocks steadily declined in early 2015 before steadying from March onwards.

Figure 143: Nickel prices, London & Shanghai

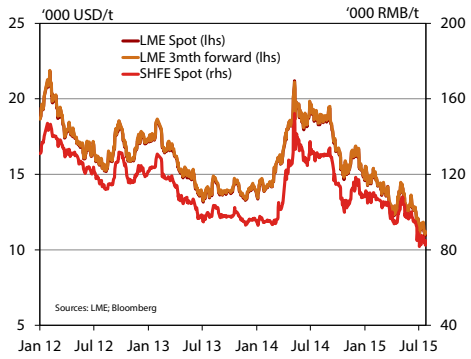


Figure 144: LME prices & inventories

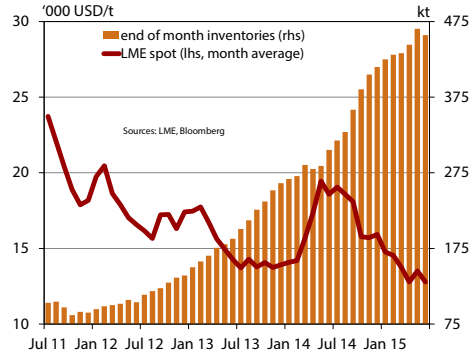


Figure 145: Nickel use and supply by country

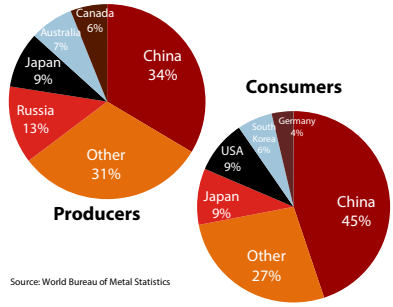


Table 19: Nickel prices (USD/t unless specified otherwise)

LME spot prices	Mar–13	Jun–13	Sep–13	Dec–13	Mar–14	Jun–14	Sep–14	Dec–14	Mar–15	Jun–15
Quarter average	17314	14963	13916	13909	14643	18465	18576	15799	14338	13008
Quarter end	16540	13680	13860	13970	15735	18715	16505	14935	12460	11680
Quarter high	18600	16390	14775	14635	16225	21200	19795	16825	15455	14415
Quarter low	16425	13560	13160	13270	13365	15780	16505	14650	12460	11680
3 Month forward	17387	15039	13996	13979	14693	18512	18669	15877	14400	13055
Shanghai avg RMB/t	121306	106053	98866	96850	96380	128595	128862	109421	106548	98129
Shanghai avg USD/t	19432	17026	16139	15905	15785	20634	20905	17792	17089	15817

Sources: LME, Bloomberg.

- China's refined nickel production increased by 7%yr to 141 kt in the first five months of 2015. Production in Gansu increased 5%yr to 59 kt while Jiangxi saw an 8%yr decrease to 14.6 kt.
- The value of China's nickel imports increased 18%yr to US$1.9 billion in Q2. The rise was supported by imports from Russia which increased 63%yr to US$655 million and as a result displaced the Philippines as China's primary supplier. China's imports from the Philippines fell 22%yr to US$562 million in Q2.
- In Q2 the value of Australia's nickel total exports fell 1%yr to $A923 million.

Figure 146: Chinese nickel import values

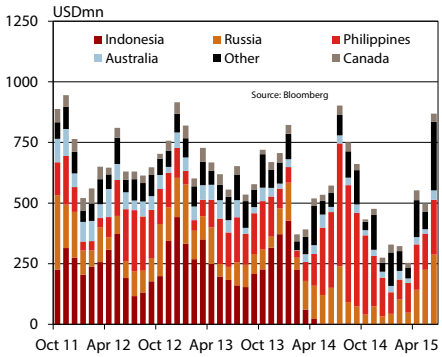


Figure 147: Nickel output by province

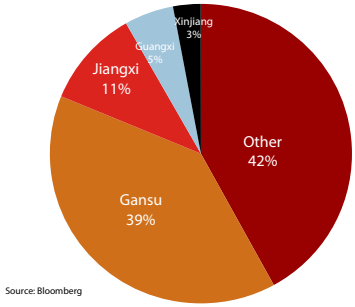


Figure 148: Nickel end–use by sector

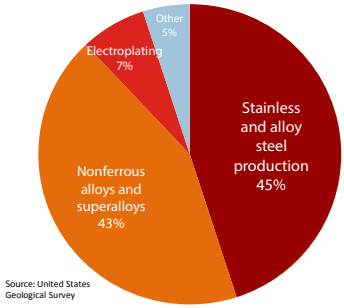


Figure 149: Nickel demand per capita

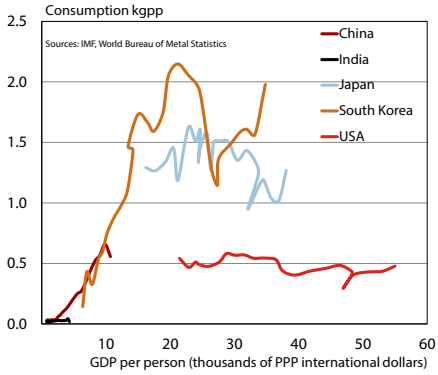


Figure 150: World trade in nickel

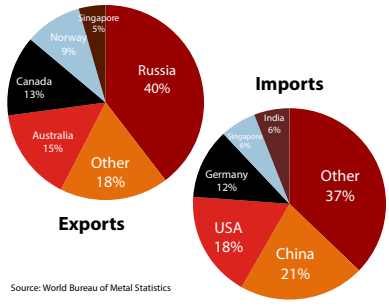


Table 20: Nickel summary data

	unit	Mar–13	Jun–13	Sep–13	Dec–13	Mar–14	Jun–14	Sep–14	Dec–14	Mar–15	Jun–15
China imports	USDmn	2149	1842	1766	2095	1585	1625	2314	1251	904	1918
Australia	USDmn	172	189	119	112	67	112	99	71	81	87
Canada	USDmn	143	107	86	89	96	85	102	57	72	107
Russia	USDmn	456	257	270	233	326	402	396	146	193	655
Indonesia	USDmn	952	629	521	914	712	28	8	1	0	0
Philippines	USDmn	168	442	482	448	171	720	1375	694	294	562
other	USDmn	258	217	287	299	212	276	334	282	265	507
Refined production*	kt	68	60	69	87	75	90	99	102	82	na
LME stocks	kt	186	207	248	282	284	305	358	415	433	457
weeks of stocks	weeks	5.5	6.3	7.2	7.6	8.5	9.1	10.7	13.8	21.5	na
Australian exports to China	kt	60	66	67.2	59.2	48.7	50	57	62	62	na
value	AUDmn	851	946	821	736	731	929	1002	948	873	923

Sources: Bloomberg, World Metal Statistics, International Nickel Study Group., CEIC

* Note: Refined production data series no longer includes smelter output and has been revised.

Zinc

- In Q2 the LME zinc spot price averaged $US2190, up 5%qtr, following a strong price recovery from the start of the quarter. However, towards the end of Q2 and into July prices declined in response to a loss of confidence precipitated by financial volatility.
- LME zinc stocks continued to decline in Q2 and dropped 10%ytd to 436 kt as of the end of July. This historical low for LME stocks coincided with several recent mine closures. However, stocks have been stable or rising in other warehousing facilities such as the SHFE, where they were up 29%qtr to 180 kt.
- In Q2 the SHFE zinc price averaged RMB 16,399, up 2%qtr, while in July prices dropped to the lowest point in twelve months.

Figure 151: Zinc prices, London & Shanghai

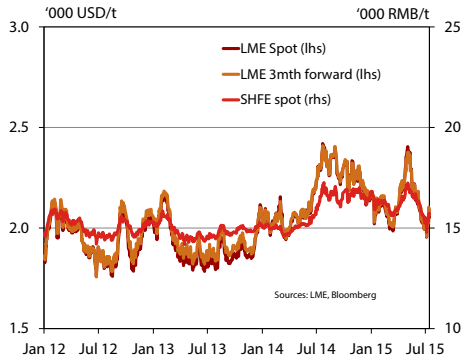


Figure 152: LME prices & inventories

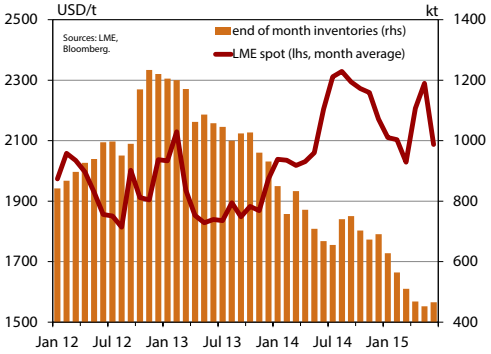


Figure 153: Zinc use and supply by country

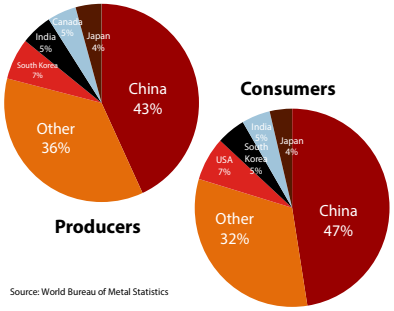


Table 21: Zinc prices (USD/t unless specified otherwise)

LME spot prices	Mar–13	Jun–13	Sep–13	Dec–13	Mar–14	Jun–14	Sep–14	Dec–14	Mar–15	Jun–15
Quarter average	2033	1840	1859	1907	2029	2073	2311	2235	2080	2190
Quarter end	1871	1823	1877	2086	1981	2205	2290	2167	2076	1994
Quarter high	2188	1925	1956	2116	2156	2205	2420	2335	2184	2405
Quarter low	1854	1784	1793	1828	1942	2073	2194	2114	1985	1994
3 Month forward	2057	1875	1896	1932	2027	2079	2314	1932	2092	2192
Shanghai avg RMB/t	15330	14596	14726	14969	14953	15155	16542	16655	16127	16399
Shanghai avg USD/t	2456	2343	2404	2459	2450	2432	2683	2709	2586	2643

Sources: LME, Bloomberg.

