



Australian Government
**Bureau of Resources
and Energy Economics**



The Westpac–BREE

China Resources Quarterly

Southern autumn ~ Northern spring 2014





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China
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Postal address:
Bureau of Resources and Energy Economics
GPO Box 1564
Canberra ACT 2601 Australia

Email: info@bree.gov.au
Web: www.bree.gov.au

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Editors

Westpac: Huw McKay.

BREE: Kate Penney and John Barber.

Design and production

Julie Doel

Cover image

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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
BREE	Bureau of Resources and Energy Economics
CEIC	Chinese Economic Information Company
CFR	Cost including freight
CNY	Chinese yuan
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 autumn ~ Northern spring edition of the Westpac–BREE **China Resources Quarterly** – hereafter the **CRQ**. The **CRQ** is a ‘first of its kind’ collaborative research venture between the Westpac Institutional Bank (hereafter Westpac) and the Bureau of Resource and Energy Economics (hereafter BREE).

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 a similar backdrop to its predecessor: a slowing domestic economy in China allied to the perception of growing financial risks.

In the resources sphere, the intersection of increasing Australian supply potential and a more sedate rate of growth in overall Chinese demand bears careful watching.

With China’s development model arguably approaching an inflection point, and Australia’s own commodity cycle moving clearly 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 demand trends.



Bill Evans
Chief Economist, Westpac



Wayne Calder
Deputy Executive Director, BREE

Executive summary

The Chinese economy grew at a rate **somewhat below its potential** early in 2014. The general impression left by the flow of data since the previous edition of **CRQ** has been one of outright deterioration. The respectable performance observed in the second half of last year, which at the time we suspected would be the peak for growth momentum in the current cycle phase, has been confirmed as such by the weak March quarter.

Growth in **heavy industrial capacity** slowed in early 2014, having managed to stabilise in the second half of 2013. Outlays on utilities projects have been disappointing in the year to date, given such spending looked somewhat underdone across the previous year. Countering that, **investment in transport infrastructure** was resilient in the March quarter, counter to expectations of a decline in growth.

Real estate investment has been weaker than anticipated so far this year. **Housing starts** ended 2013 with some momentum, which promptly evaporated in early 2014. **Developers have been hurt by weaker sales**. This has hindered their ability to move stock and control their liquidity in the tighter monetary environment. **Housing prices** and sales turnover have both been under downward pressure. The secondary dwelling market has shown the most obvious strains, but the market for new dwellings has not been able to stand completely aloof.

The **heavy industrial sector** has just completed a poor first quarter. **Inventories rose sharply from December through February**, with production plans slow to adapt to a slowdown in sales. As of March, output and sales have moved closer into line, implying that the worst is now past from a sequential growth perspective.

China's exports to advanced markets are still growing faster than its total shipments, with Europe's contractionary influence lessening and the US and Japan both now growing at reasonable rates. **China's imports from commodity producing countries** are rising faster than its overall import bill, while imports of machinery and components for assembly are both looking sluggish.

In terms of external finance, **the exchange rate depreciated in the March quarter** as the People's Bank prepared the ground for a doubling of the USD/CNY trading band. The year to date weakness in the CNY follows a 7.8% real trade weighted appreciation over 2013.

Despite the moderation in economic growth rates, **China's resources and energy use maintained an upward trajectory in 2013**. Steel production increased by 9% to a record 775 Mt, contributing to iron ore imports reaching a record 820 Mt. Notwithstanding the implementation of policies to curb coal use, coal consumption also increased 2.6% to 3.61 billion tonnes in 2013.

Australia continued to play an important role in meeting the growth in China's consumption, with increased export volumes registered across most commodities. Australia exported a record 442 Mt of iron ore and 42 Mt of thermal coal to China in 2013. Imports are playing an even more important role in meeting China's overall mineral and energy demands, and **in many commodity markets Australian producers have increased their market share** in volume terms. This factor has mitigated the impact of lower prices on overall export earnings.

Recent developments in the Chinese economy

The Chinese economy grew at a rate somewhat below its potential early in 2014. The general impression left by the flow of data since the previous edition of **CRQ** has been one of outright deterioration. The respectable performance observed in the second half of last year, which at the time we suspected would be the peak for growth momentum in the current cycle phase, has been confirmed as such by the weak March quarter.

Real GDP expanded by 7.4% year-on-year in the March quarter alone. That pace compares to 7.7% year-on-year in the December quarter, 7.7% & 7.8% in calendar years 2013 and 2012 respectively and 9.3% in 2011. Nominal GDP, which has historically exhibited significantly more cyclical amplitude than the volume measure of activity, was extremely weak at 7.9% versus 9.7% in Q4 and 9.6% a year ago. With the exception of the GFC period, that is the slowest nominal GDP growth and the meekest rate of price increases since the deflationary late 1990s. The change in the GDP deflator – the statistician’s estimate of economy wide prices – fell sharply from 1.96%yr in the December quarter to just 0.47%yr.

Looking at the breakdown of real activity from the production side of the accounts, primary output decelerated (3.5%ytd from 4.0%ytd in Q4) while both secondary (7.30%ytd from 7.85%ytd in Q4) and tertiary activity (7.8%ytd from 8.27%ytd in Q4) shed altitude. The tertiary share of GDP has increased by 2.7ppts from the position at the end of 2011, principally at the expense of secondary industry. Contributions to Q1 economic growth in terms of expenditure were 5.7ppts from final consumption (3.9ppts in 2013, 4.3ppts in Q1 a year ago); 3.6ppts from investment (4.1ppts in 2013, 2.3ppts in Q1 a year ago); and net exports at -1.4ppt (-0.3ppts in 2013, +1.1ppts in Q1 a year ago).

Real urban fixed investment has slowed abruptly, from 18.7%yr in Q4 to 16.6%yr in Q1. In terms of the sectoral composition, on a nominal basis, growth in heavy industrial capacity has slowed anew; investment in transport projects has proved resilient; while utilities capex has been disappointing. Real estate investment has started the year in poor fashion given the momentum of new starts evident later in 2013. State-owned enterprises contributed 26.3% of the growth in fixed investment in Q1, down from 29.1% in 2013.

Figure 1: Key economic indicators

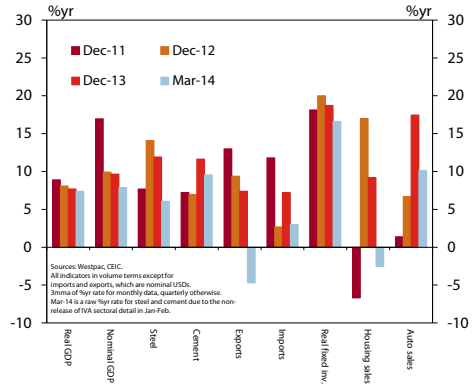


Figure 2: Various elements of the national accounts

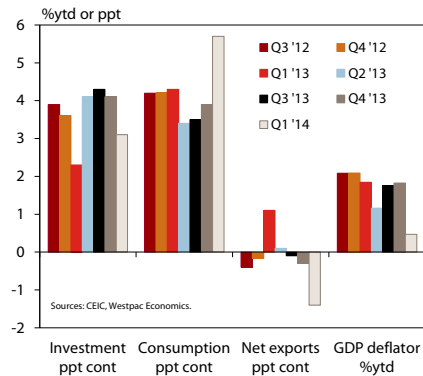
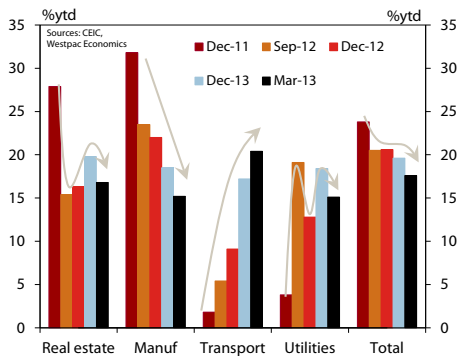


Figure 3: The investment cycle: a sectoral view



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 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 the government and corporations contain relevant insights on underlying growth.

In the previous edition of *CRQ* we argued that a balanced reading of the alternative indicators suggested that the official GDP figures were providing a reasonable approximation of the true state of affairs. In the March quarter, we judge that the ‘proxies’ indicate that the *nominal* estimate of GDP is currently providing the most useful perspective on aggregate demand.

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 to a level materially below their long run average in the March quarter. The previous survey described conditions as marginally above average, while the two surveys prior to that described conditions as marginally below average.

In category (2), alongside the traditional proxy of electricity output, logistics volumes provide additional insight. As of March 2013, the smoothed year–ended growth rate of these proxies was 8.8% (electricity); 6.9% (terrestrial freight) and 6.6% (aquatic freight).

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 smoothed year–ended growth rate of central government revenues was 10.8% in Q1. The profit margins of industrial enterprises (manufacturing, mining and utilities) narrowed in early 2014. Corporate revenue growth has receded from a low double digit annual pace in the second half of 2013 to around 7¾% in Q1.

Figure 4: Business conditions, orders & GDP

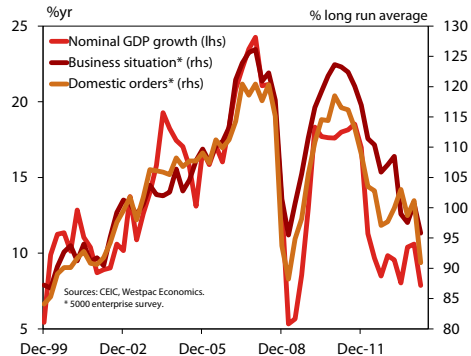


Figure 5: Selected aggregate activity proxies

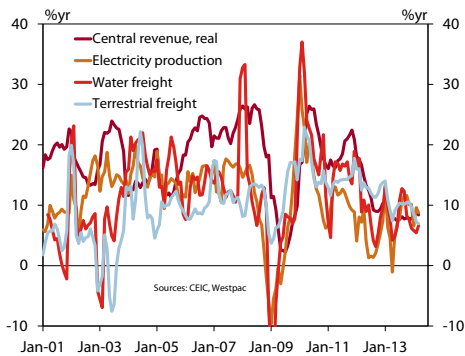
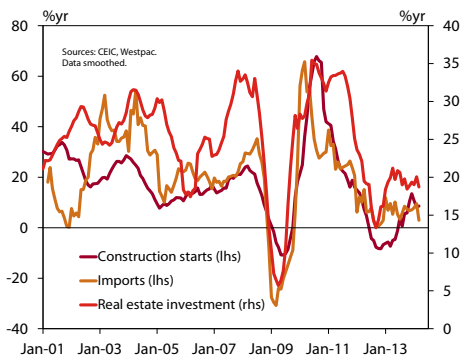


Figure 6: Selected aggregate activity proxies



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 16% of the total.

Nominal real estate investment grew by 16.8% in the year to March 2014. In year-ended terms it was expanding at a modest 14.2% clip in the month of March, down from 22.3% in December 2013. That compares to 19.4% in June 2013 and 12.4% at the end of 2012. Dwelling investment alone is growing at 15.2% as of March, versus 18.7% in June 2013 and 22.5% as 2013 came to a close.

While housing sales and prices both enjoyed a considerably stronger 2013 than might have been reasonably supposed in the wake of the controls announced following last year's National People's Congress, the sector has slowed abruptly in 2014 to date. The year-ended pace of sales has declined sharply (see figure 7) across all regions, with property markets in the eastern and western provinces seeing steep declines in the growth of turnover.

Prices have responded accordingly. Residential land prices have decelerated in 6 month annualised terms (see figure 8); the net balance of cities seeing monthly price appreciation has declined appreciably; while annual price growth has clearly topped out. The secondary market (secondary as in 'not new') has shown the most obvious strains, but the market for new dwellings has not been able to stand completely aloof. Anecdotal evidence suggests that uncertainty over the future taxation environment, corruption curbs and over supply in certain geographic areas are all having an impact alongside the macroeconomic policy stance. We note that a rising number of respondents to the *Westpac MNI China Consumer Sentiment Survey* are expressing caution towards the near term performance of the housing market.

Regarding construction, housing starts ended 2013 with some momentum, which promptly evaporated in early 2014 (figure 9). Developers have been hurt by weaker sales, which has hindered their ability to move stock and control their liquidity in the tighter monetary environment (see figure 14 on page 6).

Figure 7: Housing sales: national & regional

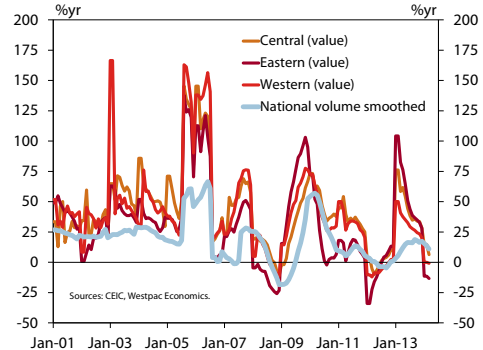


Figure 8: Land prices: total & residential

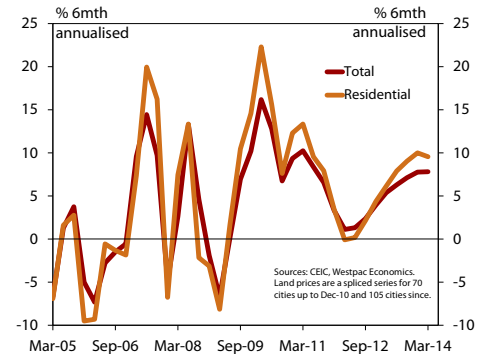
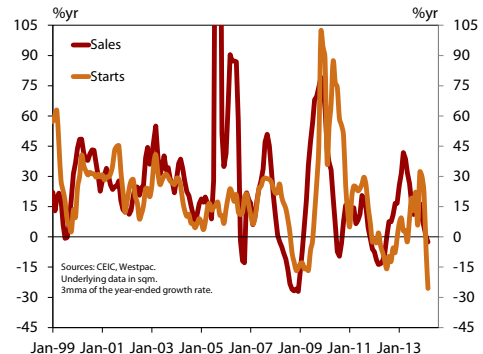


Figure 9: Residential sales & starts: volume



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 subtracted heavily from March quarter real GDP, with the trade surplus narrowing sharply from both the prior quarter and a year ago. As in the December quarter, China's exports to the G3 ran at a faster pace than China's overall global shipments in Q1. That is a rare occurrence, but not entirely unexpected in the current global growth environment. Intra-Asian exports contracted from a year ago in Q1, with Hong Kong the major culprit, reflecting ongoing distortions emanating from the illicit capital inflows of early 2013. Exports to extra-regional emerging markets are also contracting, reflecting the need for many jurisdictions to reduce their import bills in the fractious external financing conditions that have prevailed over the last year.

The business surveys have been describing an external environment where demand has been contracting modestly, or moving sideways, for most of the year. The "new export orders" sub-index in the two most watched manufacturing surveys (where 50 signifies the dividing line between expansion and decline) has averaged 49.3 in the year to April, versus 50.1 in Q4 and 49.3 in Q3. With the average back at 2013Q3 levels then, that implies no aggregate progress has been made on the demand side despite Europe exiting recession and Japan's reconstruction infused rebound.

Imports of machinery and transport equipment saw their first year-ended growth decline since 2012Q2 in the March quarter. This poor performance derives from weak processing export volumes, excess capacity in the onshore machinery sector and subdued equipment outlays by local customers. The value of food imports is growing right on its three year average of circa 30%. Overall imports from commodity producing countries are rising faster than the total import bill; imports from the G3 have recently moved into the double digit annual range; while imports from the NIEs (a proxy for the component and assembly trade) are the weakest they have been since the GFC.

Figure 10: Trade flows by source and destination

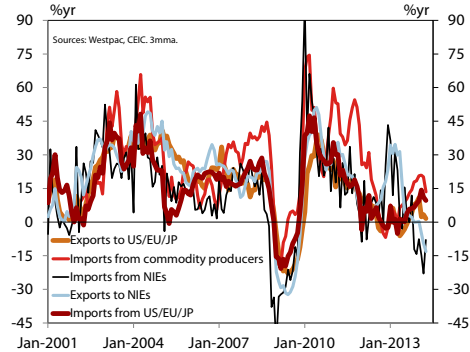


Figure 11: Export orders: survey measures

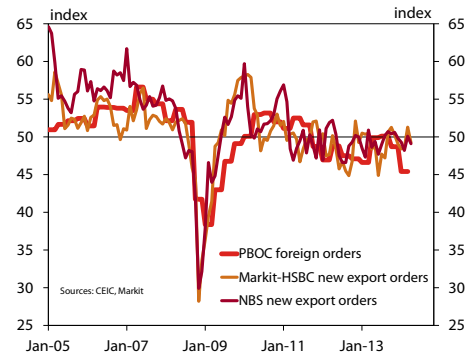
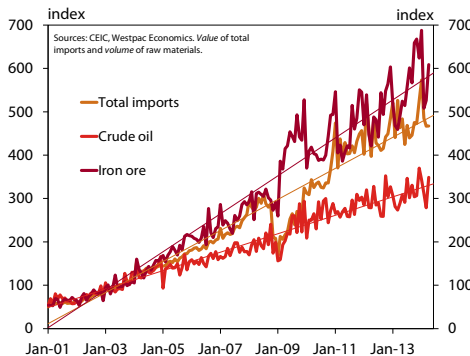


Figure 12: Imports – total & key raw materials



The monetary & financial sphere

China's monetary policy has been in constant flux since 2011. Credit supply reached a very low ebb in 2011Q3, with 'shadow banking' going into reverse and sectoral lending controls in place. Direct loan controls were eased soon after, but other forms of finance remained weak throughout the first half of 2012. However, with growth beginning to gain traction from the middle of that year, 'shadow banking' re-engaged and total credit rebounded smartly. That situation persisted through early 2013, when policy tilted back towards restraint, which led to the dramatic squeeze of late June. Interbank markets have presented a fragile facade ever since, and most forms of shadow finance have been in outright retreat.

The previous edition of the **CRQ** argued that periodic bouts of financial stress were inevitable over the course of the coming year. Subsequently, it has been observed that the growth in new credit supply less local currency bank loans has slowed from +156%yr in April 2013 to -24%yr in March 2014. For total finance the slowdown has been from 63%yr to -9%yr. Bill finance, trust loans, FX loans and bond issuance are all down heavily from a year ago, with 'entrusted loans' the only element of the shadow that has maintained its composure over the course of the tightening cycle to date.