- China's refined zinc output continued to grow in Q2, up 15%yr to 1.6 Mt, as a result of higher production in almost all provinces. Production in Inner Mongolia was up 33%yr to 139 kt, Gansu rose 65%yr to 111 kt and Shaanxi increased 13%yr to 244 kt.
- In the first five months of the year China's imports of zinc ores and concentrates increased 52%yr to 504 kt. Imports from Australia increased 30%yr to 192 kt, followed by imports from Peru, which increased 127%yr to 173 kt.
- Australia's zinc exports (by metal content) to China increased 106%yr to 187kt, with export earnings growing 101%yr to $A303 million in Q2.

Figure 154: Chinese zinc import volumes

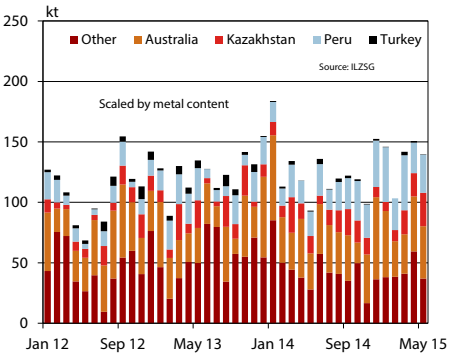


Figure 155: Chinese zinc imports by type

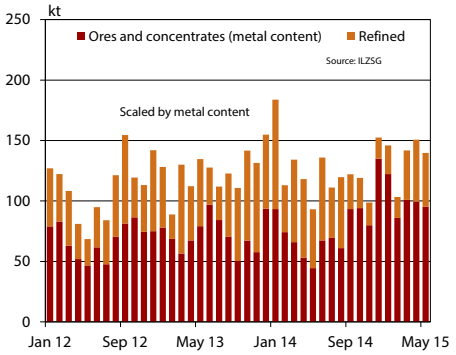


Figure 156: Australian zinc exports to China

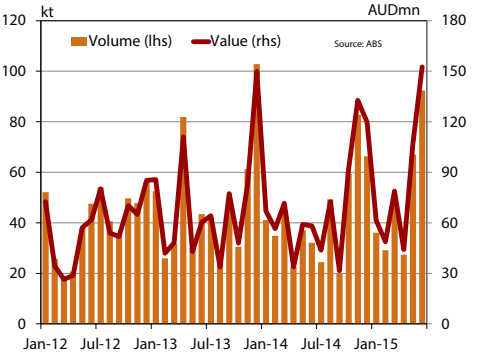


Figure 157: Zinc demand per capita

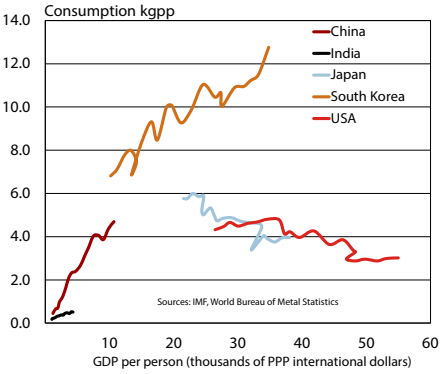


Figure 158: Zinc output by province

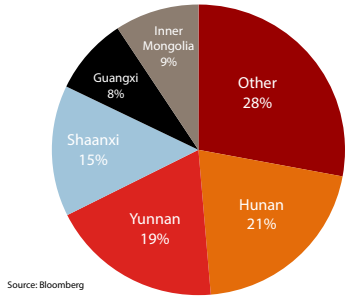


Table 22: Zinc summary data

		unit	Mar–13	Jun–13	Sep–13	Dec–13	Mar–14	Jun–14	Sep–14	Dec–14	Mar–15	Jun–15
China imports		kt	347.0	374.4	345.5	427.9	431.0	347.2	353.0	370.3	391.0	na
	Australia	kt	119.0	86.3	75.1	142.8	138.5	119.5	111.4	125.1	116.7	na
	Kazakhstan	kt	46.5	35.1	41.6	39.6	49.9	34.1	52.5	40.6	36.6	na
	Peru	kt	65.0	58.7	41.2	55.6	57.5	65	65.7	98.5	117.0	na
	Turkey	kt	12.4	11.5	16.2	9.5	5.5	5.3	5.5	3.3	3.1	na
	other	kt	104.1	182.7	171.5	180.3	179.6	123.3	117.9	102.8	117.6	na
Refined production		kt	1241.5	1325.7	1340.7	1444.6	1259.3	1405.6	1508.1	1607.3	1458.1	1612.7
World stocks		kt	1903	1757	1589	1472	1511	1283	1330	1192	1108	na
	weeks of stocks	weeks	8.2	7.0	6.2	5.6	6.2	4.9	4.9	4.5	4.5	na
Australian exports to China		kt	110	155	116	190	119	91	90	202	113	187
	value	AUDmn	176	214	175	282	195	152	150	343	189	303

Sources: Bloomberg, World Metal Statistics, International Lead and Zinc Study Group, ABS.

Lead

Figure 159: LME prices & inventories

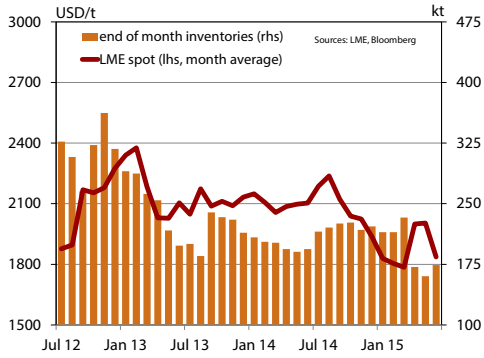


Figure 160: Chinese lead import volumes

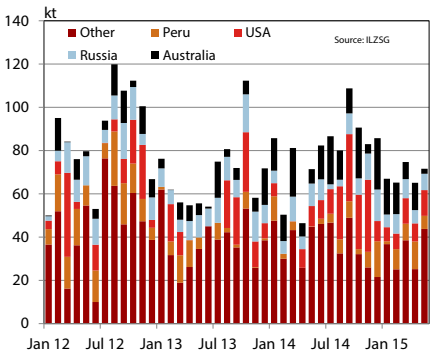


Figure 161: Australian lead exports to China

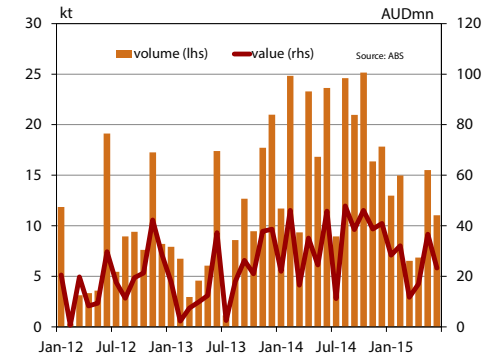


Figure 162: World trade in lead

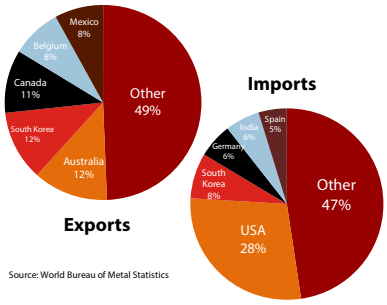


Table 23: Lead prices (USD/t unless specified otherwise).

LME spot prices	Mar–13	Jun–13	Sep–13	Dec–13	Mar–14	Jun–14	Sep–14	Dec–14	Mar–15	Jun–15
Quarter average	2301	2053	2102	2111	2106	2096	2181	2000	1806	1942
Quarter end	2094	2058	2075	2206	2041	2129	2083	1853	1808	1754
Quarter high	2448	2247	2238	2259	2212	2160	2269	2095	1882	2140
Quarter low	2089	1949	2017	2027	2008	2016	2051	1814	1696	1742
3 Month forward	2314	2066	2116	2134	2127	2120	2194	2009	1817	1952
Shanghai avg RMB/t	14734	13943	14141	14109	13928	13922	14208	13452	12494	13494
Shanghai avg USD/t	2360	2238	2308	2317	2282	2234	2305	2184	2004	2175

Sources: LME, Bloomberg.

Table 24: Lead summary data

	unit	Mar–13	Jun–13	Sep–13	Dec–13	Mar–14	Jun–14	Sep–14	Dec–14	Mar–15	Jun–15
China imports	kt	194.1	164.2	227.9	242.5	224.0	213.8	284.8	273.0	220.4	na
Australia	kt	12.6	13.4	25.7	29.6	49.6	28.8	47.8	52.0	39.1	na
Peru	kt	20.3	17.7	10.8	9.0	17.6	2.6	18.3	26.1	18.4	na
Russia	kt	20.7	27.4	30.9	40.0	23.1	25.9	14.8	34.2	23.6	na
USA	kt	28.0	0.1	44.0	46.5	6.1	26.6	66.9	67.8	25.5	na
Mexico	kt	11.9	9.2	7.0	6.7	6.8	13.6	8.9	17.3	13.5	na
other	kt	100.6	96.4	111.4	110.6	120.8	116.3	128.1	75.6	100.3	na
Refined production	kt	1074.0	1202.6	1152.0	1140.8	1055.7	1105.2	1050.5	1064.7	995.2	1071.6
World stocks	kt	680	600	603	586	562	542	577.3	560.1	546.4	na
weeks of stocks	weeks	3.5	3.0	3.0	2.9	2.8	2.6	3.0	2.8	2.9	na
Australian exports to China	kt	18	28	22	52	46	64	55	59	34	33
value	AUDmn	27	59	47	97	86	105	96	126	72	77

Sources: Bloomberg, World Metal Statistics, International Lead and Zinc Study Group, ABS.

Tin

Figure 163: Tin prices

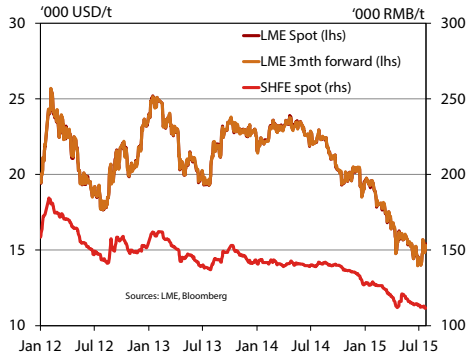


Figure 164: LME prices and inventory

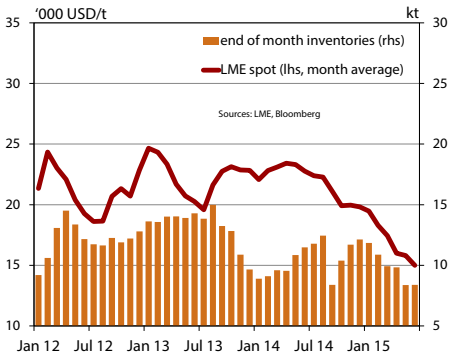


Figure 165: World tin producers and consumers

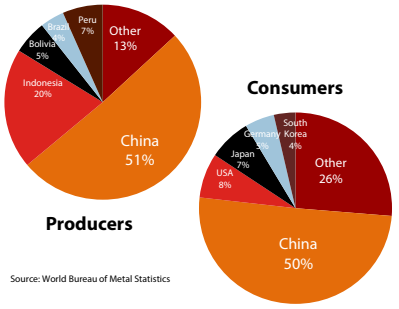


Figure 166: China's tin imports by source

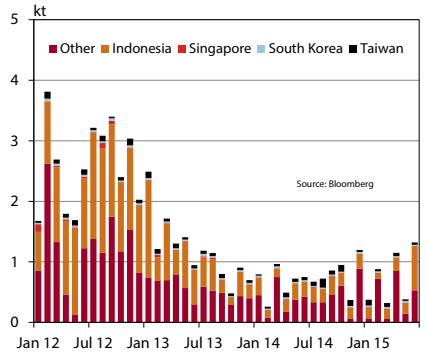


Figure 167: Tin use by sector

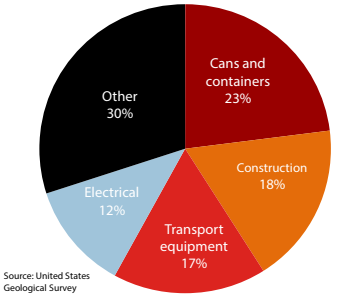
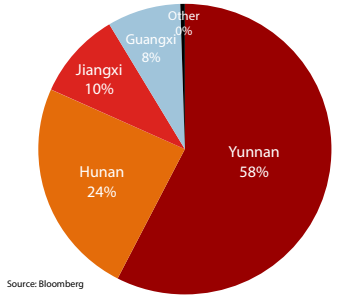


Figure 168: China's tin output by province



Molybdenum

Figure 169: Molybdenum prices

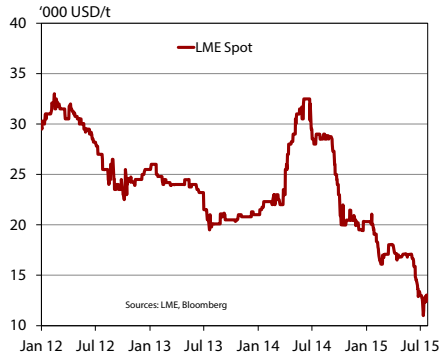


Figure 170: China's molybdenum ore imports

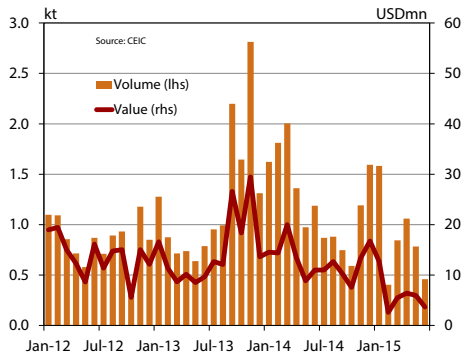


Figure 171: China's molybdenum articles exports

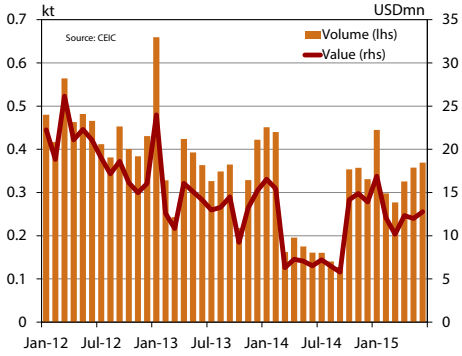


Figure 172: China's molybdenum ore exports

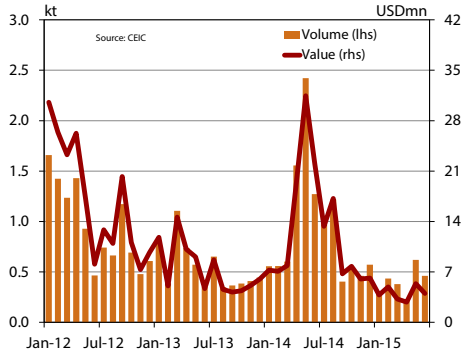


Figure 173: China's molybdenum production

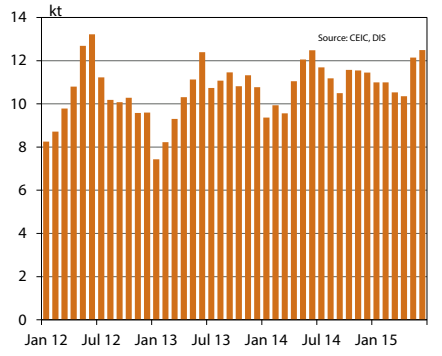
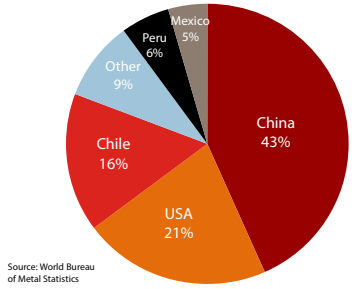