Developments in credit supply tend to lead the real economy by 2-3 quarters. Therefore the abrupt deceleration in credit growth described above is affecting growth right now and will continue to do so deep into this calendar year. Private property developers are one sector that is feeling the effects of this tightening, with their revenue from down payments and sales having been crunched by the housing slowdown. The weak performance of housing starts in the year to date is no coincidence.

The trust sector is a highly pro-cyclical source of credit supply. Trusts sell high yielding, potentially risky products to savers looking to earn more than the regulated deposit rate. The underlying asset is often a loan to a private firm that does not have access to bank finance. With many of the sectors that have relied on trust financing of late experiencing poor trading conditions and thus servicing difficulties (see figure 15 for a snapshot of the coal mining sector), it is unlikely that we have seen the last restructuring in this asset class.

Figure 13: Total credit supply growth – new flows

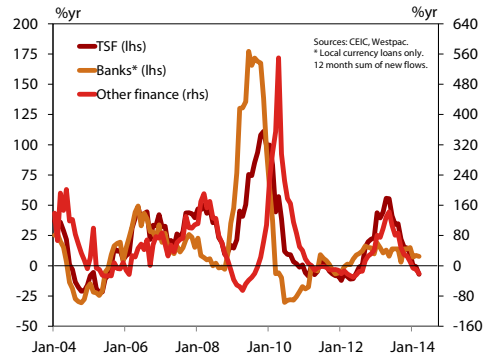


Figure 14: Property developers: finance by source

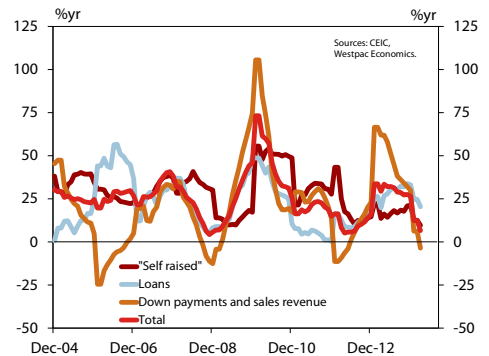
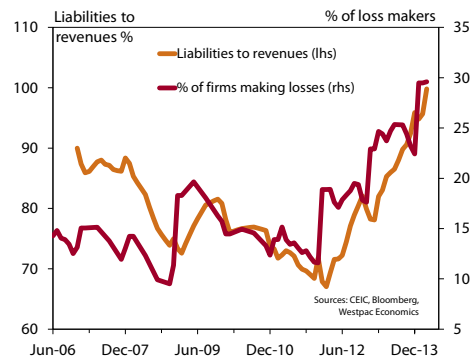


Figure 15: Coal mining: losses & liabilities mount



External finance & the currency

The bilateral exchange rate with the US dollar has appreciated by a cumulative 32% 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 38% over the same time frame. The real effective CNY has appreciated by 2.9% over the year to March 2014, while USD/CNY has fallen by 1.0% (an appreciation of the yuan).

The annual changes have moved abruptly lower from those reported for the end of 2013, courtesy of an engineered depreciation in the onshore spot rate from the low of 6.0411 on January 15 to above 6.2 by the middle of April, where it has stayed. The People's Bank apparently conducted this operation for two reasons. The first was to create some uncertainty over the direction of the currency in advance of a widening of the allowable daily trading band against the US dollar, from +/- 1% to +/- 2%, which occurred on March 16. Reason 1a. was the desire to flush out the speculative bets that had built up over the course of 2013, when USD/CNY trading had resembled one-way traffic.

The second reason was that an adjustment to the real effective trajectory of the CNY was considered appropriate from a financial conditions perspective. The currency was by far the strongest in the Asian region over the course of 2013, with a 7.8% real gain over the year, while most of its peers had seen their competitiveness increase over that same timeframe. With the domestic inflation trajectory far from threatening, the move also made sense within the administration's counter cyclical policy framework.

The capital flow backdrop was not as weak as the movement in the exchange rate might imply. Foreign exchange reserves increased by \$US127bn in the quarter, a similar figure to 2013Q1, despite a significant narrowing of the current account surplus over the year. On the reform front, an initiative entitled 'Shanghai-Hong Kong Connect' was launched. Local investors will be able to apply to invest directly in Hong Kong equities under a combined quota of \$US46bn, with the reciprocal rights being a combined quota of \$US40bn. These quotas are of material size relative to existing cross border portfolio programs (see figure 18).

Figure 16: The exchange rate: broad & bilateral

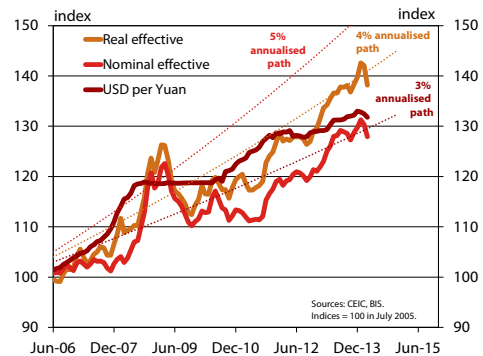


Figure 17: Currency movements & food inflation

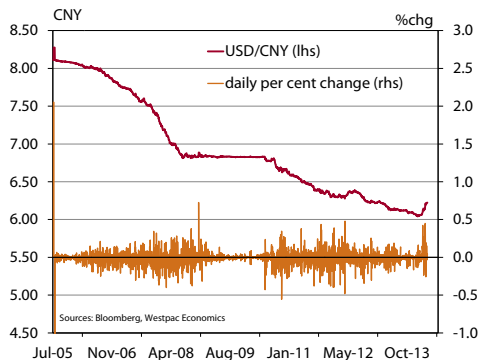
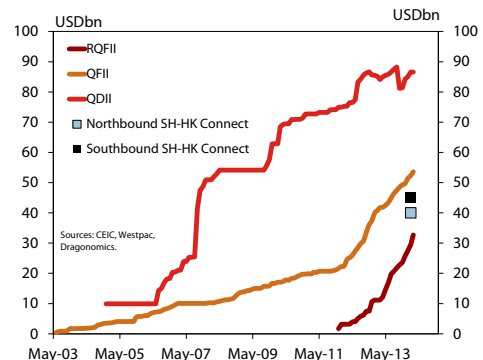


Figure 18: Cross border portfolio programs



Heavy industry

As heavy industrial output (and investment in new capacity) is essentially a measure of ‘derived demand’ from other sectors, it is a reactive variable in the 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. 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 heavy industry is vital to a full comprehension of China’s resource demand.

Note that our regular commentary on this sector has been hampered by the non-release of a considerable portion of the industrial value-added report for the months of January and February. This problem flows on in some degree to the individual commodity commentaries for the ferrous and non-ferrous metals.

Total industrial value-added expanded at a year-ended rate of 8.7% in the March quarter. That compares to an even 10% at the end of 2013, 10.1% in the September quarter and 9.1% at the mid point of 2013. The growth rate of electricity output at each of those points was 8.8% (2014Q1); 10.1% (2013Q4); 11.5% (2013Q3) and 6.9% (2013Q2). The greater amplitude of the growth rates in energy production is consistent with the movements in the heavy industrial subset of the wider sector.

In the previous edition of the **CRQ**, we highlighted that the inventory position of the basic materials sectors had shifted adversely in late 2013, but the situation appeared manageable. That judgement was reached following a balanced reading of the business surveys, data from the industry associations, official reports and our liaison efforts. Things moved swiftly early in the year though, with inventory-to-sales ratios deteriorating sharply as final demand disappointed, with immediate implications for production plans (see figure 30 on page 15). In the absence of some of the ‘hard’ data, one pointer to overstocking was the deepening deflationary impulse being described by the manufacturing business surveys.

Downstream, capital goods have been falling in price since late 2011. The rate of deflation had lessened in late 2013, but this proved to be a head fake, as price declines re-accelerated in early 2014.

Figure 19: Core & headline industrial production

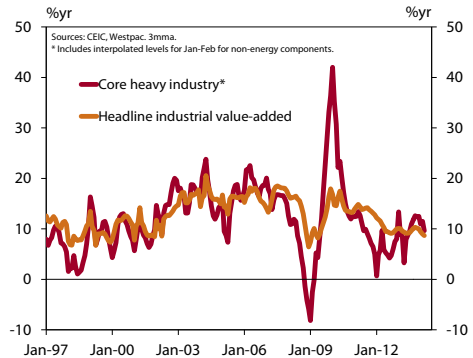


Figure 20: Manufacturing inventories & orders

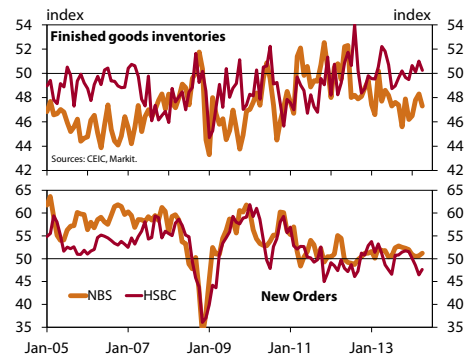
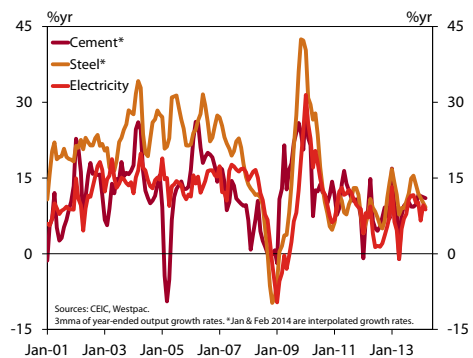


Figure 21: Heavy industrial bellwethers



The household sector

The present edition of **CRQ** is no ordinary one, as it is being compiled ahead of the launch of the *Westpac MNI China Consumer Sentiment Survey*, a collaborative research venture between Westpac and MNI Indicators, a member of the Deutsche Börse Group. Just as the **CRQ** has become “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” so too will the *Westpac MNI China Consumer Sentiment Survey* become the primary reference point for those seeking to grasp the collective psyche of China’s consumer mega market.

The methodology underpinning the survey is that of the well known and widely respected University of Michigan *Survey of Consumers*, which also serves as the basis for the *Westpac–Melbourne Institute Australian Consumer Sentiment Survey*. China watchers will be aware that there is a dearth of quality information available on the Chinese household sector. This initiative aims to fill a portion of the gap between what we would like to know about the Chinese consumer and what can realistically be gleaned from publicly available information.

The survey’s indicators have an impressive track record of co-movement with a number of closely watched data series, ranging from industrial production, asset prices, housing and auto sales, inflation, exports and imports and the official and private sector business surveys.

The survey is presently indicating that China’s urban consumers have become more cautious in recent times. This caution has manifested itself in a drop in the headline indicator since late last year; larger declines in forward looking questions vis-a-vis contemporaneous judgements; higher than average rates of saving out of income; and an apparent decrease in perceptions of job security. Attitudes towards house prices and housing and auto purchases have been more resilient than the rest of the survey, but the former category in particular bears very close watching in coming months given weak price action in the year to date.

Figure 22: Housing and auto purchases

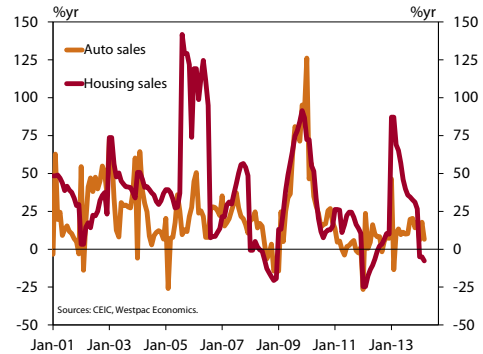


Figure 23: Consumer sentiment: income & jobs

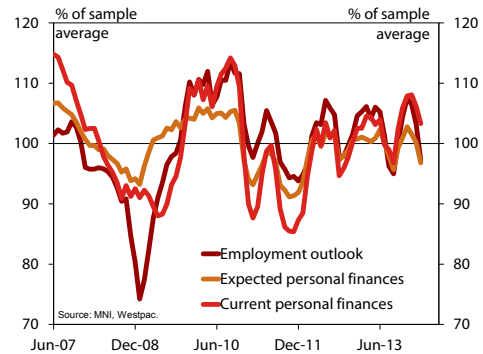


Figure 24: Uses of household income

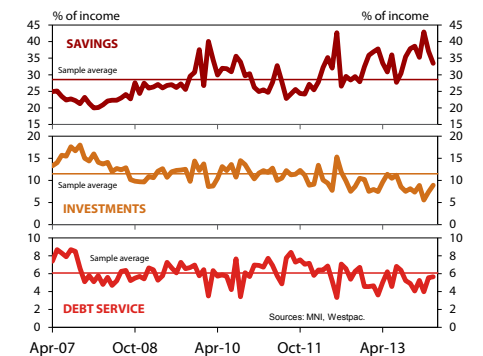


Table I: General macroeconomic data

Quarterly	Mar-11	Jun-11	Sep-11	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14	
Real GDP %yr	9.7	9.5	9.1	8.9	7.9	7.6	7.4	7.4	7.7	7.7	7.5	7.8	7.7	7.4
Nominal GDP %yr	18.0	18.1	18.5	17.0	11.3	9.7	8.5	9.9	9.6	8.1	10.6	9.7	9.7	7.9
Contributions to real GDP percentage points ytd														
Final consumption expenditure	6.1	5.1	5.0	5.3	6.4	4.7	4.2	4.2	4.3	3.4	3.4	3.5	3.9	5.7
Gross capital formation	3.8	4.6	4.4	4.4	2.4	4.0	3.9	3.6	2.3	4.1	4.1	4.3	4.1	2.9
Net exports	-0.1	0.1	0.1	-0.4	-0.7	-0.9	-0.4	-0.2	1.1	0.1	0.1	-0.1	-0.3	-1.4
Secondary industry %ytd	10.8	10.6	10.6	10.3	8.9	8.2	7.9	7.9	7.8	7.6	7.8	7.8	7.8	7.3
Tertiary industry %ytd	9.7	9.7	9.5	9.4	7.4	7.7	7.9	8.1	8.3	8.3	8.3	8.4	8.3	7.8
Current Account %GDP	3.4	3.2	2.5	1.8	2.1	2.3	2.7	2.6	2.8	2.6	2.1	1.9	1.9	1.5
GDP deflator %yr	8.3	8.6	9.4	8.1	3.3	2.1	1.1	2.0	1.8	0.6	2.8	2.0	2.0	0.5
Fixed investment deflator %yr	6.5	6.7	7.3	5.7	2.3	1.6	0.2	0.3	0.2	-0.1	0.0	0.0	0.9	1.0
Land price index %yr	8.5	8.9	8.4	5.8	3.8	2.3	1.7	2.6	3.9	5.1	6.2	7.0	7.0	7.5
Consumer price index %yr	5.1	5.7	6.3	4.6	3.8	2.9	1.9	2.1	2.4	2.4	2.8	2.8	2.9	2.3
Non-food %yr	2.5	2.9	2.9	2.3	1.8	1.5	1.5	1.7	1.8	1.6	1.6	1.6	1.6	1.7
Central revenue 4qma %yr	21.9	24.1	27.1	25.0	20.2	14.7	10.9	12.8	10.7	10.1	10.8	10.2	10.8	10.8
Central expenditures 4qma %yr	20.3	23.7	22.5	21.6	23.2	18.1	18.2	15.1	11.6	10.8	7.5	11.2	11.2	11.3
Central operating position 4qma %GDP	-1.0	-0.9	-0.7	-1.1	-1.6	-1.6	-2.2	-1.6	-1.8	-1.8	-1.5	-1.9	-1.9	-1.9
Money supply M2 %yr	16.6	15.9	13.0	13.6	13.4	13.6	14.8	13.8	15.7	14.0	14.2	13.6	13.6	12.1
Bank loans (stock) %yr	17.9	16.9	15.9	15.8	15.7	16.0	16.2	15.0	14.9	14.2	14.3	14.1	14.1	13.9
Total credit supply (new, rolling annual) %GDP	32.9	31.6	28.4	27.1	25.8	26.0	29.2	30.3	34.0	33.6	32.6	30.4	30.4	28.9

Table 1 continued on page 11

Table I: General macroeconomic data

Quarterly

	Mar-11	Jun-11	Sep-11	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14
Exports %yr	26.4	22.0	20.5	14.3	7.6	10.5	4.5	9.4	18.3	3.7	3.9	7.4	-3.5
to G3	19.7	16.3	16.6	11.5	7.0	6.8	-4.9	-1.6	3.4	-4.9	2.6	9.4	2.8
to Asia ex Japan	30.9	25.8	22.5	14.6	9.2	12.1	13.4	21.7	36.7	15.2	7.5	6.9	-10.3
to Australia	26.5	32.2	26.2	15.6	10.5	15.1	7.6	12.4	5.7	-5.3	3.0	-1.5	1.1
to non-Asian emerging markets	29.7	32.4	29.4	24.7	15.5	16.7	11.7	10.2	22.2	0.4	-1.4	5.9	-3.3
Imports	32.8	23.1	24.8	20.6	7.1	6.5	1.6	2.7	8.5	5.0	8.4	7.2	2.0
from G3	29.7	18.4	16.9	10.6	4.3	1.6	-0.9	-4.3	-0.8	-0.1	4.3	8.1	11.5
from Asia ex Japan	27.9	21.9	23.5	19.9	10.7	3.2	3.8	10.9	17.5	8.1	7.3	1.5	-4.7
from Australia	48.5	34.5	39.9	29.7	18.0	19.0	-8.3	-8.1	7.5	9.1	19.0	33.5	24.8
from non-Asian emerging markets	45.0	26.8	38.5	42.4	26.0	24.6	4.9	-1.7	-0.9	-6.8	4.9	6.3	2.4
Trade balance USDbn	-0.7	46.7	63.8	48.1	1.1	68.8	79.5	83.3	43.5	65.7	61.5	90.5	16.6
Change in FX reserves USDbn	197	153	4	-21	124	-65	45	26	131	54	166	159	127
Enterprise survey – net balance													
Business conditions	71.1	70.6	69.3	67.5	64.4	63.7	61.1	61.8	62.6	57.1	56.3	58.1	55.3
Profitability	58.2	58.7	57.6	55.5	51.2	52.6	51.4	53.1	52.8	55.6	55.1	57.6	50.9
Domestic orders	56.9	56.7	55.3	53.2	50.5	50.2	47.4	47.7	48.8	50.3	48.2	49.4	44.4
Foreign orders	51.1	52.5	51.6	48.7	46.9	48.8	47.5	47.1	46.6	49.9	50.1	48.7	45.4
Banking climate – % of long run average													
Demand for loans	105.2	102.3	102.5	98.6	98.3	87.4	82.5	87.8	95.6	89.5	92.2	91.9	96.5
Ease of policy stance	70.7	63.8	64.0	76.6	106.3	121.8	130.2	134.5	140.2	142.2	127.7	131.5	118.7
Willingness to lend (corporate perception)	96.1	89.0	84.1	82.0	90.6	94.5	100.9	103.6	107.1	128.6	124.8	122.7	-
Westpac MNI Consumer Sentiment – % of average													
Headline composite	96.5	99.7	93.0	92.6	98.5	100.3	94.9	99.2	99.2	100.2	94.9	101.6	97.4
Real estate composite	105.0	104.0	100.2	95.6	98.2	99.4	98.3	102.0	100.9	102.1	103.1	102.9	104.4
Auto composite	90.8	91.6	95.8	102.0	97.7	96.0	102.5	100.7	102.8	103.3	102.8	102.9	102.7
Employment outlook	100.0	103.6	95.7	93.8	101.4	107.2	97.8	101.6	106.1	105.2	95.0	107.5	97.2

Source: Westpac Economics, CEIC, MNI.

Table 2: Resource related economic indicators

Monthly	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14
Industrial production %yr 3mma	9.4	9.1	9.1	9.1	9.3	9.7	10.1	10.3	10.2	10.0	9.4	8.7
Electricity	-1.1	4.9	6.9	7.9	7.9	10.8	11.5	11.6	10.1	10.1	6.6	8.8
Processed crude oil	4.2	4.0	5.2	6.4	7.5	4.0	2.6	-0.3	-0.3	-1.0	-5.3	-2.1
Cement*	-1.1	7.6	9.5	10.0	10.2	9.3	9.3	9.3	9.8	11.6	na	9.6
Steel products*	7.7	9.1	9.1	10.3	12.0	14.9	15.5	13.6	11.9	na	na	6.1
Non-ferrous metals*	11.4	11.3	9.3	8.3	6.8	7.5	8.1	10.5	8.4	na	na	6.9
Automobiles*	4.1	13.7	12.4	12.1	12.5	14.4	17.6	20.9	22.6	na	na	3.2
Civilian ships*	-18.8	-22.3	-34.2	-27.3	-20.6	-11.2	-22.2	-21.7	-22.5	na	na	-29.3
Metal cutting tools*	36.0	30.9	11.2	3.1	-4.0	4.2	2.0	3.6	6.5	na	na	8.1
Fixed asset investment %yr 3mma	20.8	20.3	19.8	19.9	20.5	20.4	20.1	18.8	18.0	17.6	17.7	17.7
Manufacturing, of which	18.2	18.1	16.5	16.3	18.2	20.6	22.7	19.9	16.4	13.7	14.0	15.2
Heavy industry	19.4	19.3	15.8	14.9	16.8	19.5	22.2	18.4	15.6	12.0	12.8	13.6
Highways	24.1	24.5	22.8	23.9	25.5	25.2	22.3	20.6	20.2	21.1	19.3	20.1
Railways	20.1	20.5	19.0	23.3	27.3	29.9	23.6	20.5	15.2	19.7	18.9	23.5
Utilities	24.6	30.9	34.1	15.2	11.0	1.4	-6.4	-12.6	-0.3	11.3	19.3	16.0
Real estate, of which	14.0	9.8	13.3	20.4	23.1	21.1	16.6	19.1	25.3	21.0	15.5	11.4
Dwellings	18.9	15.7	13.0	13.2	12.8	13.6	15.6	19.4	18.8	21.2	19.3	21.1
Non-residential	21.2	20.1	20.7	20.0	17.9	18.9	16.8	19.8	19.8	21.2	20.3	17.6
Off-market urban construction	30.6	27.9	24.8	25.0	26.8	28.2	27.5	30.8	30.9	30.9	22.8	19.3
Value of new project starts	17.4	21.1	20.5	11.6	11.4	-1.8	2.1	29.5	59.4	61.3	28.1	1.9
Number of new project starts	14.6	16.3	27.1	18.4	14.5	4.1	13.6	8.8	15.0	27.4	50.1	45.7
Local government projects	9.3	8.8	17.5	15.5	6.7	1.0	6.2	16.0	9.2	7.0	6.0	7.6
Central government projects	21.6	20.9	20.5	20.2	21.0	21.0	20.9	18.6	17.7	17.2	18.1	18.1
State owned enterprise investment	9.6	11.6	8.5	15.3	13.0	11.7	8.1	21.9	23.7	23.4	12.4	11.5
	18.1	17.6	16.4	16.9	18.3	17.7	15.7	13.8	14.6	14.8	14.6	14.1

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	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14
%yr 3mma unless otherwise specified												
Volume of housing starts	3.0	-2.4	9.1	19.3	13.1	22.1	5.9	32.2	30.1	22.1	-6.6	-25.6
Volume of housing sales	38.8	31.7	26.5	17.2	11.1	15.1	15.0	16.6	9.2	5.2	0.2	-2.5
Value of housing sales – Nationwide	73.8	63.7	56.0	47.6	40.5	36.7	34.3	32.7	30.1	17.5	5.5	-5.9
Eastern provinces	87.7	74.6	64.1	53.3	44.5	39.7	36.8	34.8	31.9	16.5	1.8	-12.1
Central provinces	65.4	58.3	53.6	45.9	39.2	36.3	34.8	34.4	32.0	25.5	19.2	11.8
Western provinces	42.8	37.8	35.2	32.4	29.9	27.9	26.2	24.8	22.7	14.6	6.7	-0.3
Volume of land sales	1.4	-0.5	8.0	27.6	22.2	40.2	1.4	49.5	32.0	36.9	4.5	-1.3
70 city new house prices net % rising m-o-m	94.3	88.6	84.3	85.7	90.0	84.3	91.4	91.4	88.6	80.0	80.0	77.1
Auto sales	3.5	11.2	11.4	10.2	10.5	13.3	16.8	18.1	17.5	12.7	13.9	10.1
Excavator sales	-20.7	1.8	4.2	4.9	7.2	12.3	18.3	20.6	22.3	10.6	22.3	12.7
Bulldozer sales	-1.6	9.7	1.5	-1.4	1.0	3.8	-8.3	-17.0	-29.3	-6.4	9.7	16.3
Terrestrial freight	7.4	9.0	9.8	10.3	10.2	10.1	10.5	10.5	9.7	8.6	7.2	6.9
Aquatic freight	4.2	4.7	6.5	10.8	12.7	12.3	8.3	7.6	6.2	5.8	5.4	6.6
International air freight	-14.7	11.7	9.8	6.6	4.3	1.1	7.6	9.0	11.8	3.1	14.1	18.4
Manufacturing PMI – index – of which												
Output	50.8	50.1	50.3	51.0	51.1	51.4	51.4	51.0	50.5	50.2	50.3	50.4
New orders	53.3	52.0	52.4	52.6	52.9	54.4	54.5	53.9	53.0	52.6	52.7	52.5
New export orders	51.8	50.4	50.6	52.4	52.8	52.5	52.3	52.0	50.9	50.5	50.6	51.2
Order backlog	49.4	47.7	49.0	50.2	50.7	50.4	50.6	49.8	49.3	48.2	50.1	49.1
Raw material inventories	44.9	42.9	44.7	44.8	46.2	45.5	45.3	45.1	45.7	45.1	44.8	44.9
Finished goods inventories	47.6	47.4	47.6	48.0	48.5	48.6	47.8	47.6	47.8	47.4	47.8	48.1
Purchases of inputs	48.6	48.2	47.3	47.6	47.4	45.6	47.9	46.2	46.5	47.8	48.3	47.3
Imports	51.5	49.5	50.0	52.0	52.5	52.7	53.6	52.7	51.0	49.4	50.3	50.6
New orders to finished goods inventories ratio	50.3	47.9	48.4	50.0	50.4	50.0	50.5	49.0	48.2	46.5	49.1	48.6
	1.07	1.05	1.07	1.10	1.11	1.15	1.09	1.13	1.09	1.06	1.05	1.08

Source: Westpac Economics, CEIC.

Steel

- Average steel prices were lower in Q1 with rebar recording the largest decline of 5.1%qtr. Wire rod, cold-rolled sheet and hot-rolled sheet also recorded heavy declines, falling by 3.6%qtr, 3.0%qtr and 2.6%qtr, respectively. Steel prices averaged around RMB3400 for the quarter (RMB4200 for cold-rolled sheet).
- China’s steel production was a record 201 Mt in Q1, up 6.8%qtr and 4.9%yr. While some steel mills have closed recently amid tighter credit conditions, there remains surplus production capacity in China.
- CISA has announced that steel companies “... are no longer expanding capacity. They are putting emphasis on environmental protection”.

Figure 25: Benchmark steel prices

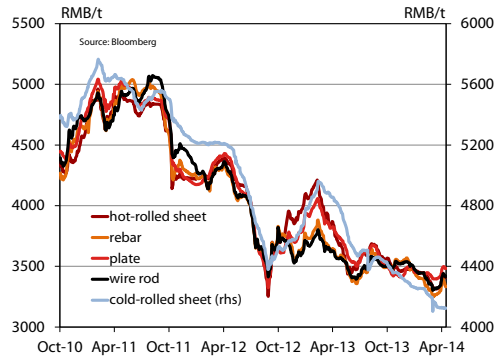


Figure 26: Crude steel output: level & growth

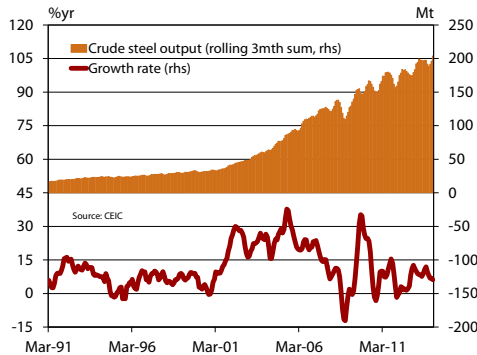


Figure 27: The rebar price and input costs

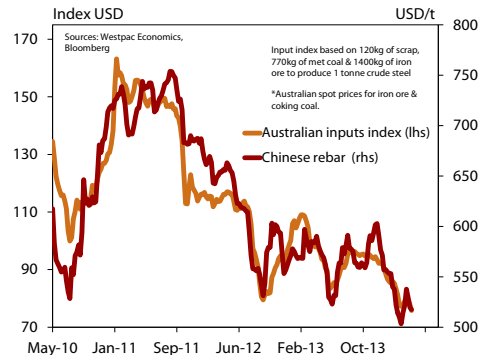


Table 3: Steel prices (quarterly averages).

Domestic RMB/t	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14
Rebar	4319	4240	4160	3676	3683	3749	3527	3507	3527	3348
Hot-rolled sheet	4268	4272	4255	3663	3849	4043	3623	3609	3489	3399
Cold-rolled sheet	5322	5214	5099	4599	4565	4865	4697	4460	4342	4214
Plate	4312	4273	4255	3655	3703	3934	3676	3599	3455	3433
Wire rod	4466	4257	4179	3686	3653	3697	3526	3509	3519	3394
Benchmarks USD/t										
Rebar benchmarker	575	561	551	485	495	503	476	474	477	454
HRC benchmarker	568	567	564	483	513	545	493	494	480	466
CRC benchmarker	703	689	670	601	612	647	629	613	611	597

Source: Bloomberg.

- The steel industry saw output growth outstrip sales from December to February, which drove stocks up to uncomfortable levels, especially in long products. Output slowed in March to be better aligned with sales growth, which has partially mitigated the inventory problem, but another few months of restraint will likely be required. In a sequential growth sense though, the worst is probably now past.
- Outside of the usual driver of construction investment (real estate plus infrastructure), which has decelerated in the year to date, a softening of auto and non-transport machinery sales has also hindered downstream demand.

Figure 28: Steel end-use by sector

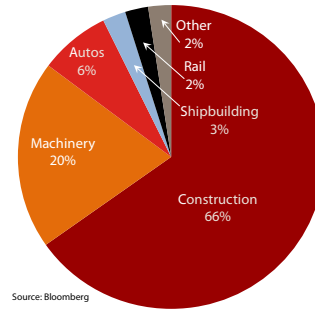


Figure 29: Steel inventories by product type

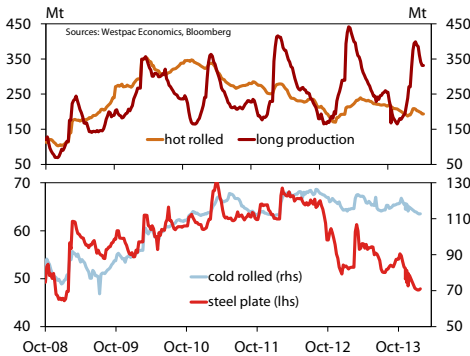


Figure 30: Steel inventory-to-sales scatter plot

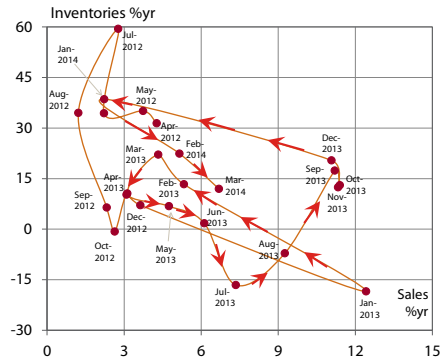


Figure 31: Steel demand per head

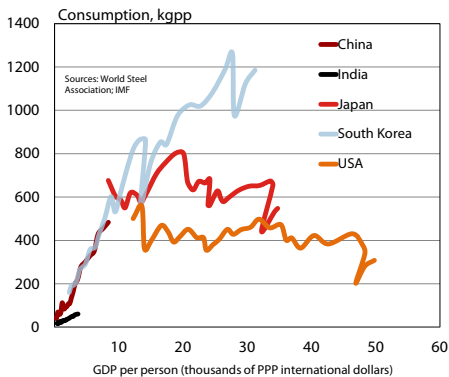
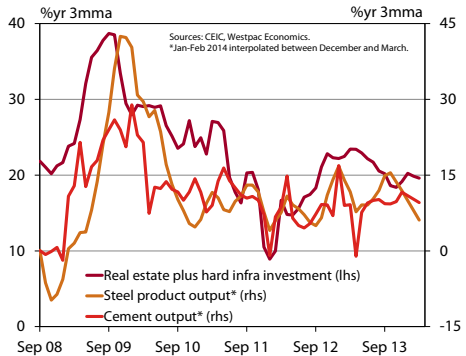


Figure 32: Construction, cement and steel



Iron ore

- The Steel Index (TSI) 62% spot iron ore price CFR Tianjin averaged US\$120 in Q1, down 10.7%qtr. Prices declined progressively over the quarter from around US\$135 at the start of January to a low of US\$105 in mid-March.
- A number of factors contributed to the decline in prices including high port inventories; weaker demand from mills given rising steel stocks; concerns about over-supply on the back of strong imports and concerns over the use of iron ore as collateral for loans.
- China’s banking regulator has directed banks to investigate the growing practice of using iron ore as collateral to ‘manage risks arising from commodities trade financing’.

Figure 33: Iron ore prices: spot and forward



Figure 34: Iron ore prices and rebar steel

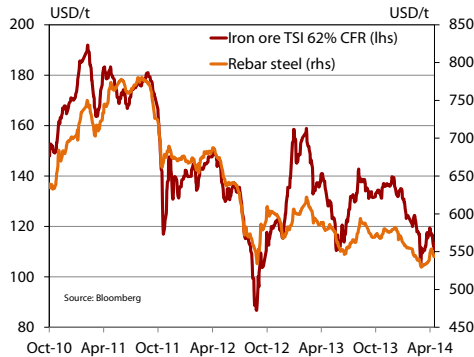


Figure 35: Port inventories versus end demand

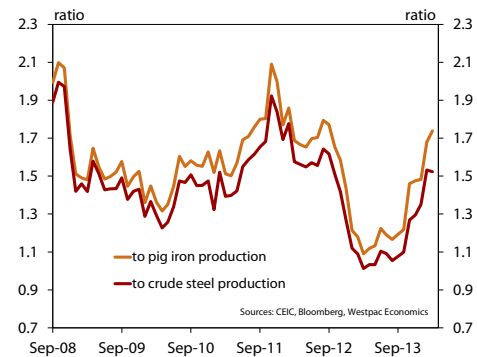


Table 4: Iron ore prices (USD/t, 62% ferrous metal content unless otherwise indicated).

TSI spot price, CFR	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14
Quarter average	140.8	141.8	139.4	112.1	120.6	148.2	125.8	132.6	134.9	120.4
Quarter end	138.5	147.6	134.0	104.2	144.9	137.3	116.5	131.4	134.2	116.8
Quarter high	171.3	147.7	149.4	135.5	144.9	158.9	141	142.8	139.7	135
Quarter low	116.9	134.3	129.9	86.7	104.2	132.9	110.4	116.9	131.2	104.7
TSI in CNY terms, CFR	895.2	894.9	882.0	712.3	752.9	922.4	774.3	812.0	821.4	734.5
IODEX Aust FOB	129.1	134.9	133.2	105.6	112.9	140.5	117.9	122.2	122.6	110.8
IODEX Brazil FOB	110.8	120.9	119.7	93.4	99.5	129.0	106.5	106.9	107.2	95.9

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

- Iron ore inventories increased from around 82 Mt in early January to 104 Mt by the end of March. China imported a record 222 Mt of iron ore in Q1, driven primarily by higher imports from Australia (up 4.7%qtr to 118 Mt). Imports from Brazil declined by 6.3%qtr to 42 Mt. In Q1 imports from Australia comprised 53% of China's total iron ore imports.
- The value of China's iron ore imports increased by 1.2%qtr to US\$28.4 billion (up 17.5%yr) as higher volumes more than offset lower prices.
- Australia exported 123 Mt of iron ore to China in Q1, up 32.6%yr (the difference compared with import volumes reflects transit time). Export values increased 36%yr to A\$15.2 billion.