Figure 174: World molybdenum output



Tungsten

Figure 175: China's tungsten ore imports

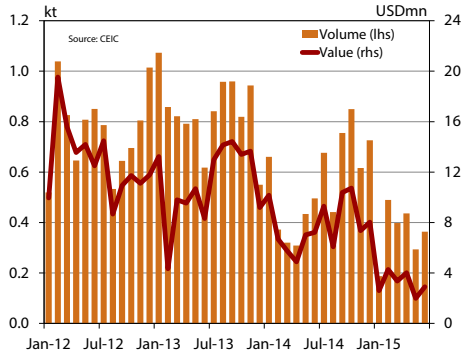


Figure 176: China's tungsten articles imports

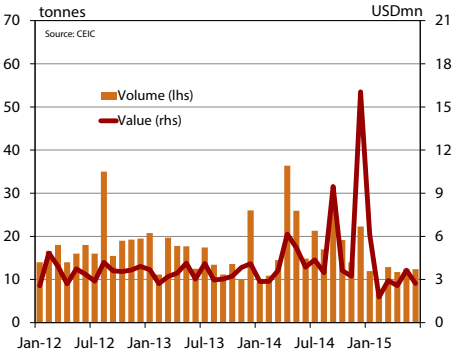


Figure 177: China's tungsten and articles exports

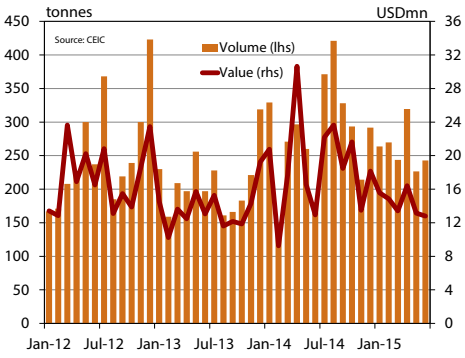


Figure 178: China's tungsten products exports

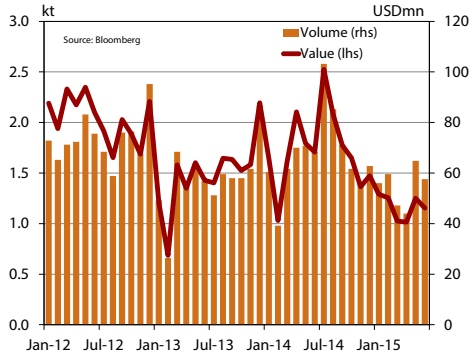


Figure 179: World tungsten output

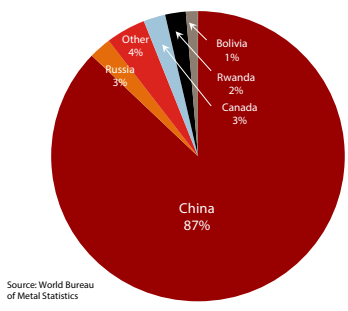
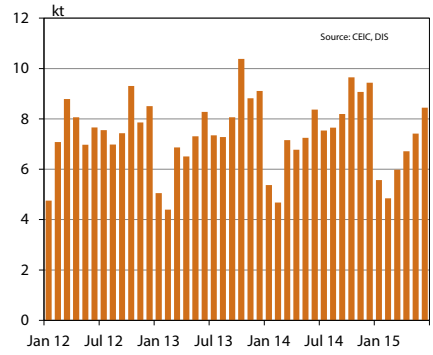


Figure 180: China's tungsten output (metal content)



Cobalt

Figure 181: Cobalt prices

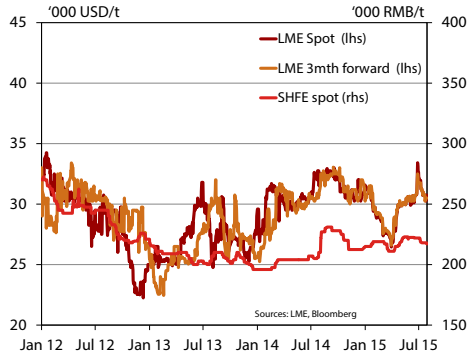


Figure 182: China's cobalt ore imports

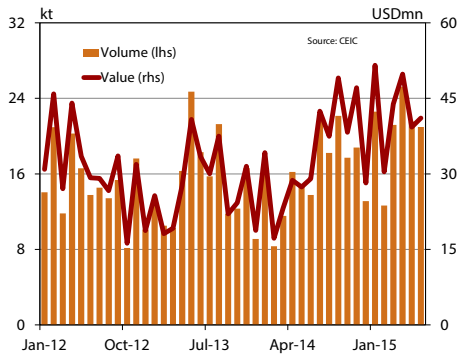


Figure 183: China's cobalt articles imports

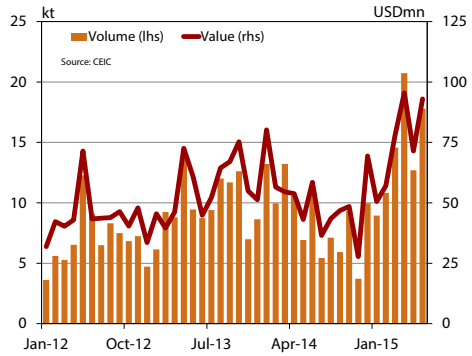


Figure 184: World cobalt mine output

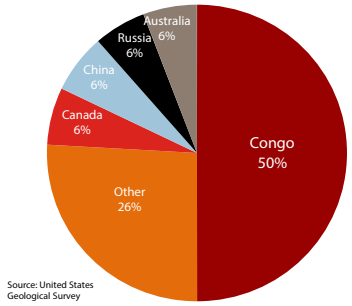


Figure 185: World cobalt refined output

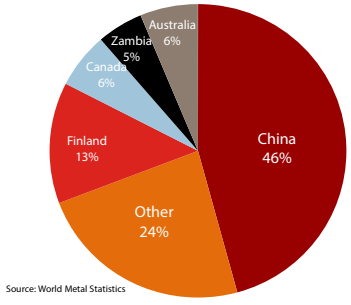
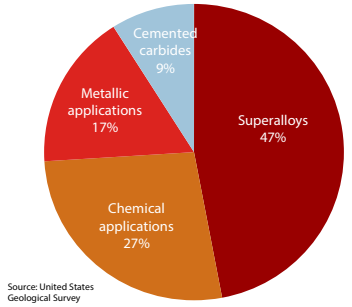


Figure 186: Cobalt use by sector



Antimony

Figure 187: Antimony prices

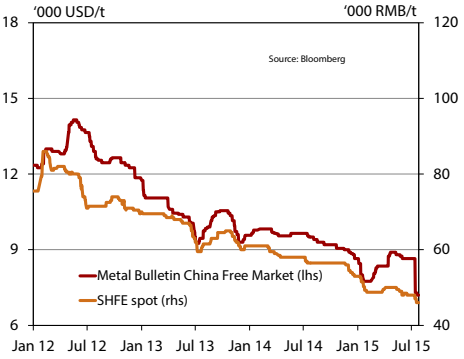


Figure 188: China's antimony ores imports

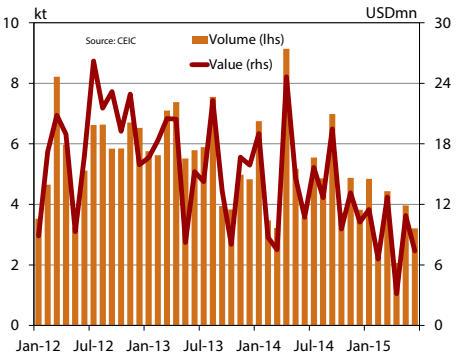


Figure 189: China's unwrought antimony exports

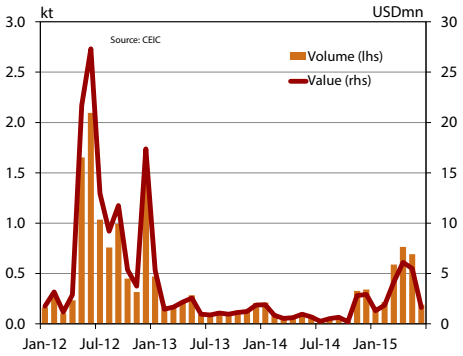


Figure 190: Australian antimony exports to China

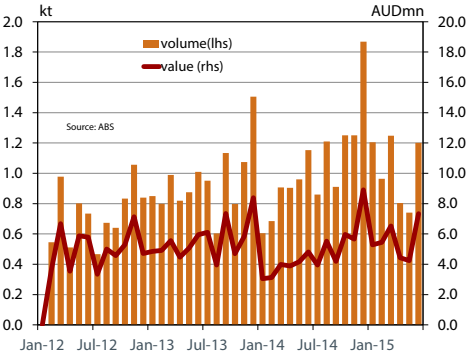


Figure 191: China's antimony mine output

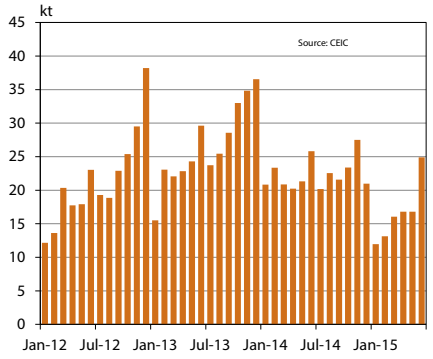
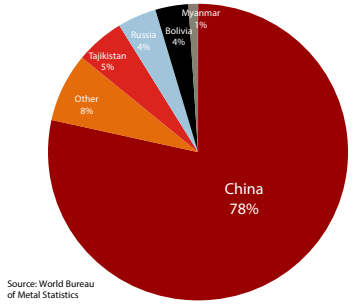