Figure 36: Chinese import volumes by source

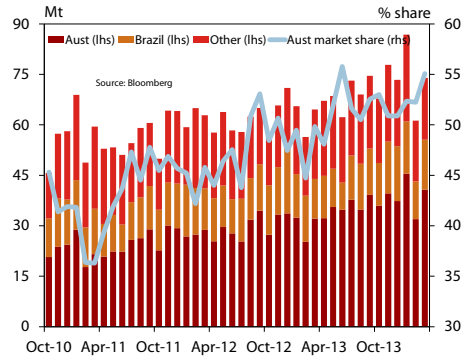


Figure 37: Australian iron ore exports to China

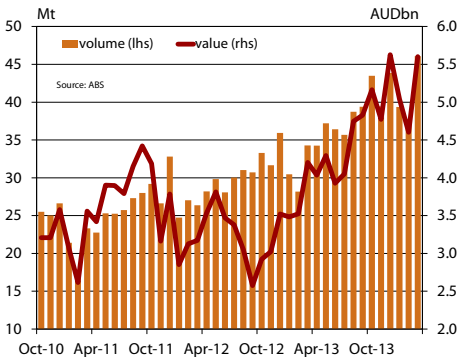


Figure 38: Chinese imports, unit values & prices

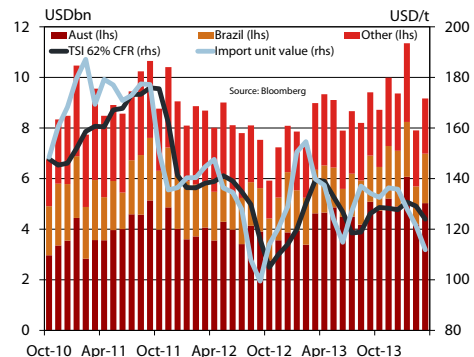


Figure 39: World trade in iron ore – seaborne

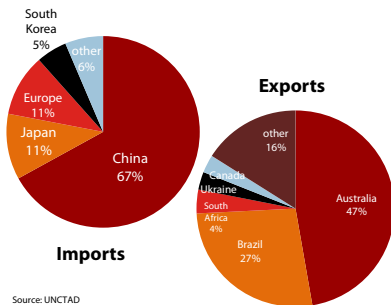
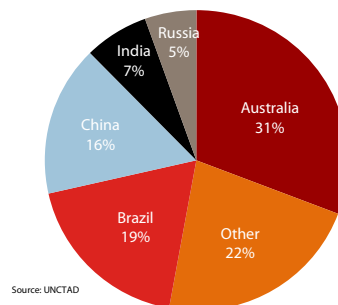


Figure 40: Shares of world iron ore output



- Despite the downturn in prices, Chinese interest in foreign iron ore assets remains strong. In May Baosteel partnered with Queensland based Aurizon to announce a \$1.4 billion takeover bid for Australian listed Aquila Resources, the developer of the 30 Mt capacity West Pilbara iron ore project.
- In March, the Metallurgical Mines Association of China also announced a target of supplying 50% of China's iron ore requirements from domestic sources. Given the high cost structures of many Chinese producers and reform efforts tilting the economy towards greater reliance on market mechanisms it remains uncertain as to how this target would be achieved in practice.

Figure 41: China's total ore supply

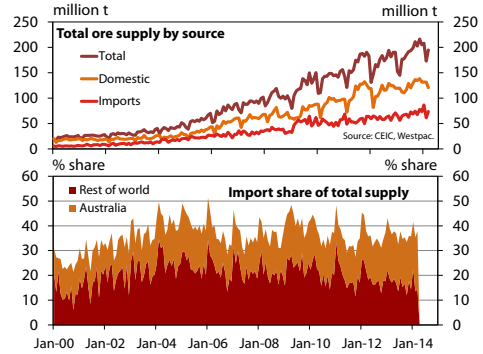


Figure 42: Chinese iron ore miners' margins

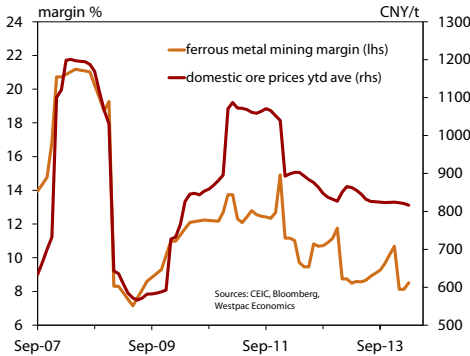


Figure 43: Chinese output, imports & stocks

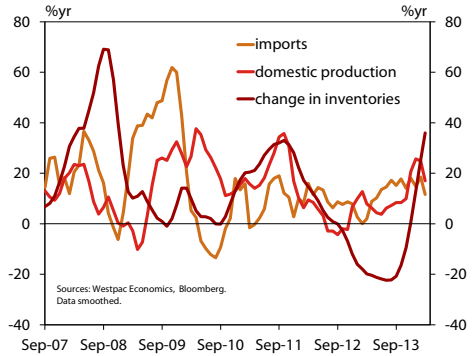


Figure 44: Chinese iron ore miners: loss-makers



Figure 45: Seaborne iron ore cost curve

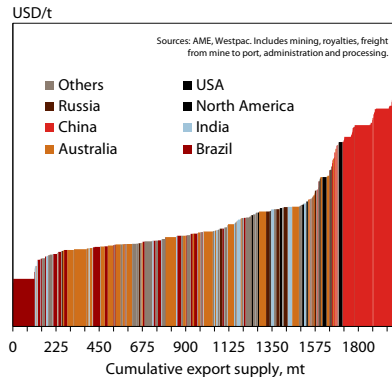


Table 5: Iron ore & metallurgical coal summary data

Iron ore	unit	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14
China imports	Mt	178.2	187.2	179.8	185.3	193.1	186.5	198.0	216.7	219.1	222.0
Australia	Mt	82.1	83.0	82.7	91.6	94.3	89.8	102.6	111.8	112.9	118.2
Brazil	Mt	38.1	41.6	35.4	38.8	48.8	38.4	32.1	40.5	44.4	41.6
value	USDbn	28.2	25.6	25.1	23.4	21.2	24.2	26.3	26.3	28.1	28.4
Raw production *	Mt	378.0	256.4	342.1	361.1	369.0	287.4	356.6	387.0	405.4	304.2
Iron ore stocks at ports, end of qtr	Mt	94.8	96.1	94.8	92.6	70.5	68.1	71.5	70.1	81.3	103.8
weeks of imports	weeks	6.9	6.7	6.9	6.5	4.8	4.8	4.7	4.2	4.8	6.1
Australian exports to China	Mt	88.6	78.1	86.1	91.8	100.9	92.9	107.9	113.8	126.8	123.2
value	AUDbn	11.1	9.2	10.8	9.0	9.5	11.2	12.3	13.6	15.6	15.2
Metallurgical coal											
China imports	Mt	14.3	12.2	15.4	8.9	17.0	17.2	18.1	19.4	20.7	13.0
value	USDm	2230	2022	2355	1220	2048	2431	2498	2414	2418	1634
Australian exports to China	Mt	5.4	6.9	4.8	3.6	13.0	9.1	9.8	12.4	14.0	9.9
value	AUDm	980	1092	751	441	1584	1284	1296	1547	1823	1333

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

Metallurgical coal

- Spot prices for metallurgical coal declined steadily during Q1. Prices for low volatility HCC started the quarter at around US\$148 and ended at around US\$121. Prices averaged US\$135 in Q1, down 14%qtr and 25%yr. This decline has brought metallurgical coal prices the closest to parity with spot prices for 62% iron ore since they started trading on spot markets.
- China imported 13 Mt of metallurgical coal in Q1, down 24.5%yr. This was underpinned by a large drop in imports from Canada (down 42%yr) and Mongolia (down 22%yr).
- Australia exported 9.9 Mt of metallurgical coal to China in Q1, up 9%yr. The value of these exports increased 4%yr to A\$1.3 billion.

Figure 46: Met coal spot prices

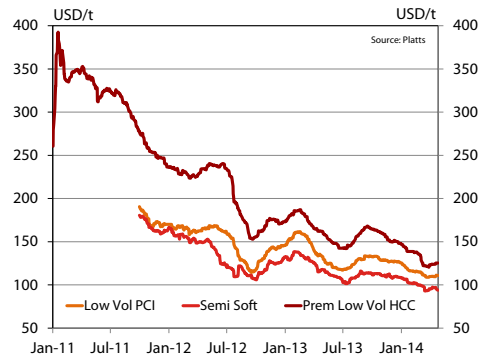


Figure 47: World trade in met coal

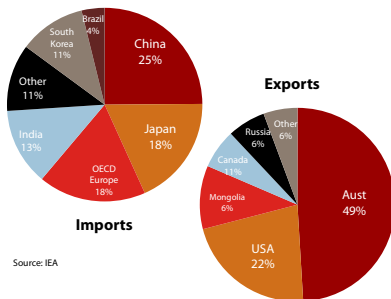


Figure 48: Met coal use and supply by country

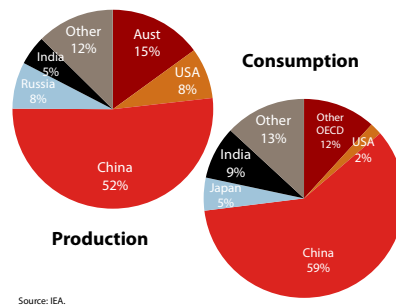


Table 6: Metallurgical coal prices (quarterly average spot prices).

	unit	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14
Prem Low Vol HCC CFR China	USD/t	255.1	230.1	236.3	188.0	169.0	179.7	155.0	154.7	156.3	135.0
Low Vol PCI CFR China	USD/t	174.7	165.3	164.9	135.2	136.3	154.9	127.2	125.9	129.0	115.9
Semi Soft CFR China	USD/t	167.4	156.4	141.3	114.6	120.4	132.6	114.5	109.1	110.9	101.1
Prem Low Vol HCC FOB Aust	USD/t	237.2	214.3	221.0	174.3	155.2	165.9	141.5	140.9	140.5	120.6
Prem Low Vol HCC FOB Aust	AUD/t	234.6	203.0	219.2	168.0	149.4	159.6	142.6	155.4	155.3	133.3

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

- China is the world's largest consumer and producer of metallurgical coal. Australia is a major global exporter of metallurgical coal, but there are a number of competing neighbouring suppliers to China.
- Lower metallurgical coal prices have reduced the profitability of a number of Chinese and Australian mines, which is starting to force some closures. During Q1 Glencore-Xstrata announced that it would cease underground production from its Ravensworth mine in New South Wales.
- Over the remainder of 2014, the outlook for metallurgical coal is expected to be subdued, with growth in China's steel production slowing and around 30 Mt of capacity expected to close.

Figure 49: Chinese met coal import volumes

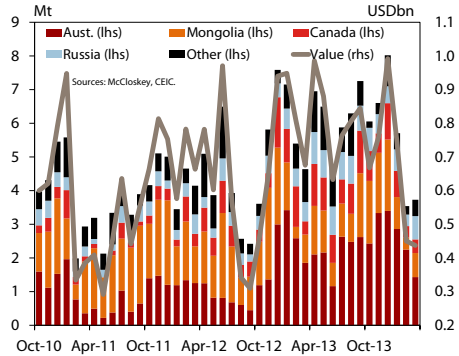


Figure 50: Aust met coal exports to China

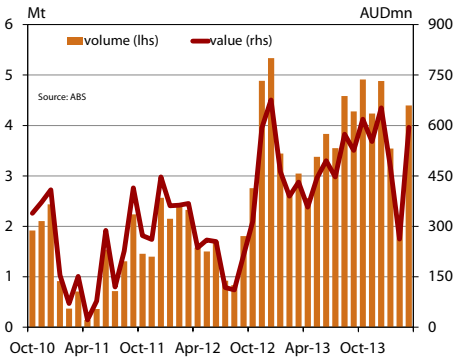


Figure 51: Queensland met coal exports – total

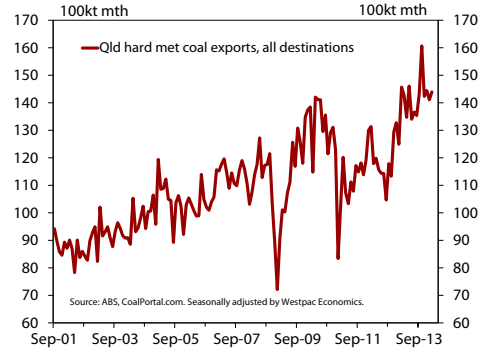


Figure 52: Seaborne met coal cost curve

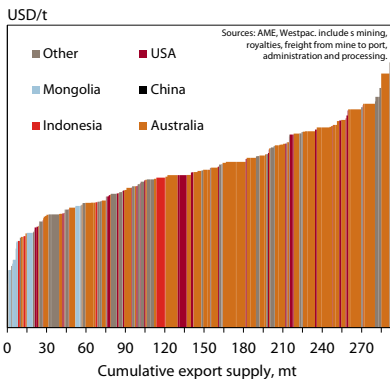
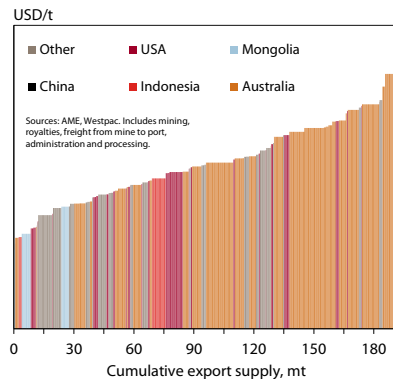


Figure 53: Seaborne hard coking coal cost curve



Developments in China's energy policy

- Premier Li Keqiang has declared a 'war on smog' and has outlined plans for improving environmental protection. Amendments to China's 1989 environmental protection law passed by the legislature in April will provide a legal backing to these efforts.
- At the first meeting of the new National Energy Administration in April, Li Keqiang outlined a number of measures to ensure energy security to support China's modernisation comprising increased exploration and development of oil and gas; promoting the development of unconventional oil and gas resources; improving energy efficiency; increasing the use of clean energy including nuclear; promoting the use of electric vehicles and the modification of existing coal-fired plants.
- The Central Government has allocated a fund of 10 billion Yuan (around US\$1.7 billion) to combat air pollution in key regions. The Beijing Government has also announced plans to allocate 20 million Yuan (around US\$3.3 million) towards weather modification in a bid to reduce smog pollution.
- State Grid is upgrading the electricity system as part of the effort to reduce pollution. As at January, five ultra-high voltage transmission lines had been completed, two were awaiting approval and a further six were in early planning stages. Ultra-high voltage transmission lines will reduce transmission losses and allow for increased utilisation of renewable energy sources. State Grid estimates that ultra-high voltage transmission will reduce smog haze by 23–25% between 2012 and 2020.
- In a poll undertaken by the Guangzhou Opinion Research Center, 54% of respondents from Beijing, Shanghai and Guangzhou indicated that the public was more willing to help in the effort to reduce air pollution. However, only 49% had taken any action to this effect. The lack of action was attributed to insufficient channels and lack of knowledge.
- The Government has pledged to implement phase 4 of its diesel standard, which will limit the sulphur content of fuel to less than 50 micrograms per gram by the end of 2014.
- In March, the Ministry of Finance announced that subsidies for new energy vehicles will continue to be offered, but will be reduced by 5% and 10% in 2014 and 2015, respectively. China produced around 17 500 new energy vehicles in 2013, almost 40% higher than 2012.
- The NDRC announced plans for gas market price reform in March, which will increase the city-gate price for non-residential users from late 2014. There are plans to introduce tiered pricing in the residential sector by the end of 2015 so that large users pay progressively more for gas.
- The Central Government will promote mixed-ownership of energy resources to increase the participation of non-state-owned companies in the gas market. Accordingly, they have announced plans to allow third-party access to pipeline, LNG and storage infrastructure.
- In Q1, China's electricity generation increased by 7.8%yr to 1.27 trillion kWh. Electricity consumption declined in early 2014 in line with a seasonal drop in economic activity over the Lunar New Year period. However, year on year, Q1 consumption was 5.4% higher.
- Construction of a power grid between Tibet and Sichuan commenced in late March. The new grid will include more than 1500 kilometres of lines and four substations. The project will be difficult to construct because of harsh terrain, but upon completion it will relieve electricity shortage problems in Tibet. The project is scheduled to be completed in 2015 and will cost around 6.6 billion Yuan (around US\$1.1 billion).