Figure 192: World antimony mine output



Platinum & Palladium

Figure 193: Platinum prices

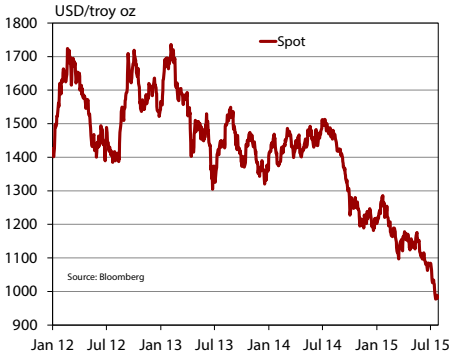


Figure 194: Palladium prices

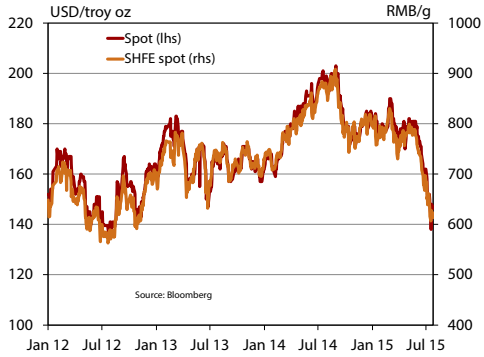


Figure 195: China's platinum imports

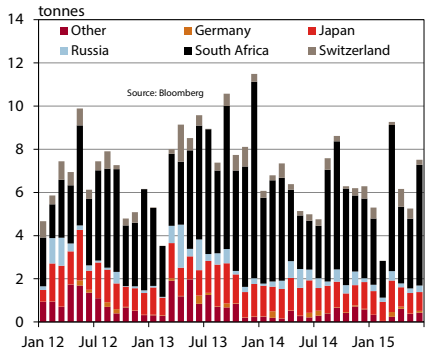


Figure 196: China's platinum exports

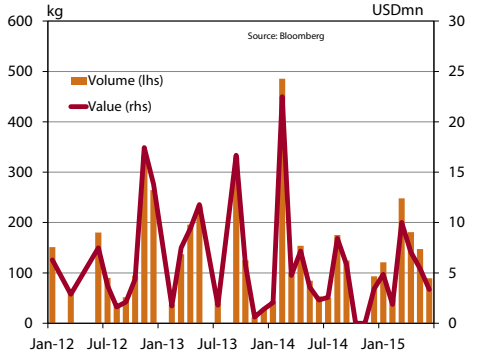


Figure 197: World platinum output

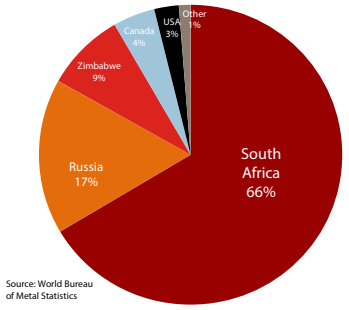
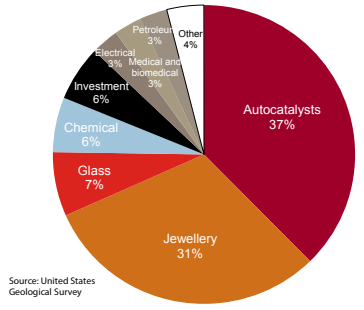


Figure 198: Platinum end use by sector



Mineral Sands

Figure 199: China's titanium dioxide imports

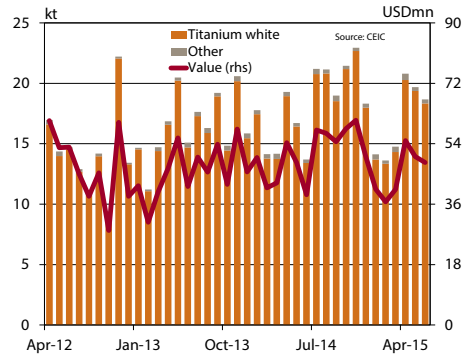


Figure 200: China's titanium dioxide exports

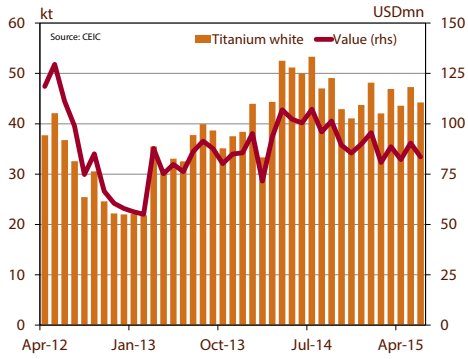


Figure 201: Aust titanium dioxide exports to China

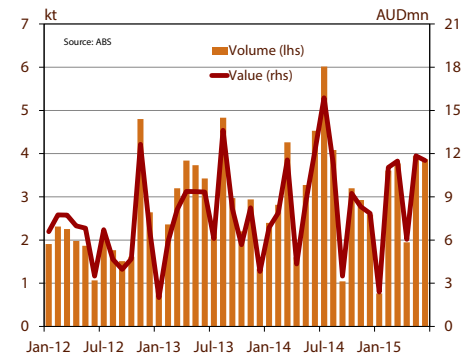


Figure 202: Australian rutile exports to China

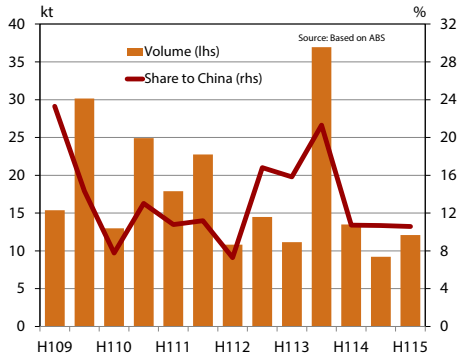


Figure 203: Australian zirconium exports to China

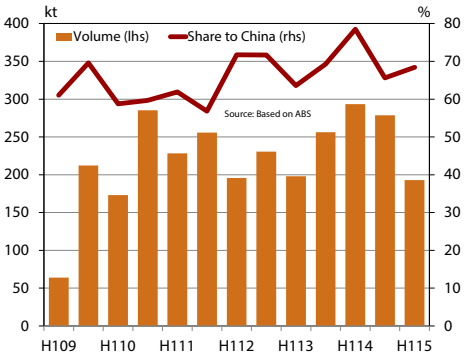
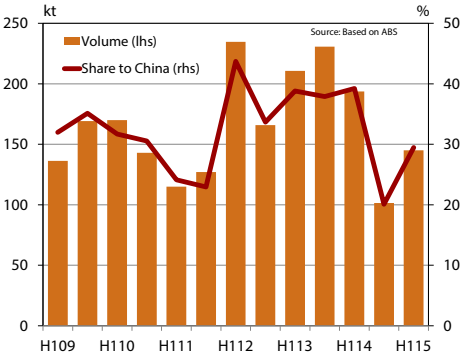


Figure 204: Australian ilmenite exports to China



China's exports of rare earth oxides

Figure 205: China's total rare earth oxides exports

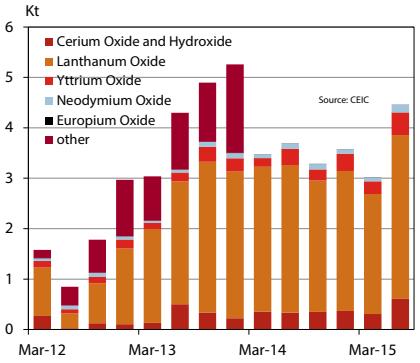


Figure 206: Cerium oxide & hydroxide exports

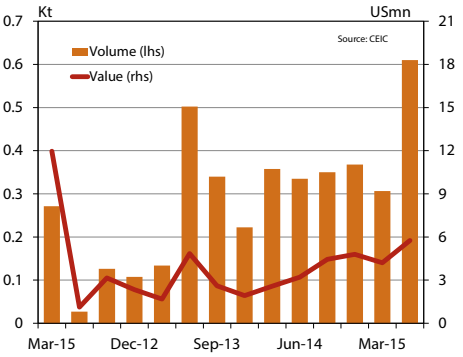


Figure 207: Lanthanum oxide exports

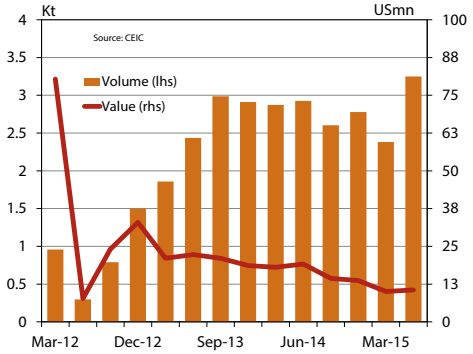


Figure 208: Neodymium oxide exports

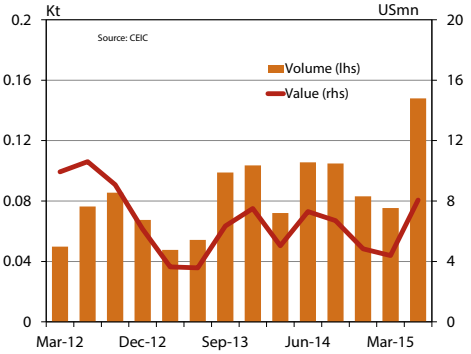


Figure 209: Europium oxide exports

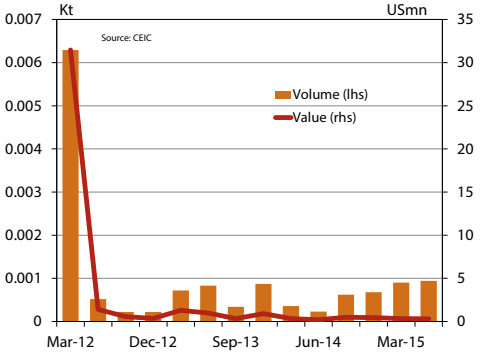
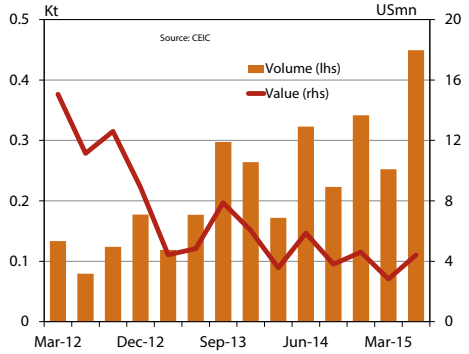