Figure 54: World energy consumption

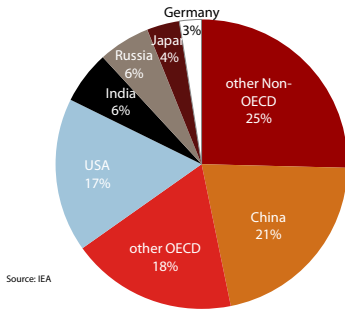


Figure 55: World energy production

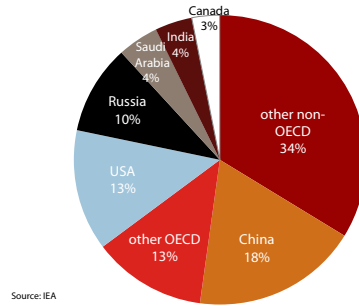


Figure 56: Chinese electricity output by source

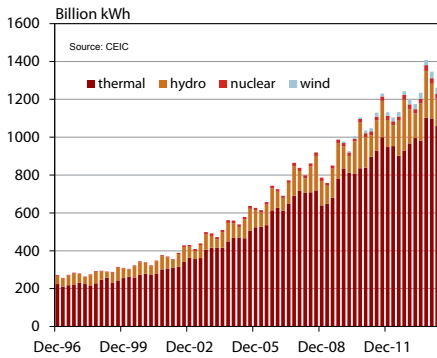


Figure 57: Chinese electricity use by sector

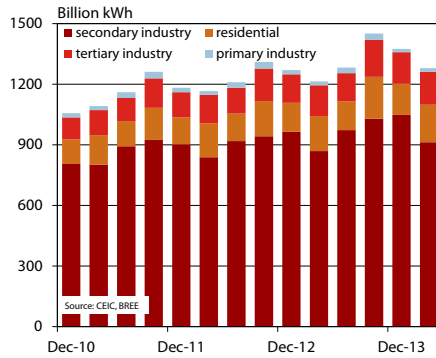


Figure 58: Chinese electricity growth: broad source

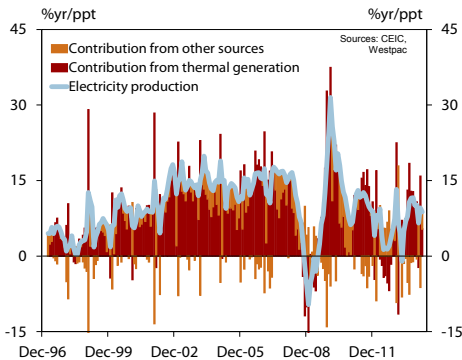
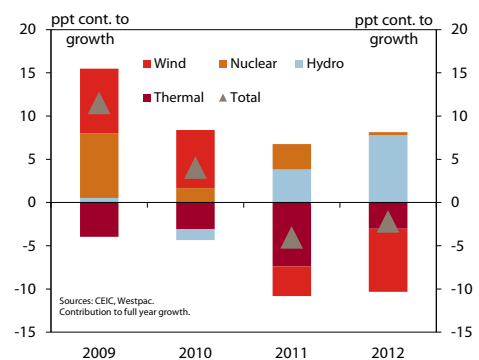


Figure 59: China's investment in new energy capacity



Thermal coal

- Key thermal coal FOB prices averaged lower in Q1 in response to increased supply and weaker demand in China and India. Newcastle spot prices declined 5.6%qtr, Richard’s Bay 5.3%qtr, Baltic 5%qtr and QHD 0.6%qtr.
- Shenhua, a major coal producer and price setter in China, reduced its offer price to domestic utilities multiple times during Q1. This made domestic coal more competitive against imported coal.
- At lower prices the margins of many Chinese producers have been squeezed, forcing some smaller-scale producers to close. Producers in Inner Mongolia have been particularly hard hit because of high relative transportation costs.

Figure 60: Thermal coal prices

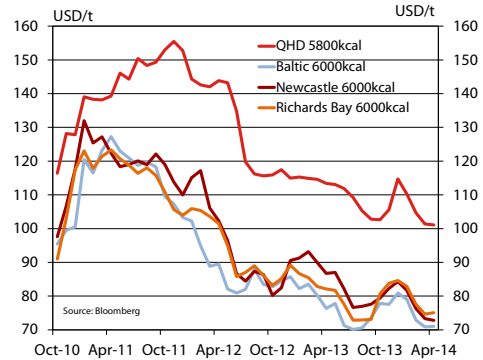


Figure 61: Thermal coal stocks: ports & generators

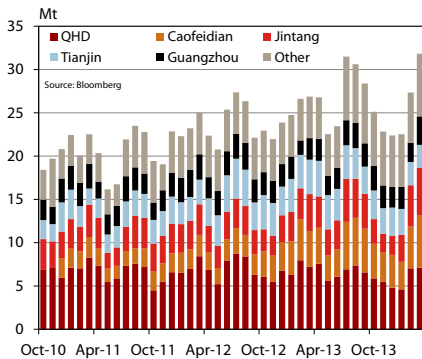


Figure 62: Export thermal coal cost curve

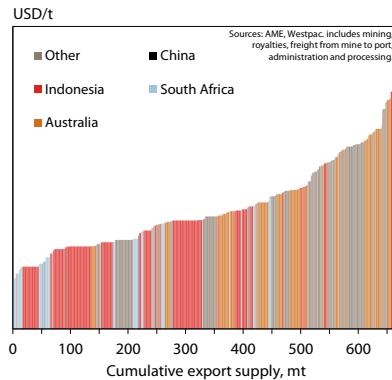


Table 7: Thermal coal prices (USD/t, NAR unless otherwise indicated).

Quarterly averages	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14
QHD 5800kcal	153.8	143.0	139.8	117.2	116.6	114.9	112.8	105.8	106.1	105.4
QHD 5800kcal RMB/t	977.6	901.6	885.5	744.6	728.6	715.2	694.4	647.8	646.8	643.1
Newcastle 6000kcal	113.9	112.3	94.5	86.1	84.3	91.3	85.4	77.1	82.0	77.4
Newcastle 6000kcal AUD/t	112.0	106.4	93.5	82.7	81.2	88.0	86.7	84.3	88.6	86.5
Richards Bay 6000kcal	106.6	104.8	93.5	87.5	85.8	84.8	80.5	73.0	83.1	78.7
Baltic 6000kcal	106.7	95.3	83.7	84.4	84.4	82.0	75.5	71.4	78.2	74.3

Sources: Bloomberg. NAR stands for net as received.

- Relatively low domestic prices and rising stockpiles reduced the incentive to import in Q1. Stocks held by major ports and generators increased by 22.7%qtr, supported by large increases at Caofeidian (52%qtr), Jintang (33%qtr) and Guangzhou (32%qtr).
- Despite more competitive domestic coal, China's imports (including lignite) increased 13.1%yr in Q1 to 71 Mt. Imports from Australia were up 19.7%yr. Imports from Indonesia were also higher (8.1%yr), reaching 36 Mt.
- Australia's exports to China were up 44%yr to 11.4 Mt in Q1. Export values increased 55%yr to A\$668 million supported by higher volumes.

Figure 63: Thermal coal imports

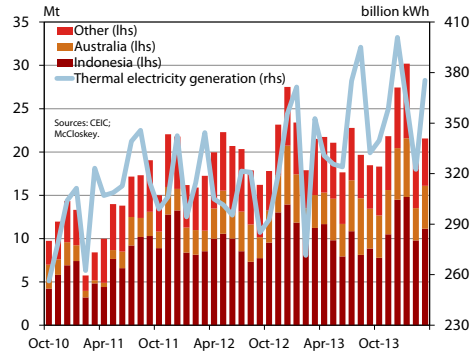


Figure 64: Aust thermal coal exports to China

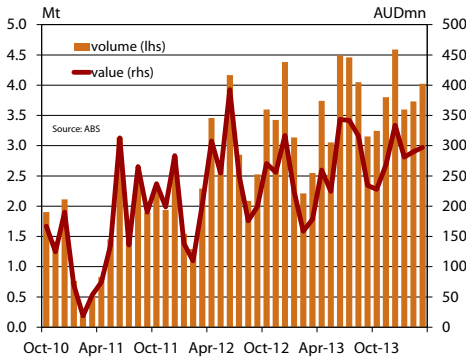


Figure 65: Capex: coal mining vs power generation

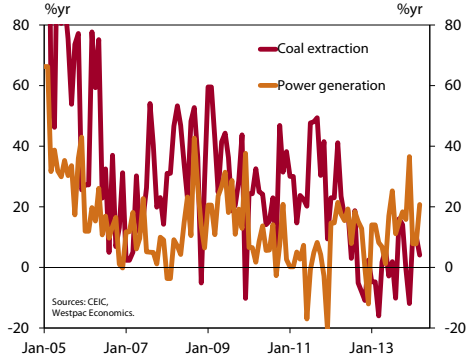


Figure 66: Thermal coal use and supply by country

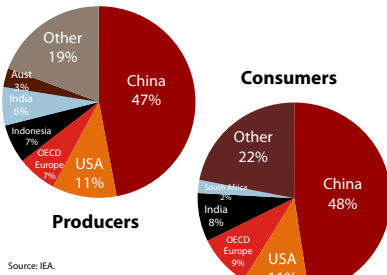


Figure 67: World trade in thermal coal

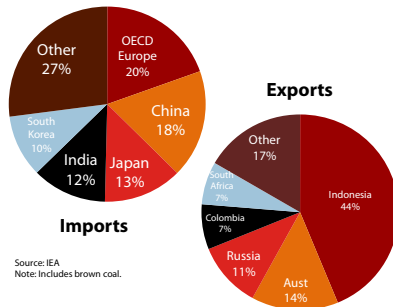


Table 8: Thermal coal summary data

	unit	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14
China imports	Mt	58.8	49.3	62.9	54.4	68.5	62.8	60.5	60.9	67.6	71.0
Indonesia	Mt	34.9	25.1	30.5	23.6	36.5	33.1	29.4	27.8	32.8	35.7
Australia	Mt	7.6	8.1	11.4	11.3	14.8	12.9	12.2	17.0	15.9	15.4
	value USDmn	4829	4940	5969	4885	5291	4846	4679	4647	4973	5145
End of quarter stocks at ports	Mt	22.3	22.4	27.4	22.9	24.7	26.8	31.5	25.1	22.4	27.5
	weeks of imports	4.9	5.9	5.6	5.5	4.7	5.5	6.8	5.4	4.3	5.0
Australian exports to China	Mt	7.1	5.1	10.3	7.5	11.4	7.9	11.3	11.7	11.6	11.4
	value AUDmn	719.9	451.7	955.0	625.9	843.3	561.7	827.6	892.2	830.4	868.1

Source: ABS, Bloomberg, McCloskey.

Oil

- Despite support from supply disruptions and geopolitical tensions between Russia and Ukraine, global oil prices generally averaged lower in Q1 because of increased supply from non-OPEC producers, weaker economic activity in China and lower refinery demand.
- In response to global price movements, China's benchmark retail diesel and gasoline prices were adjusted four times in Q1. Prices ended the quarter 2% lower than the end of 2013Q4.
- State-owned Sinopec announced it will reduce its capital expenditure by 4% to around RMB162 billion (US\$26 billion) in 2014, because of greater competition from the US and growing environmental concerns.

Figure 68: Oil prices

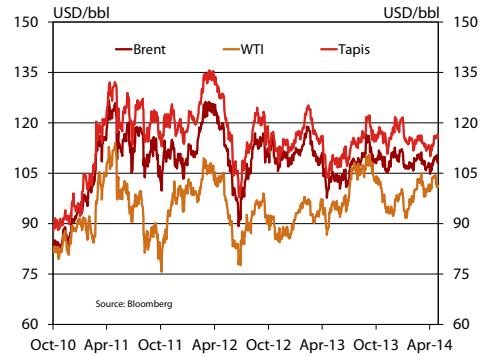


Figure 69: Oil use by sector: China & the World

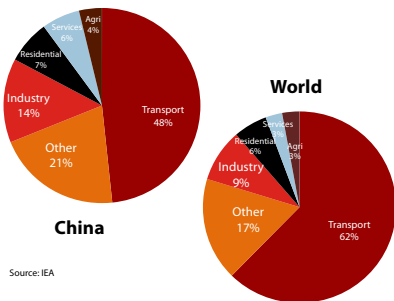


Figure 70: Oil use and supply by country

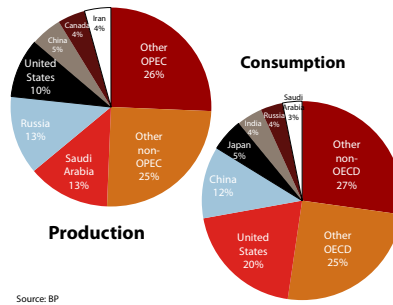


Table 9: Crude oil spot prices (USD/bbl, quarterly).

	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14
Brent										
Quarter average	109.0	118.4	108.8	109.4	110.1	112.6	103.3	109.7	109.4	107.9
Quarter end	107.4	122.9	97.8	112.4	111.1	110.0	102.2	108.4	110.8	107.8
Quarter high	115.0	126.2	125.4	116.9	115.8	118.9	111.1	116.6	112.6	111.2
Quarter low	99.8	109.8	89.2	97.3	105.7	107.5	97.7	103.0	103.5	105.8
Tapis										
Quarter average	118.9	128.0	117.2	115.9	113.3	118.3	108.9	115.9	117.2	114.3
Quarter end	117.5	133.0	101.1	119.0	114.1	116.0	109.7	114.5	120.7	113.2
Quarter high	125.5	135.6	133.7	124.5	117.3	125.2	116.1	122.2	121.7	118.6
Quarter low	113.0	119.5	97.9	103.1	108.1	113.7	103.8	109.1	110.8	111.7
West Texas intermediate										
Quarter average	94.0	103.0	93.3	92.2	88.2	94.3	94.1	105.8	97.6	98.7
Quarter end	98.8	103.0	85.0	92.2	91.8	97.2	96.6	102.3	98.4	101.6
Quarter high	102.6	109.5	106.2	99.0	92.5	97.9	98.4	110.5	104.1	104.9
Quarter low	75.7	96.4	77.7	83.8	84.4	90.1	86.7	98.0	92.3	91.7

Source: Bloomberg.

- China's oil imports increased by 8.3%yr in Q1 following the signing of long-term contracts for inputs to two new refineries commissioned in January. These refineries have a combined capacity of 400 000 bpd.
- In March, China became a net exporter of petroleum products for the first time in over four years. China has been investing in developing new oil refining and processing capacity, while consumption growth has been waning as economic activity slows.
- China's imports of crude oil from Australia increased 37%yr to 731 kt in Q1. Earnings increased 33%yr to US\$600 million.

Figure 71: Chinese oil import volumes

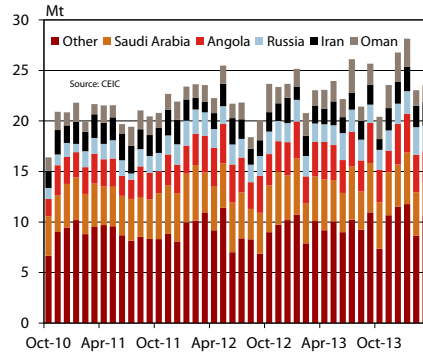


Figure 72: Chinese imports of Australian oil

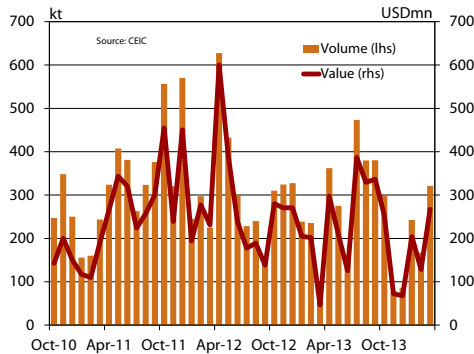


Figure 73: World trade in oil

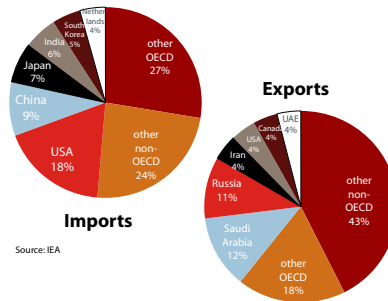


Figure 74: Automobile penetration

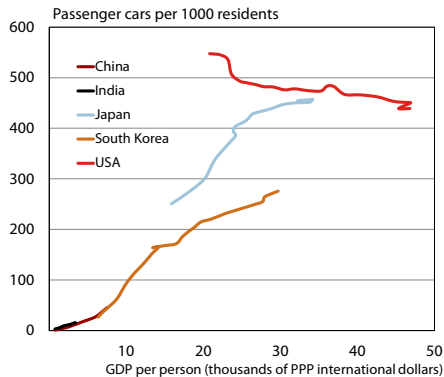


Figure 75: Oil demand per capita

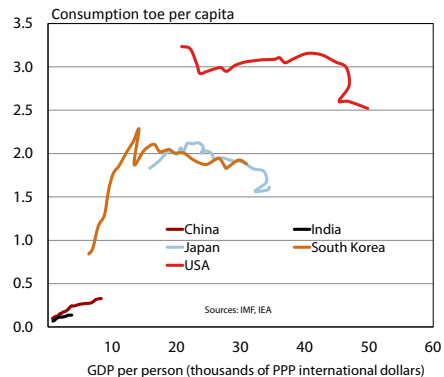


Table 10: Oil and gas summary data

	unit	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14
Oil											
China imports	Mt	65.4	70.6	69.5	60.3	70.7	69.0	69.2	73.2	70.8	74.7
Saudi Arabia	Mt	14.1	14.3	13.7	11.6	14.3	14.0	13.0	13.9	13.0	12.7
Angola	Mt	8.1	9.5	11.5	9.8	9.4	9.7	10.4	10.5	9.4	10.7
Russia	Mt	5.7	7.2	5.6	5.5	6.1	6.0	6.4	6.1	6.0	7.5
Iran	Mt	7.5	4.3	6.4	5.1	6.2	5.0	5.5	5.5	5.4	6.9
Oman	Mt	4.8	4.3	4.7	4.8	5.8	5.6	5.7	6.8	7.4	6.0
other	Mt	25.2	31.1	27.6	23.5	28.9	28.7	28.2	30.4	29.5	31.0
China production											
Crude	Mt	50.1	51.0	50.8	52.0	53.2	17.7	52.3	51.4	53.2	51.3
Gasoline	Mt	21.0	21.5	21.1	22.6	24.1	8.3	24.0	24.0	25.4	26.6
Diesel	Mt	42.5	42.8	41.8	41.6	44.3	14.8	42.1	42.7	44.0	42.3
Chinese imports from Australia	kt	1447.2	767.5	1361.1	625.6	961.4	531.9	798.3	1233.7	461.8	730.9
value	USDm	1143.9	702.8	1229.5	505.0	821.7	452.6	630.8	1052.3	393.3	599.8
Gas											
China pipeline imports	Mt	3.0	3.5	3.7	3.9	4.6	4.5	4.9	5.2	5.4	4.9
China LNG imports	kt	3650	3260	3410	3800	4230	4180	4160	4560	5140	5629
Qatar	kt	1037.3	1021.2	1161.4	1525.6	1283.6	1932.7	1432.2	1618.3	1784.8	2570.0
Australia	kt	1038.5	778.8	907.6	903.6	971.8	842.3	974.2	833.9	906.2	842.5
Indonesia	kt	604.9	551.1	666.2	542.8	665.0	362.8	788.4	605.5	676.6	617.4
Malaysia	kt	359.0	405.5	426.4	443.8	576.8	648.4	645.3	679.0	685.0	842.9
other	kt	610.2	503.4	248.4	384.3	732.8	393.9	319.8	823.3	1087.4	756.2
China production	Bcm	27.3	33.2	25.0	24.8	28.7	9.9	26.9	26.4	30.2	32.3
Chinese imports from Australia	kt	1038.5	778.8	907.6	903.6	971.8	842.3	974.2	833.9	906.2	842.5
value	USDm	176.6	132.2	160.3	172.9	164.3	143.4	182.9	145.7	159.6	146.4

Source: CEIC.

Gas

- LNG unit values increased by 6%/yr in Q1, while pipeline unit values declined by 2%/yr.
- With regulated retail prices, state-owned PetroChina has been selling gas at a loss (an estimated 42 billion Yuan or US\$6.8 billion in 2013) because of the rising cost of imports. In March, the NDRC announced plans to increase the city-gate price for non-residential users from late 2014 and introduce tiered pricing for large residential users by the end of 2015.
- To promote participation of non-state-owned companies in the gas market, the Government has announced plans to allow third-party access to pipeline, LNG and storage infrastructure.

Figure 76: Gas unit values in China

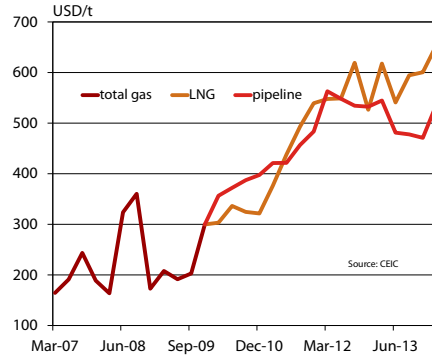


Figure 77: Gas use by sector: World

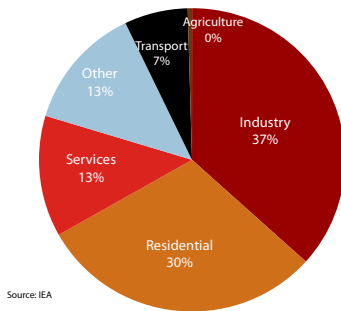


Figure 78: Gas use by sector: China

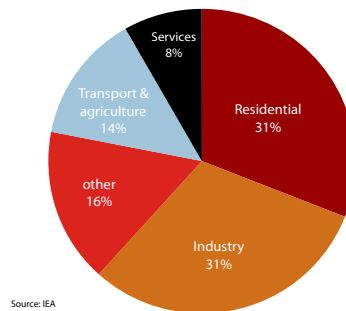


Figure 79: Gas demand per capita

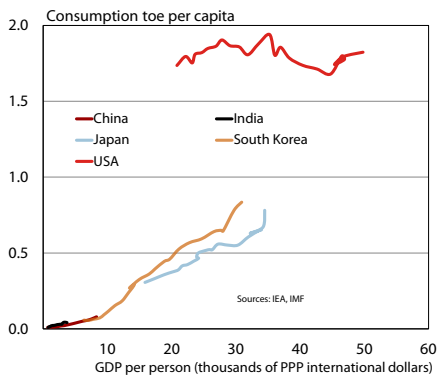
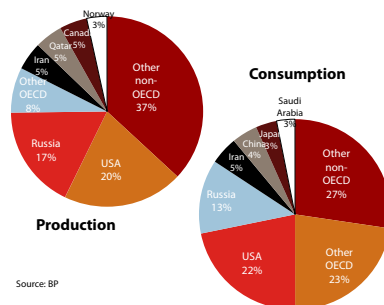


Figure 80: Gas use and supply by country



- In response to a rapid increase in consumption China has been seeking to secure gas supplies, largely through imports. It is anticipated that China will sign a 30-year gas supply deal with Russia when President Putin visits Beijing in May. Gazprom expects to supply up to 38 bcm of gas a year from late 2018 under the deal.
- China's LNG and pipeline gas imports increased by 35%yr and 8%yr, respectively in Q1. Growth in LNG imports was underpinned by a 70%yr increase in imports from Indonesia (617 kt) and a 33%yr increase from Qatar (2570 kt).
- LNG imports from Australia were steady year on year, totalling 842.5 kt in Q1. Values increased by 2%yr to US\$146 million.

Figure 81: China's gas imports by type

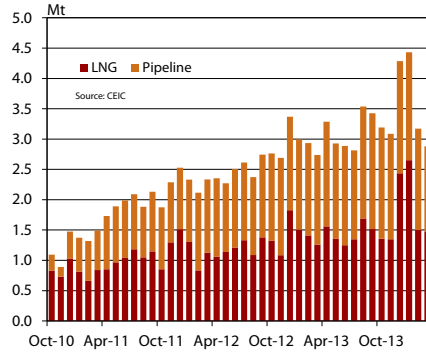


Figure 82: Chinese LNG imports by source

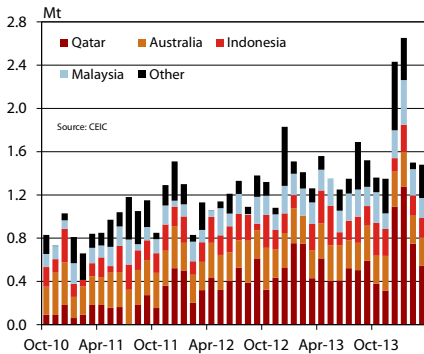


Figure 83: Chinese LNG imports from Australia

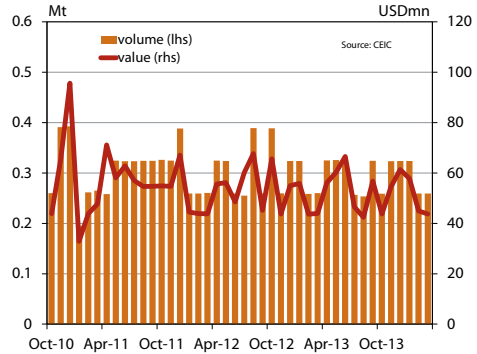


Figure 84: World gas exports by country

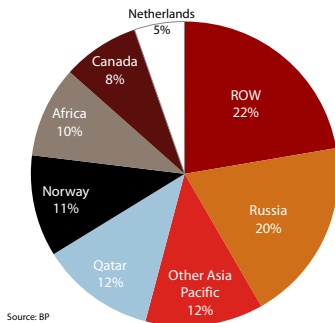
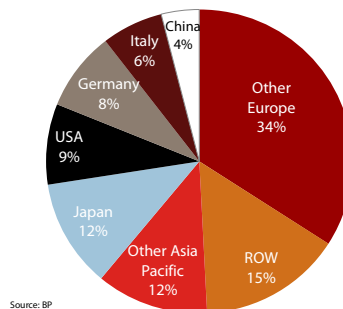


Figure 85: World gas imports by country



Uranium

Figure 86: Uranium prices

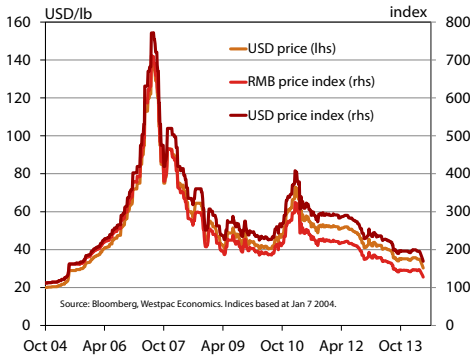


Figure 87: China's uranium imports

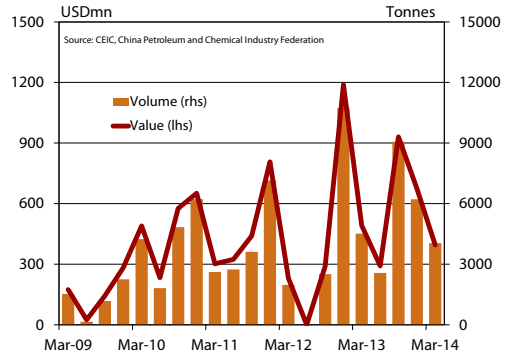


Figure 88: Global uranium output & reserves

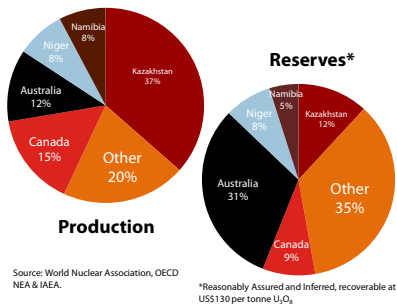


Figure 89: Uranium use by country

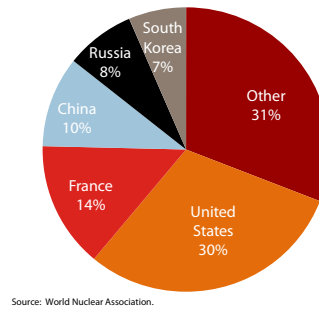


Table 11: Uranium summary data.

	Units	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14
Uranium spot price U ₃ O ₈	USD/lb	52	51	49	43	43	41	35	35	35
China nuclear power output	bn kWh	21	22	26	25	23	24	30	30	27
Investment in nuclear	RMBbn	17	15	20	26	12	14	15	20	11
China uranium imports	t	1978	0	2510	10734	4516	2567	9069	6216	4045
Value	USDm	231	0	290	1189	491	292	931	677	396

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

- In Q1 uranium prices remained low at around US\$35/lb, down 18%yr. Oversupply in the uranium market has pushed spot prices as low as US\$31 at the start of May 2014.
- China's investment in nuclear power development declined 12%yr to RMB10.7 billion in Q1. However, there is still 33 GWe of capacity already under construction and recent policy announcements indicate further expansion of nuclear power is likely.
- Nuclear power generation was up 16%yr to 27 billion kWh in Q1 following the commercial start-up of several new reactors.
- China's imports of uranium decreased around 10%yr in Q1 to around 4045 tonnes.

Figure 90: Chinese nuclear generation growth

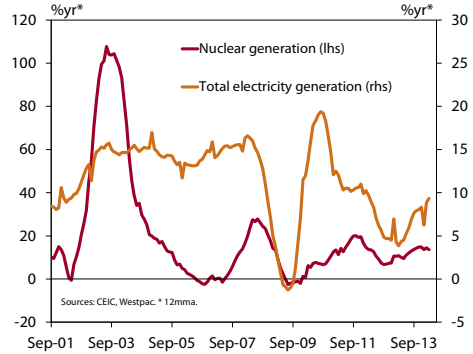


Figure 91: New capacity: planned & underway

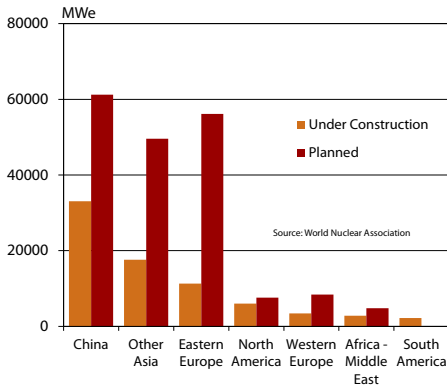


Figure 92: Chinese nuclear generation capacity

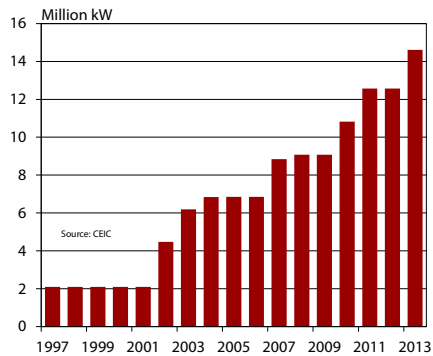


Figure 93: Uranium demand per capita

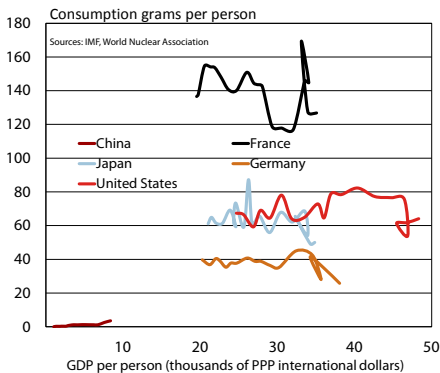
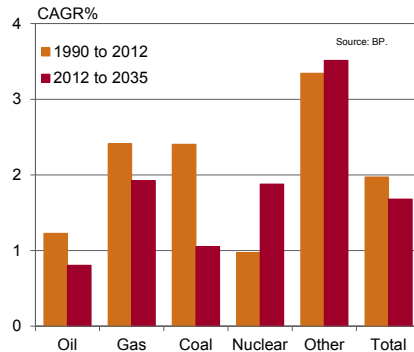


Figure 94: Growth in world energy by source



Gold

- Gold prices have recovered somewhat at the beginning of 2014, but they still remain far below their 2013 highs.
- In Q1 the average LBMA spot price increased 1.6%qtr to US\$1292. This is mainly attributable to safe haven purchasing to mitigate the risk of geopolitical tensions in the Ukraine. However, gold prices were down 21%yr from US\$1632 in 2013Q1 due to reduced ETF purchases and negative investor sentiment associated with the tapering of QE3 (the latest iteration of unconventional monetary policy by the US Federal Reserve).
- In Q1, China's gold price increased 2.0%qtr to average RMB256 a gram, in line with the LBMA spot price increase.
- In 2013 China overtook India to become the world's largest gold consumer. While India's gold consumption increased 13% to 975 t, China's total gold consumption surged 32% in 2013 to total 1066 t. Import curbs in India, installed to narrow the trade deficit, were partially responsible.
- The World Gold Council reports that in 2013 China's jewellery purchases increased 29% to 668 t while its bar and coin investment rose 38% to 397 t. These purchases appear to be highly price sensitive and purchases ramped up in the second half of the year in response to the declining prices.

Figure 95: Gold prices, London & Shanghai

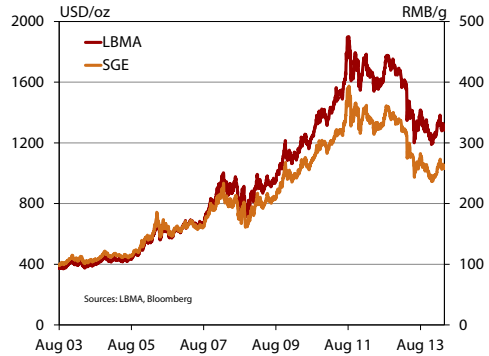


Figure 96: Chinese gold imports via Hong Kong

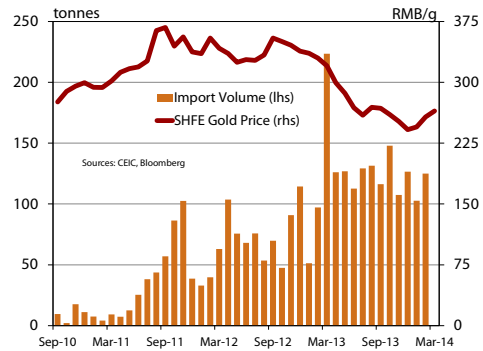


Table 12: Gold prices (USD/oz unless specified otherwise)

LBMA spot prices	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14
Quarter average	1683	1691	1612	1653	1718	1632	1417	1330	1272	1292
Quarter end	1564	1668	1597	1772	1675	1597	1235	1329	1206	1295
Quarter high	1795	1784	1678	1777	1790	1693	1600	1418	1353	1383
Quarter low	1546	1566	1540	1567	1648	1565	1201	1223	1189	1201
Shanghai avg RMB/g	346	345	329	338	345	329	286	265	251	256
Shanghai avg USD/g	54	55	52	53	55	53	46	43	41	42

Sources: LBMA, Bloomberg.

- With consumption demand growing in China, gold imports through Hong Kong increased 53%yr to total 227 t in the first two months of 2014. However, as reported by the World Gold Council, part of this inflow could be to support financing deals amid tighter credit conditions.
- The volume of Australia’s gold export volumes to China increased by 27%yr in Q1 to 47 t. This contributed to an 18%yr increase in the value of Australia’s gold exports.
- In 2012-13 Australia exported 124 t of gold to China (including Hong Kong). In the first three quarters of current financial year Australia has already exported 141 t of gold to China.

Figure 97: Australian gold exports to China

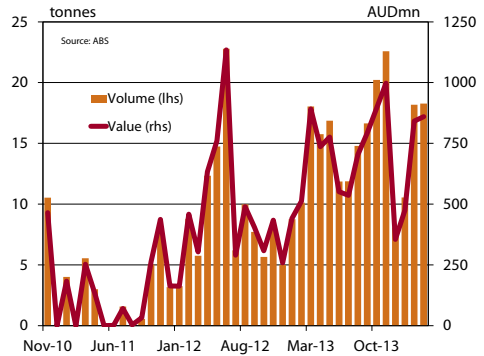


Figure 98: Gold exchange traded funds

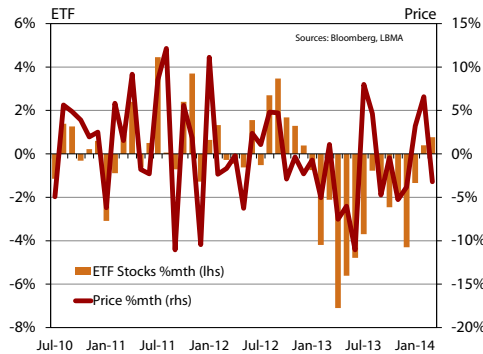


Figure 99: Gold output by country

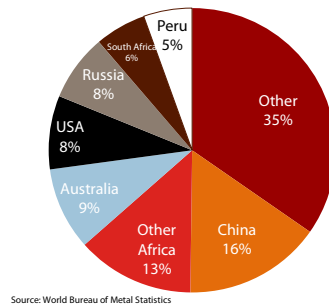


Figure 100: Gold fabrication cons. by country

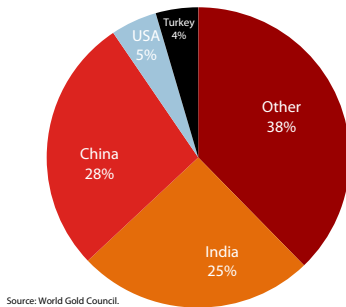


Figure 101: Gold end-use by sector

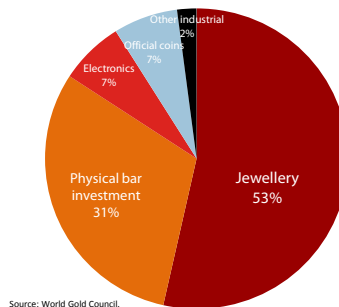


Table I3: Gold and silver summary data

	unit	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13	Sep-13	Dec-13	Ma4-14
Gold											
China imports (via Hong Kong)	t	258.5	135.5	247.3	199.1	252.6	371.9	365.7	377.0	381.9	na
Domestic production	t	32.1	29.6	31.7	43.2	40.1	39.1	41.0	44.0	39.6	na
Australian exports to China	t	16.4	17.8	49.9	23.9	18.9	36.9	44.5	43.3	50.9	47.0
value	USDmn	864.2	924.9	2529.0	1185.1	1000.8	1845.3	2064.1	2032.0	2254.3	2175.8
Silver											
China imports	t	129.3	93.7	111.4	110.3	99.7	83.6	85.5	99.9	78.1	67.8
Domestic production	t	3.7	3.2	3.2	3.3	3.8	na	na	na	na	na

Sources: CEIC, ABS.