Figure 210: Yttrium oxide exports



Manganese & Cadmium

Figure 211: Manganese & cadmium prices

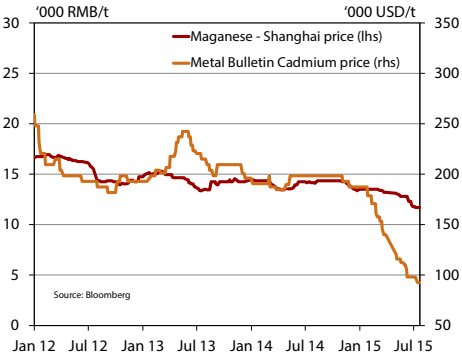


Figure 212: China's manganese ore imports

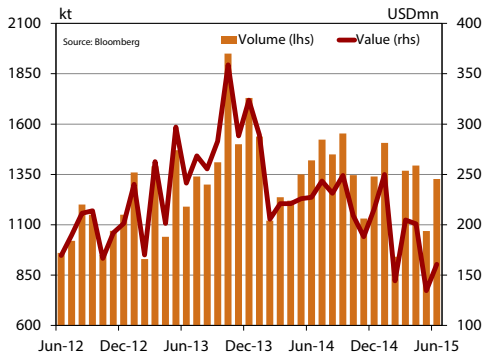


Figure 213: Australian manganese exports to China

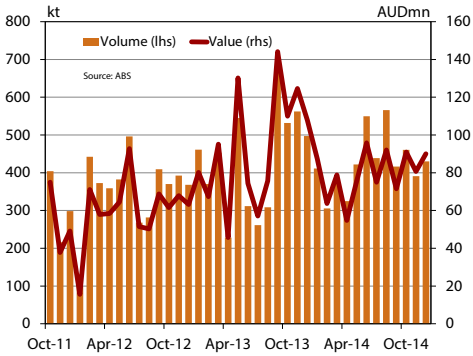


Figure 214: World manganese mine output

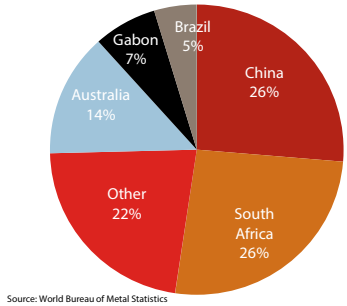


Figure 215: World cadmium production

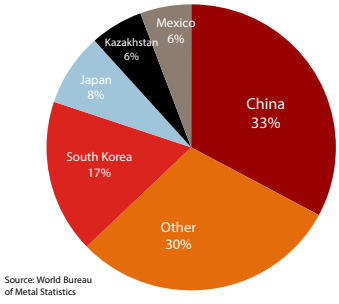
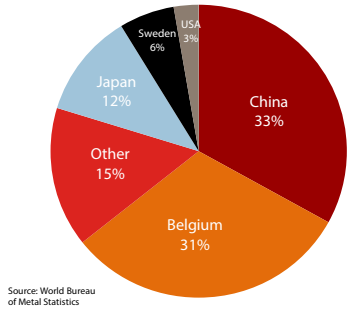


Figure 216: World cadmium consumption



Diamonds & Magnesium

Figure 217: World diamond exports

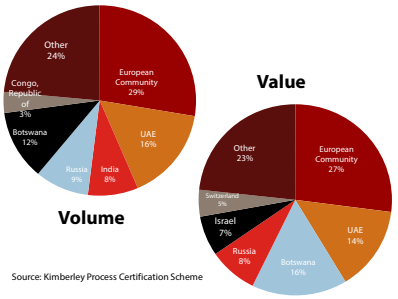


Figure 218: World diamond imports

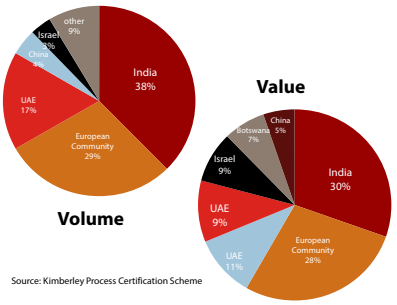


Figure 219: World diamond output

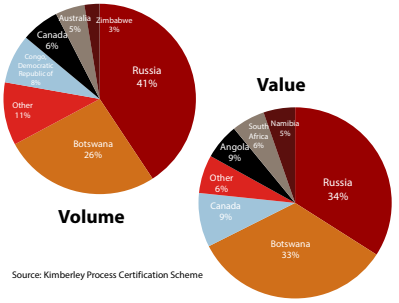


Figure 220: Magnesium prices

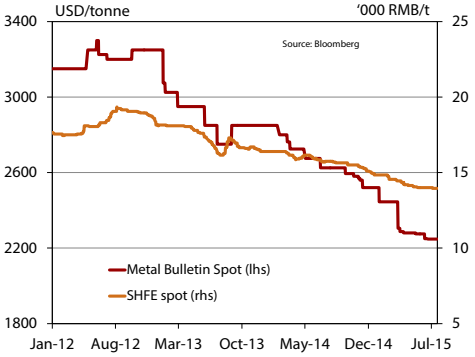


Figure 221: China's magnesium exports

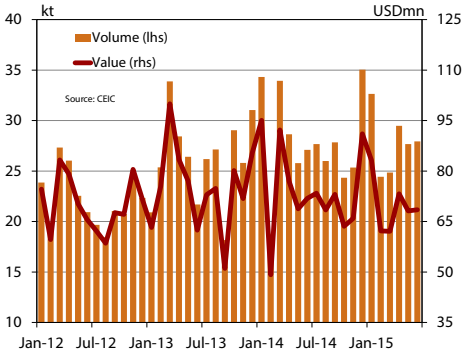


Figure 223: Shares of world magnesium output

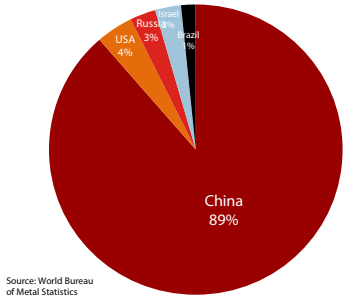


Table 25: China mineral and energy import summary

	unit	Sep–13	Dec–13	Mar–14	Jun–14	Sep–14	Dec–14	Mar–15	Jun–15
Iron ore	Mt	216.7	219.1	222.0	235.3	242.1	233.6	227.1	226.0
from Australia	Mt	111.8	112.9	118.2	138.2	149.4	142.7	144.4	146.8
Australian share	%	52	52	53	59	62	61	64	65
Thermal coal	Mt	60.9	67.6	71.0	58.1	49.7	50.4	38.1	40.1
from Australia	Mt	17.0	15.9	15.4	15.2	17.5	15.1	10.6	12.6
Australian share	%	28	24	22	26	35	30	28	32
Metallurgical coal	Mt	19.4	20.7	13.0	18.1	13.4	18.0	10.9	10.7
from Australia	Mt	7.7	9.2	6.5	8.6	5.9	10.3	5.3	5.5
Australian share	%	40	44	50	47	44	57	49	51
Aluminium	kt	137.7	193.0	175.5	96.1	51.5	30.5	34.4	45.9
from Australia	kt	31.7	31.5	48.0	18.9	7.0	5.6	7.7	2.7
Australian share	%	23	16	27	20	14	18	22	6
Alumina	kt	829	1354	1484	1281	1158	1354	1072	1041
from Australia	kt	767	1177	1184	655	523	791	455	555
Australian share	%	92	87	80	51	45	58	42	53
Bauxite	Mt	21.1	17.6	13.1	6.6	8.4	8.4	10.1	12.6
from Australia	Mt	4.2	3.4	3.1	3.7	4.7	4.2	4.9	4.5
Australian share	%	20	19	24	56	55	50	49	36
Copper	kt	1731	1819	1836	1699	1725	1935	1729	1774
from Australia	kt	135	128	165	144	140	152	116	142
Australian share	%	8	7	9	8	8	8	7	8

Table 25 continued on page 69

Table 25 continued:

	unit	Sep–13	Dec–13	Mar–14	Jun–14	Sep–14	Dec–14	Mar–15	Jun–15
Oil	Mt	73.2	70.8	74.7	77.2	76.5	79.9	80.3	83.0
from Australia	Mt	1.2	0.5	0.7	0.7	0.7	0.5	0.6	0.6
Australian share	%	1.7	0.7	1.0	0.9	1.0	0.7	0.7	0.7
Gas (LNG)	kt	4560	5140	5629	4297	4811	5155	5127	4392
from Australia	kt	834	906	843	905	1162	902	1094	1286
Australian share	%	18	18	15	21	24	18	21	29
Zinc	kt	345.5	427.9	431.0	347.2	353.0	370.3	na	na
from Australia	kt	75.1	142.8	138.5	119.5	111.4	125.1	na	na
Australian share	%	22	33	32	34	32	34	na	na
Nickel	USDmn	1766	2095	1585	1625	2314	1251	904	1918
from Australia	USDmn	119	112	67	112	99	71	81	87
Australian share	%	7	5	4	7	4	6	9	5
Lead	kt	227.9	242.5	224.0	213.8	284.8	273.0	na	na
from Australia	kt	25.7	29.6	49.6	28.8	47.8	52.0	na	na
Australian share	%	11	12	22	13	17	19	na	na
Tin	kt	3.1	2.1	2.0	2.0	2.3	2.5	1.6	2.9
from Australia	kt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Australian share	%	0	0	0	0	0	0	0	0
Uranium	t	9069	6216	4045	6801	4985	9281	2041	5659

Sources: CEIC, Bloomberg, IHS.

Electricity generation and consumption

Figure 211: Electricity generation by region, 2014

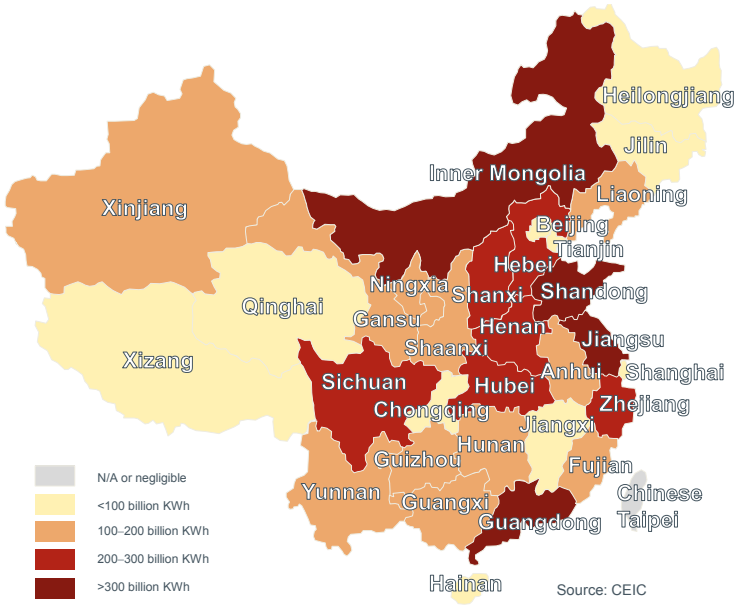
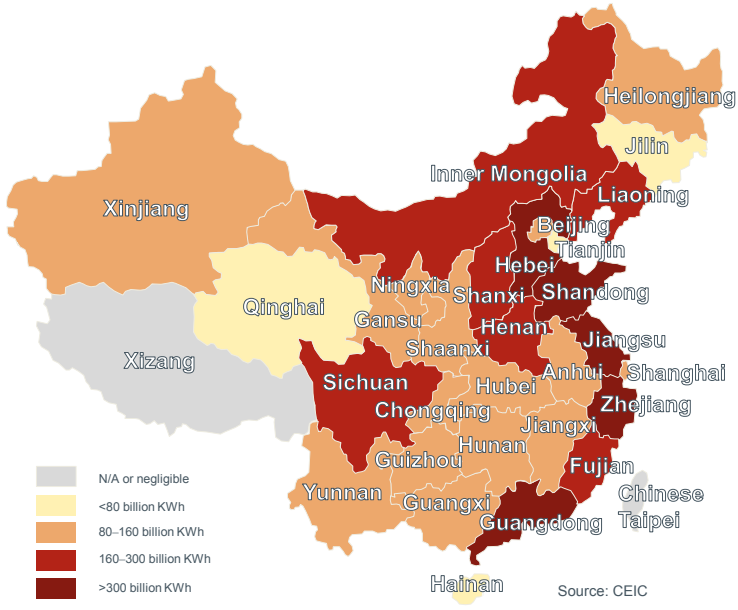


Figure 212: Electricity consumption by region, 2013



Coal and gas

Figure 213: Coal production by region, 2015 to date

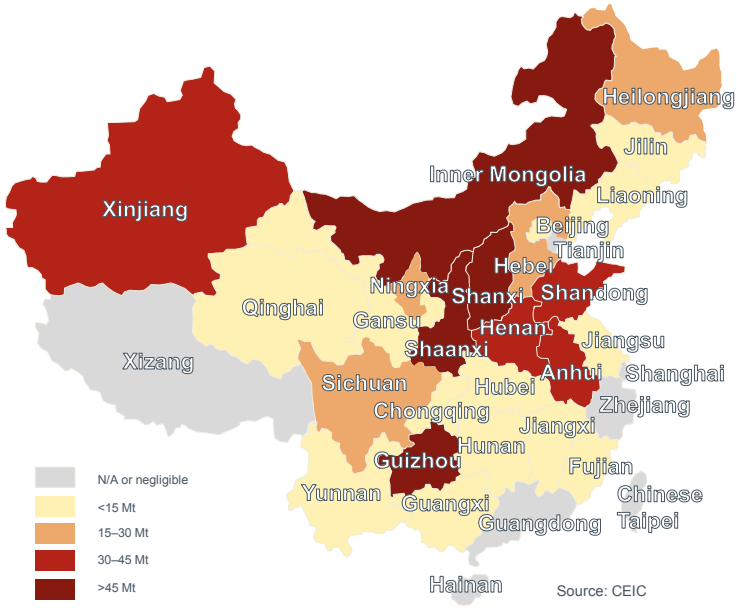
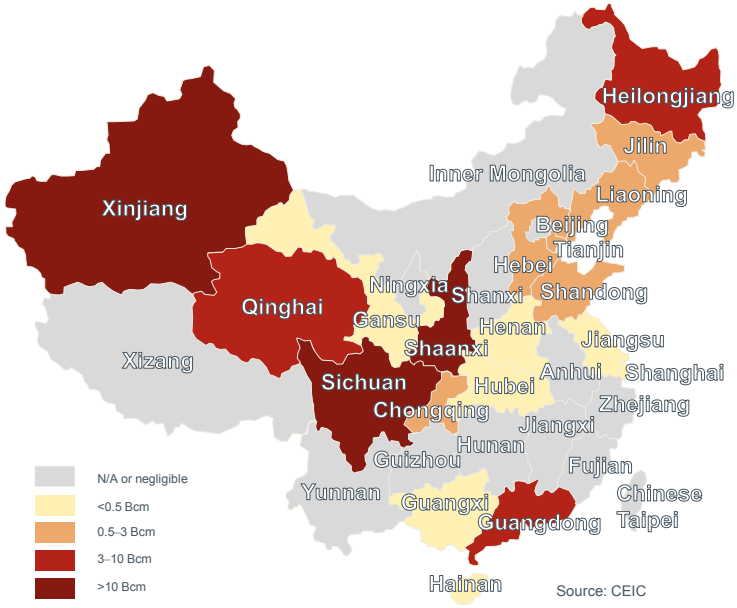


Figure 214: Gas production by region, 2014



Ferrous metals

Figure 215: Iron ore production by region, 2014

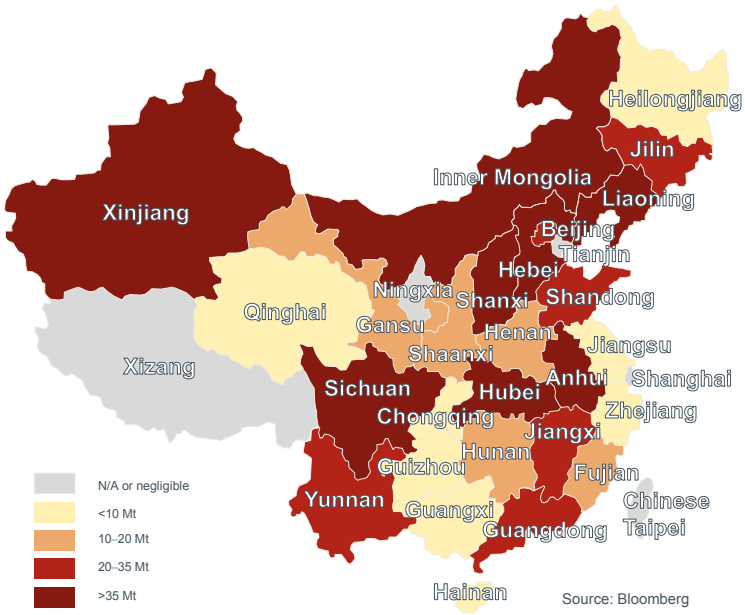
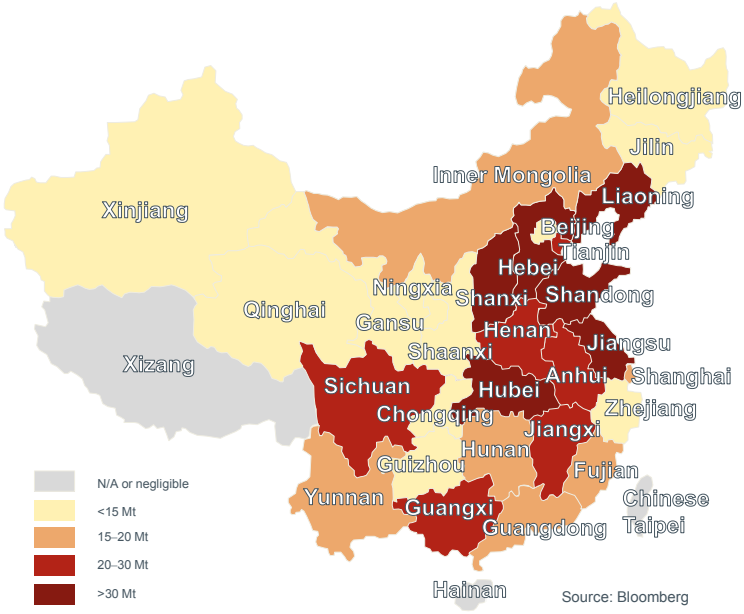