Silver

Figure 102: Silver prices, London & Changjiang

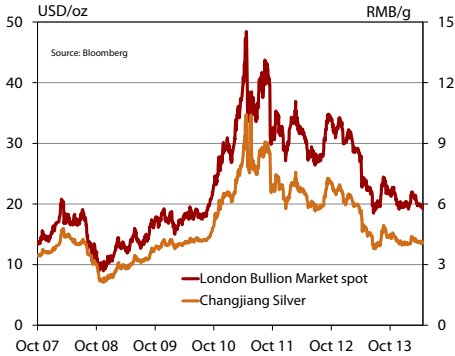


Figure 103: Silver output & fabrication demand

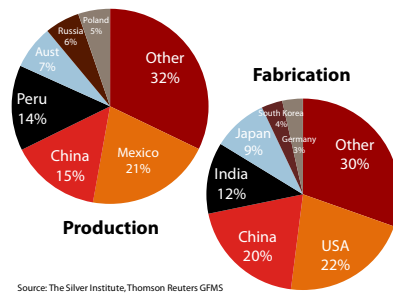


Figure 104: Chinese silver import volumes: annual

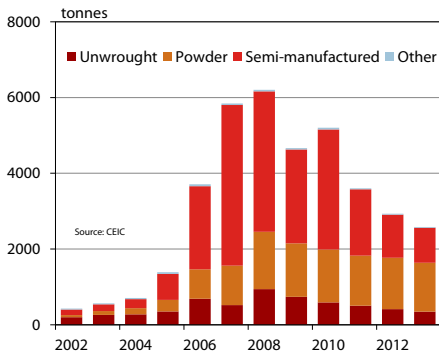


Figure 105: Silver end-use by sector

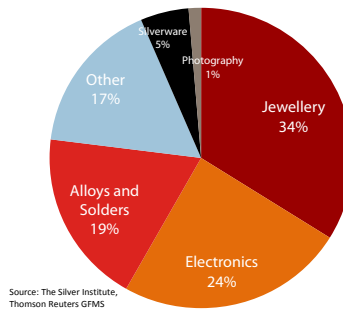


Table 14: Silver prices (USD/oz unless specified otherwise)

LBMA spot prices	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14
Quarter average	31.8	32.7	29.5	29.9	32.6	30.1	23.2	21.5	20.8	20.5
Quarter end	27.8	32.3	27.5	34.5	30.3	28.5	19.7	21.7	19.5	19.8
Quarter high	35.3	36.9	33.0	34.8	35.0	32.3	28.0	24.5	22.8	22.0
Quarter low	27.1	27.9	26.4	26.8	29.9	28.4	18.5	18.9	19.1	19.2
Changjiang RMB/g	6.81	6.79	6.18	6.27	6.65	6.11	4.72	4.28	4.24	4.15
Changjiang USD/g	1.07	1.07	0.98	0.99	1.05	0.98	0.76	0.70	0.70	0.68

Source: LBMA, Bloomberg.

Copper

- China's is the world's largest consumer of copper, hence its slowdown has been a major contributor to the LME copper price decreasing 11.2%yr to average US\$7041 in Q1, despite LME inventories falling to 235.1 kt at the end of April 2014.
- China's SHFE copper price fell by 13%yr in Q1 to average RMB49 731. Slowing construction activity in China and a shift away from the use of copper as collateral in financing deals contributed to the drop in prices.
- China's refined copper production was 1585 kt in Q1, an increase of 6.8%yr. The ICSG remains reasonably constructive on China's refined copper production growth prospects.

Figure 106: Copper prices, London & Shanghai

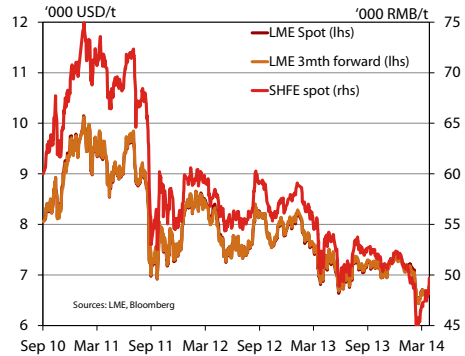


Figure 107: LME prices & inventories

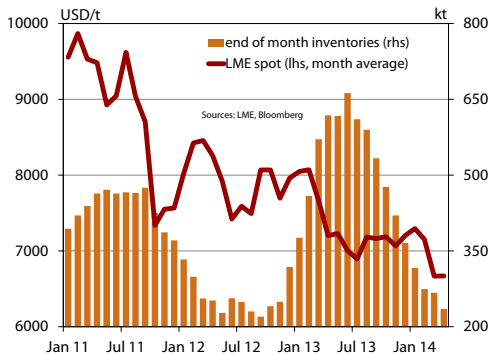


Figure 108: Copper use and supply by country

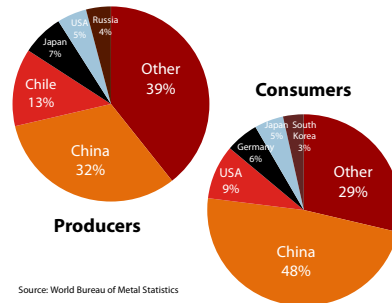


Table 15: Copper prices (USD/t unless specified otherwise)

LME spot prices	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14
Quarter average	7489	8310	7869	7706	7909	7931	7148	7073	7153	7041
Quarter end	7554	8480	7605	8268	7915	7583	6751	7291	7395	6636
Quarter high	8040	8658	8576	8401	8340	8243	7547	7341	7395	7440
Quarter low	6785	7471	7252	7327	7541	7539	6638	6719	6939	6435
3 Month forward	7511	8314	7829	7712	7921	7964	7180	7096	7161	7008
Shanghai avg RMB/t	56590	58931	56554	56518	56984	57189	52778	51690	51545	49731
Shanghai avg USD/t	8868	9292	8965	8922	8971	9161	8473	8438	8465	8164

Sources: LME, Bloomberg.

- China's imports of copper (total copper content) increased 35.4%yr in Q1, as buyers took advantage of low world prices.
- Imports from Chile increased 24.5%yr in Q1. The 8.2 magnitude earthquake in Chile on 1 April resulted in minimal disruption to its copper mines. Although some operations were evacuated, they were soon restarted and returned to normal production.
- A 12.4%yr increase in the volume of Australian exports of copper to China to 122 kt in Q1 contributed to a 17.3%yr increase in export earnings from the bilateral trade.

Figure 109: Chinese copper import volumes

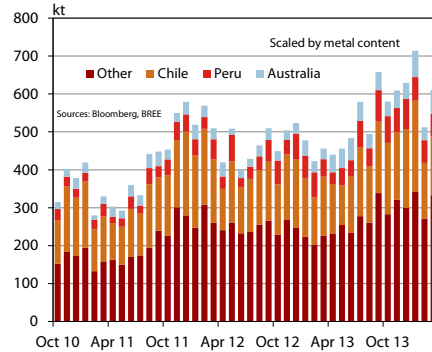


Figure 110: Australian copper exports to China

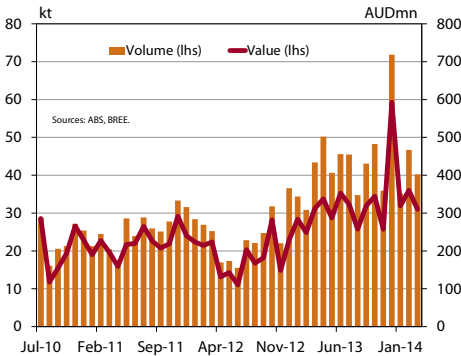


Figure 111: Copper end-use by sector

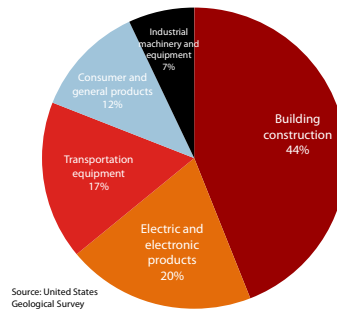


Figure 112: Copper demand per capita

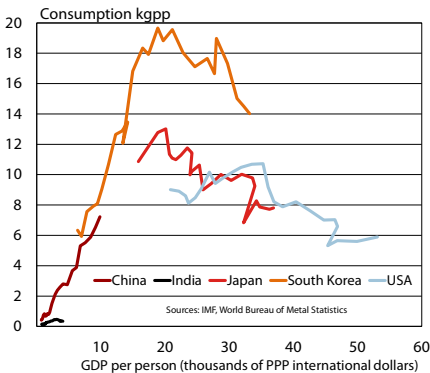


Figure 113: Copper output by Chinese province

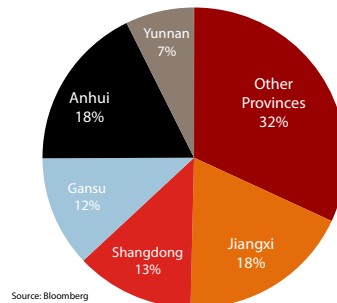


Table I6: Copper summary data

	unit	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14
China imports	kt	1582	1597	1327	1403	1477	1356	1380	1731	1819	1836
Australia	kt	82	97	75	80	78	97	157	135	128	165
Chile	kt	557	558	393	439	485	436	383	519	574	542
Peru	kt	136	127	125	127	169	171	120	200	213	182
other	kt	808	816	734	757	744	652	720	877	904	946
Refined production	kt	1331	1327	1417	1433	1562	1484	1693	1715	1909	1585
World stocks	kt	981	961	860	860	1061	1297	1319	1107	902	na
	weeks of stocks	2.5	2.4	2.2	2.2	2.8	3.4	3.3	2.7	2.1	na
Australian exports to China	kt	93	81	50	70	90	109	142	123	154	122
	value AUDm	751	661	385	554	660	844	991	888	1194	990

Sources: Bloomberg, World Metal Statistics.

Aluminium

- LME spot prices decreased 15%yr to average US\$1708 in Q1 as the market continued to be plagued by excess supply. After reaching US\$1768 in mid-January, LME spot prices fell to a four and a half year low of US\$1642 in February.
- Excess supply in China contributed to Shanghai prices falling 11%yr to average RMB13 168 in Q1. Shanghai prices fell below RMB13 000 in March. At this price a remarkable 90% of Chinese smelters are estimated to be unprofitable.
- China's aluminium production in Q1 increased 10%yr to 5.8 Mt in Q1 as output in the northwest continued to expand, underpinned by low energy costs. Production increased in Xinjiang by 76%yr and in Qinghai by 17%yr.

Figure 114: Aluminium prices, LME & Shanghai

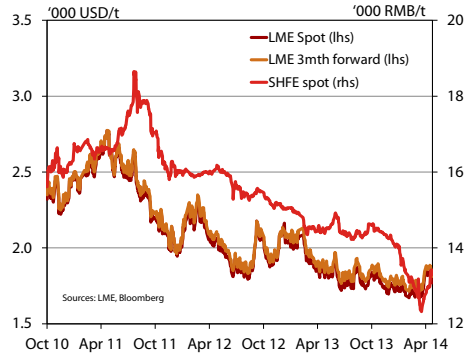


Figure 115: LME prices & inventories

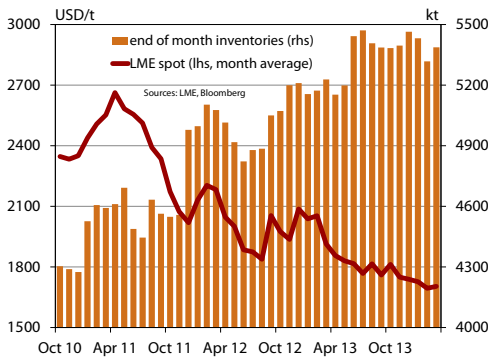


Figure 116: Aluminium use & supply by country

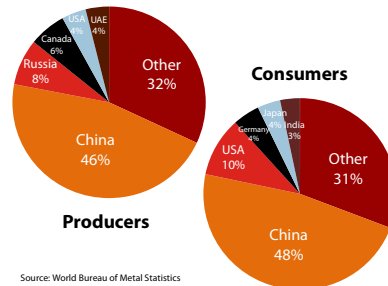


Table 17: Aluminium and Alumina prices (USD/t unless specified otherwise)

LME spot prices	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14
Quarter average	2090	2177	1978	1918	1997	2003	1835	1781	1769	1708
Quarter end	1971	2099	1835	2094	2040	1882	1731	1803	1765	1731
Quarter high	2234	2308	2091	2177	2164	2123	1939	1877	1849	1768
Quarter low	1945	2004	1811	1794	1874	1868	1720	1730	1695	1642
3 Month forward	2110	2216	2019	1945	2017	2042	1870	1827	1815	1752
Shanghai avg RMB/t	16244	15957	15946	15467	15161	14722	14551	14363	14353	13168
Shanghai avg	2545	2516	2528	2442	2387	2358	2336	2345	2357	2158
Aus FOB alumina	331	317	317	316	326	341	327	318	323	328
China Alumina RMB/t	2848	2651	2688	2581	2597	2571	2513	2500	2504	2438

Sources: LME, Bloomberg.

- High LME prices over the 12 months ending March 2014 contributed to China's aluminium imports declining by 18% over the same period. This trend reversed during Q1, with Chinese unwrought aluminium imports increasing by 160%yr as relatively higher domestic prices encouraged a flurry of imports.
- China's aluminium imports from Australia totalled 48 kt in Q1 (230%yr increase), overtaking Russia as the largest supplier of imports with 30 kt (64%yr increase). Import volumes from India totalled 19 kt during Q1.
- Australia's export volumes increased 240%yr to total 34 kt, with export earnings increasing 220%yr to \$73 million.

Figure 117: Chinese aluminium import volumes

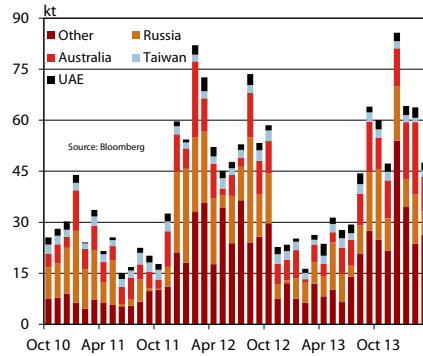


Figure 118: Australian aluminium exports to China

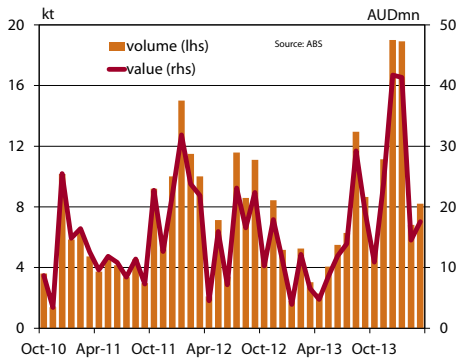


Figure 119: Aluminium end-use by sector

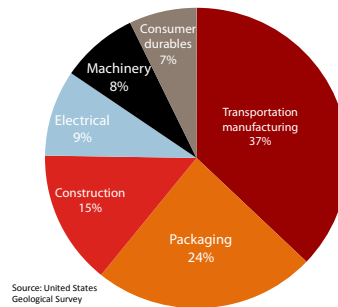


Figure 120: Aluminium demand per head

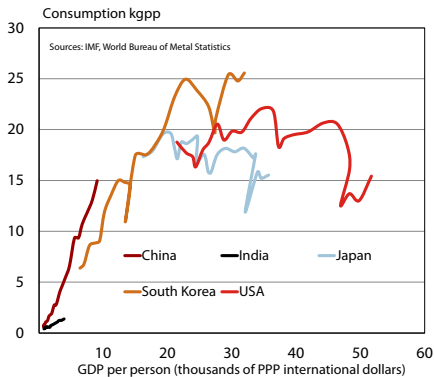
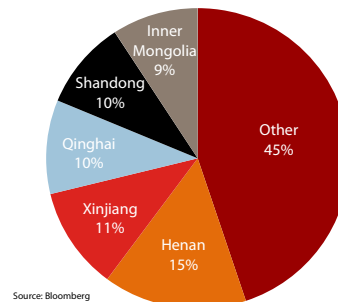


Figure 121: Aluminium output by province



Alumina

- Alumina prices (FOB Australia) were affected by ongoing oversupply in Q1, contributing to a 4.1%yr decline in prices to an average of US\$328.
- Chinese alumina prices decreased by 5%yr to average RMB2438. Aluminium production curtailments and increased alumina supply from new projects in Shandong and Henan underpinned the price fall.
- Cheaper import prices encouraged an increase in alumina imports into China in Q1. Total imports increased by 43%yr to 1.5 Mt in Q1. Australia's imports into China increased by 15%yr. Australia's share of total imports dropped to 80% in Q1, with India the next largest contributor, for a 6% share.