Figure 216: Crude steel production by region, 2014



Alumina and aluminium

Figure 217: Alumina production by region, 2014

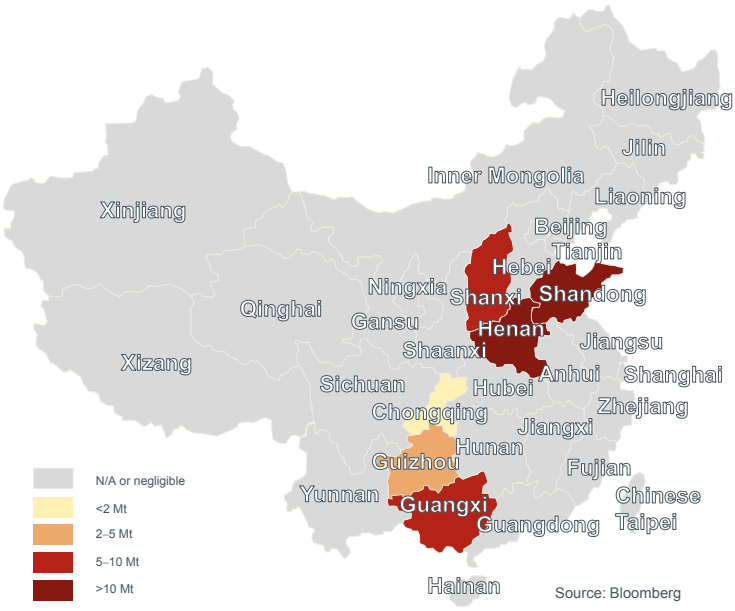


Figure 218: Aluminum production by region, 2014

Copper and gold

Figure 219: Copper production by region, 2014

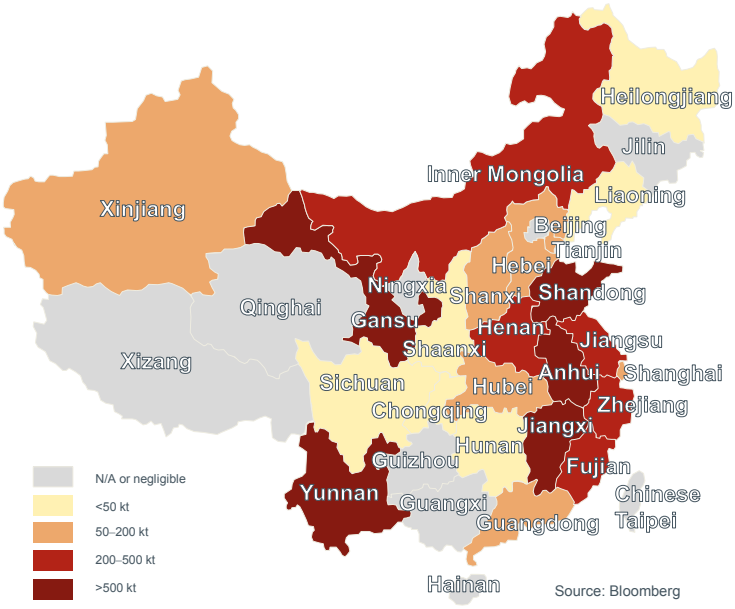
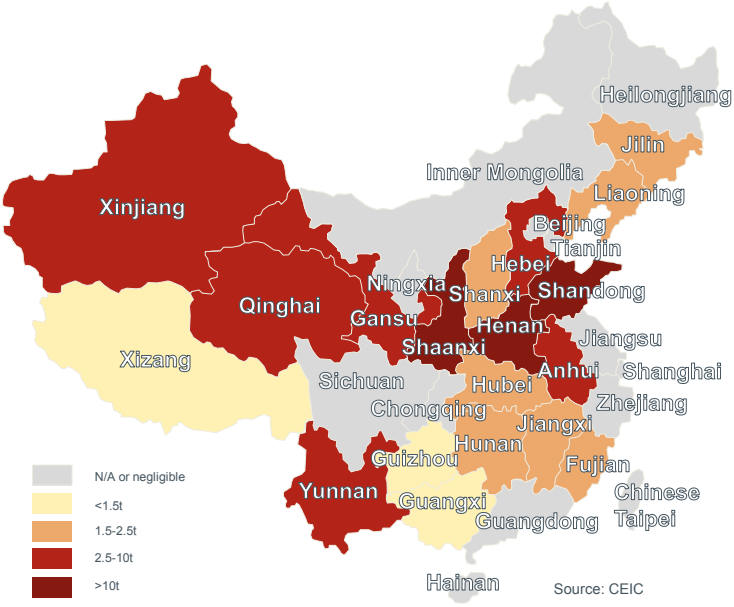


Figure 220: Mined gold production by region, 2014



Nickel and zinc

Figure 221: Nickel production by region, 2014

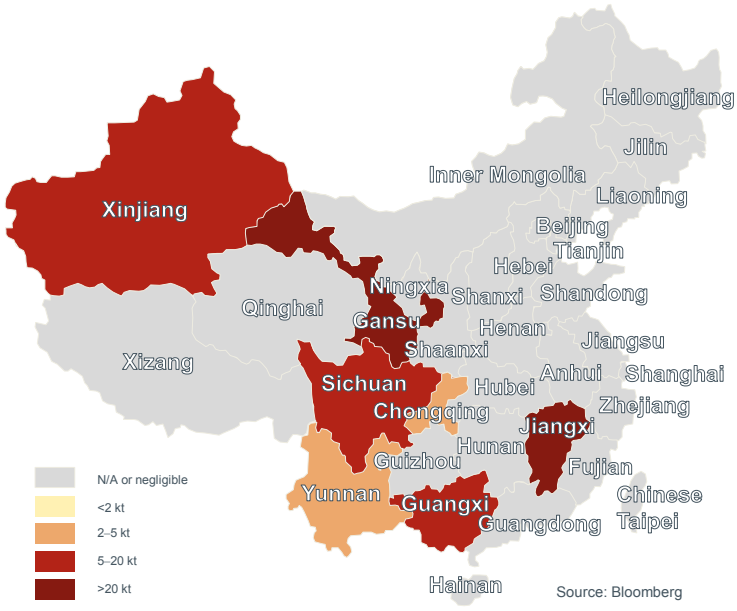
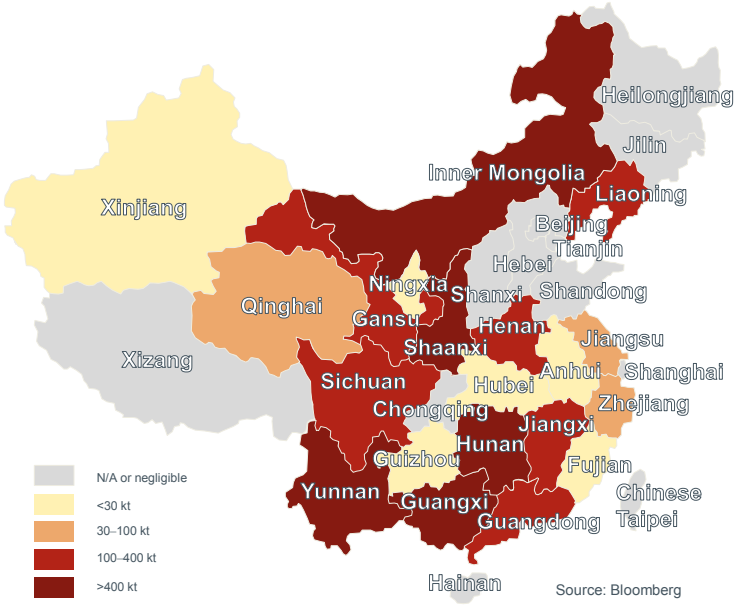


Figure 222: Zinc production by region, 2014



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