Figure 122: Alumina prices

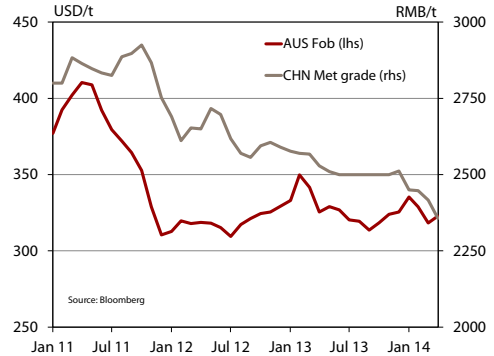


Figure 123: World alumina trade

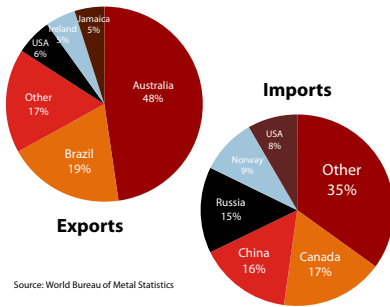


Figure 124: China's alumina imports

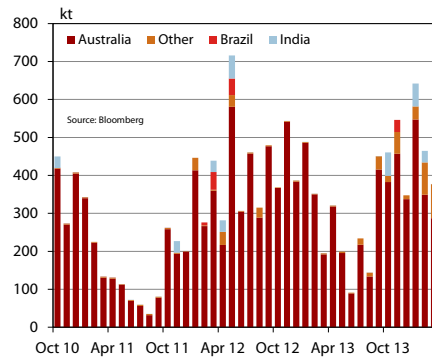


Figure 125: World alumina output

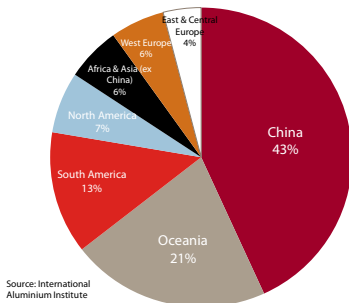
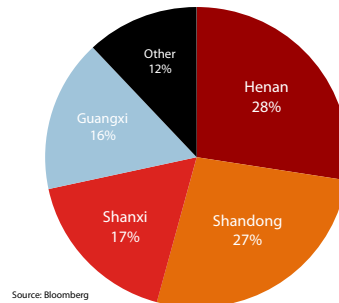


Figure 126: China's alumina output by province



Bauxite

- China's bauxite imports decreased 7%yr to 13.1 Mt in Q1, with the resulting import value decreasing by 4.2%yr to total US\$694 million. The enactment of Indonesia's ban on ores and concentrates exports in January heavily influenced China's imports, resulting in ore stockpiling prior to the ban and a sharp decline post the deadline. As a result, China's total bauxite imports volumes decreased by 26%qtr, with import values decreasing 27%qtr.
- Imports from Indonesia decreased by 29%qtr, as the export ban took effect, to total 8.7 Mt in Q1. Imports volumes from Indonesia decreased 4.9%yr, with earnings decreasing by 1.3%yr. Indonesia was still the largest supplier of bauxite to China in Q1 due to increased imports in January prior to the ban.
- Imports from Australia decreased by 9%qtr to 3.1 Mt in Q1 as higher ore stockpiles in China reduced demand.
- China has a strategy to diversify its bauxite suppliers, with imports from the rest of the world accounting for just 10% of total imports in Q1. Outside of Indonesia and Australia, India was the largest contributor with 0.2 Mt.
- Australia's exports of bauxite to China decreased 9%yr to 2.5 Mt in Q1. However as a result of increased prices, export earnings increased 6.2%yr.

Figure 127: China's bauxite import by source

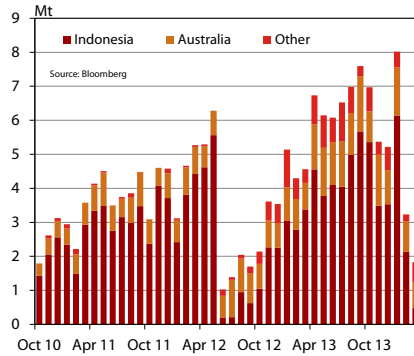


Figure 128: Australia's bauxite exports to China

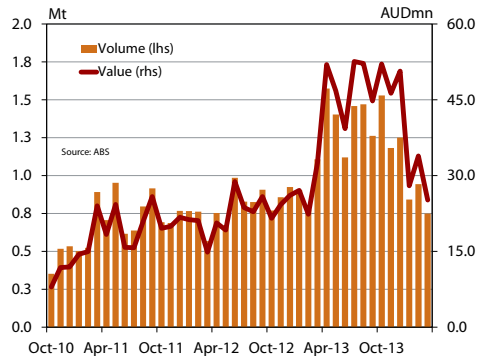


Figure 129: World bauxite output

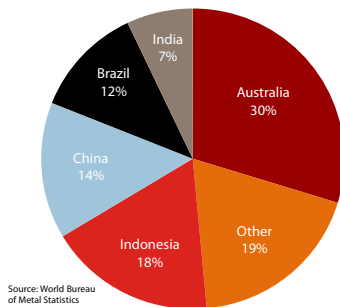


Figure 130: World bauxite trade

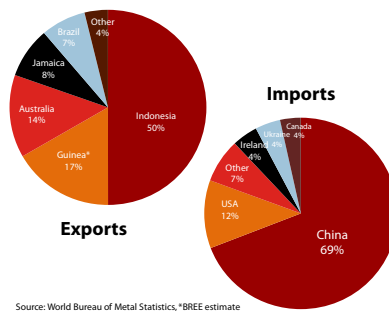


Table I8: Aluminium, alumina and bauxite summary data

	unit	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14
Aluminium											
China imports	kt	109.9	209.0	144.9	179.8	104.6	67.8	82.8	137.7	193.0	175.5
Australia	kt	24.0	38.2	18.3	25.5	21.6	14.5	14.3	31.7	31.5	48.0
India	kt	5.6	10.0	5.0	28.0	0.5	0.0	2.9	13.1	17.7	19.1
Russia	kt	30.0	70.5	36.9	53.3	19.6	18.1	28.1	28.9	46.1	29.6
other	kt	50.3	90.3	84.7	72.9	62.9	35.2	37.6	64.0	97.7	78.8
Refined production	kt	4586	4691	5002	5357	5217	5215	5365	5626	5839	5755
World stocks	kt	6999	7239	6839	7203	7361	7400	7439	7089	7171	na
	weeks of stocks	9.0	8.8	7.7	8.2	8.3	8.7	8.4	7.9	8.0	na
Australian exports to China	kt	25	36	13	31	19	10	12	28	35	34
	value AUDm	57	78	28	62	39	23	25	62	76	73
Alumina											
China imports	kt	689.3	1161.6	1303.8	1255.0	1298.7	1034.9	612.5	829.3	1354.4	1483.7
Australia	kt	651.5	1039.7	1102.4	1223.5	1291.8	1028.5	602.7	766.5	1177.0	1183.7
Chinese production	Mt	7.9	9.0	10.1	9.6	9.0	10.3	11.0	11.6	11.2	11.2
Bauxite											
China imports	Mt	12.3	13.1	12.6	5.1	9.3	14.0	19.0	21.1	17.6	13.1
Australia	Mt	2.0	2.3	2.0	3.0	2.3	2.7	4.0	4.2	3.4	3.1
Indonesia	Mt	10.2	10.6	10.4	1.8	5.6	9.2	12.4	14.7	12.4	8.7
Australian exports to China	Mt	2.1	2.1	2.4	2.6	2.6	2.8	4.1	4.2	4.0	2.5
	value AUDm	61.3	57.3	68.7	72.4	71.9	82.0	138.0	149.5	149.0	87.0

Source: Bloomberg, World Metal Statistics.

Nickel

- The onset of the Indonesia’s unprocessed minerals export ban in January supported a 5%qtr increase in the LME spot price, which averaged US\$14,643 in Q1. Prices progressively increased from a low of US\$13,365 in the week prior to the introduction of the ban to US\$16,225 at the end of March.
- Shanghai nickel prices decreased by 21%yr to average RMB96,380 in Q1 owing to surplus refined nickel supply in China. Shanghai prices remained steady quarter-on-quarter.
- In 2013, China was the largest producer of refined nickel, accounting for 36% of global production. This is more than the next top three producers combined.

Figure 131: Nickel prices, London & Shanghai

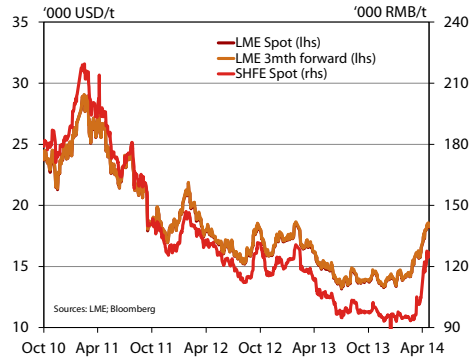


Figure 132: LME prices & inventories

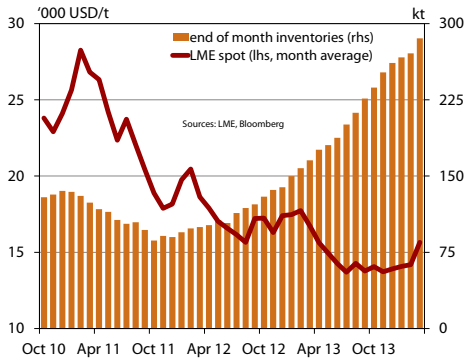


Figure 133: Nickel use and supply by country

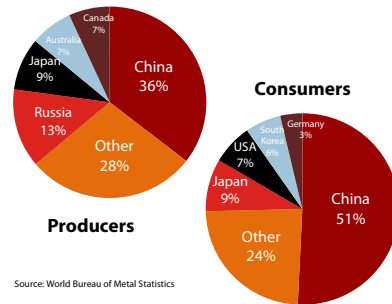


Table 19: Nickel prices (USD/t unless specified otherwise)

LME spot prices	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14
Quarter average	18303	19651	17146	16317	16967	17314	14963	13916	13909	14643
Quarter end	18280	17430	16475	18520	17085	16540	13680	13860	13970	15735
Quarter high	19825	21830	18400	18520	18840	18600	16390	14775	14635	16225
Quarter low	16935	17405	16025	15190	15850	16425	13560	13160	13270	13365
3 Month forward	18328	19721	17215	16381	17036	17387	15039	13996	13979	14693
Shanghai avg RMB/t	133408	138025	126669	118070	120920	121306	106053	98866	96850	96380
Shanghai avg USD/t	20904	21760	20080	18640	19038	19432	17026	16139	15905	15785

Sources: LME, Bloomberg.

- China's nickel imports declined by 26%yr to total US\$1.6 billion in Q1, as a result of the Indonesian export ban and higher nickel ore stockpiles in China.
- The value of Australia's imports into China decreased 61%yr to US\$67 million. Import values from Indonesia (US\$712 million) and Russia (US\$326 million), China's largest import suppliers, decreased by 25%yr and 28%yr respectively. Contrary to these results, import values from the Philippines increased by 2.3%yr to US\$171 million.
- Australia's nickel export values decreased by 16%yr in 2013. The fall in values is a combination of lower world nickel prices and a 3.3%yr decrease in export volumes.

Figure 135: Nickel output by province

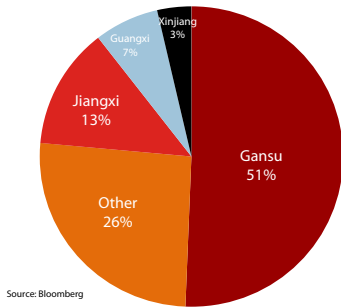


Figure 137: Nickel demand per capita

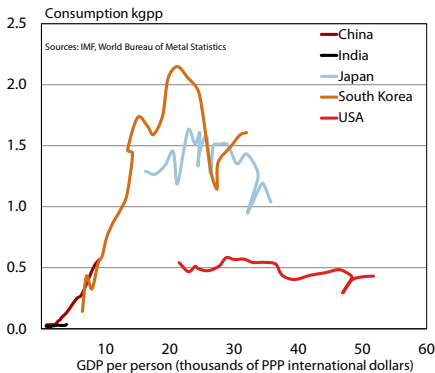


Figure 134: Chinese nickel import values

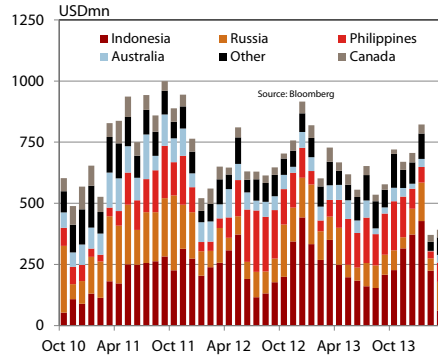


Figure 136: Nickel end-use by sector

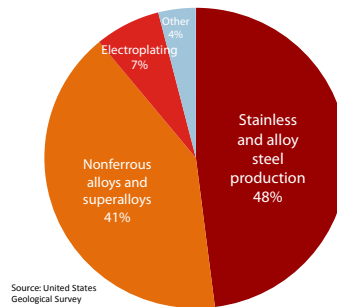


Figure 138: World trade in nickel

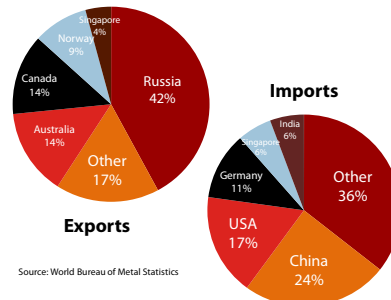


Table 20: Nickel summary data

	unit	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14
China imports	USDmn	2597	1731	2086	1890	2376	2149	1842	1766	2095	1585
	USDmn	265	221	252	158	147	172	189	119	112	67
Australia	USDmn	156	166	103	93	110	143	107	86	89	96
Canada	USDmn	676	309	196	290	514	456	257	270	233	326
Russia	USDmn	814	699	871	425	985	952	629	521	914	712
Indonesia	USDmn	439	114	445	673	411	168	442	482	448	171
Philippines	USDmn	248	221	220	252	209	258	217	287	299	212
other	USDmn	129	105	149	172	198	152	161	181	217	na
Refined production	kt	97	105	110	130	162	186	207	248	282	na
World stocks	kt	2.8	3.3	3.4	3.8	4.5	5.5	6.3	7.2	7.6	na
	weeks of stocks	69	61	64	69	67	60	66	67.2	59.2	na
Australian exports to China	value AUDmn	990	1077	1081	936	909	851	946	822	739	na

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

Zinc

- A draw down of LME stocks in Q1 underpinned a 6%qtr zinc spot price increase to an average of US\$2029. LME stocks fell below 778 kt at the end of March, down from 888 kt at the end of 2013.
- Shanghai zinc prices remained steady on the previous quarter to average RMB14 953 in Q1 but decreased by 2.5%yr. Stocks in China rose slightly during Q1 but remain below levels at the same time last year.
- China's refined zinc production increased by 1.4%yr to 1.3 Mt in Q1. Increased production in Shaanxi and Sichuan underpinned the rise, offsetting reductions in Jiangxi, Gansu, and Fujian.

Figure 139: Zinc prices, London & Shanghai

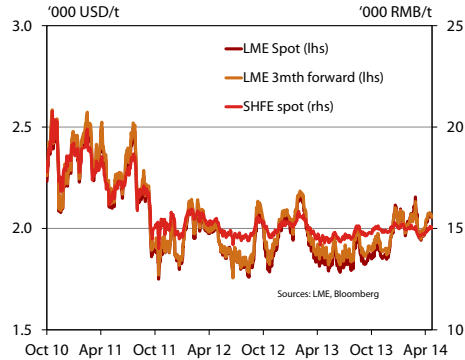


Figure 140: LME prices & inventories

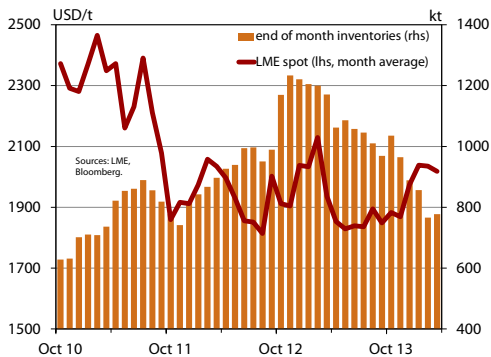


Figure 141: Zinc use and supply by country

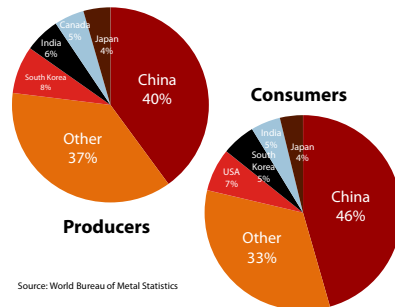


Table 21: Zinc prices (USD/t unless specified otherwise)

LME spot prices	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14
Quarter average	1897	2025	1928	1885	1947	2033	1840	1859	1907	2029
Quarter end	1828	2003	1843	2088	2035	1871	1823	1877	2086	1981
Quarter high	2060	2179	2049	2105	2098	2188	1925	1956	2116	2156
Quarter low	1750	1827	1760	1760	1785	1854	1784	1793	1828	1942
3 Month forward	1909	2040	1932	1902	1979	2057	1875	1896	1932	2027
Shanghai avg RMB/t	15173	15369	15132	14640	15021	15330	14596	14726	14969	14953
Shanghai avg USD/t	2378	2423	2399	2311	2365	2456	2343	2404	2459	2450

Sources: LME, Bloomberg.

- Increased demand, in addition to relatively slow production growth, has supported higher zinc imports (metal content) through the first two months of the year.
- China accounted for 40% of refined zinc production in 2013. China was also the largest consumer of zinc, accounting for 46% of global consumption.
- Australian export volumes (in metal content) to China increased by 9%yr to total 120 kt in Q1. Accordingly, export earnings increased by 11%yr to \$195 million.

Figure 142: Chinese zinc import volumes

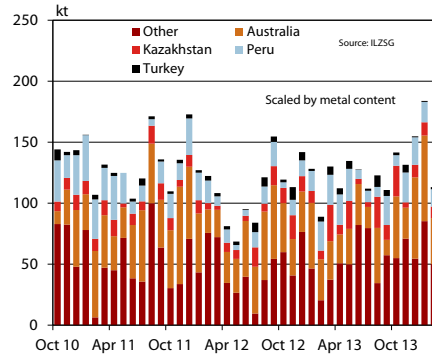


Figure 143: Chinese zinc imports by type

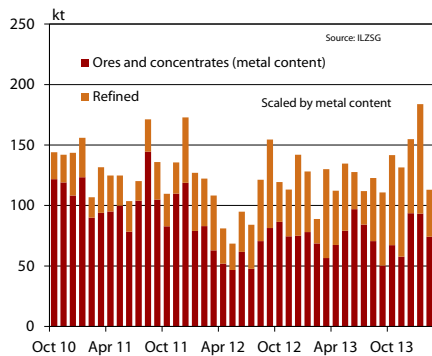


Figure 144: Australian zinc exports to China

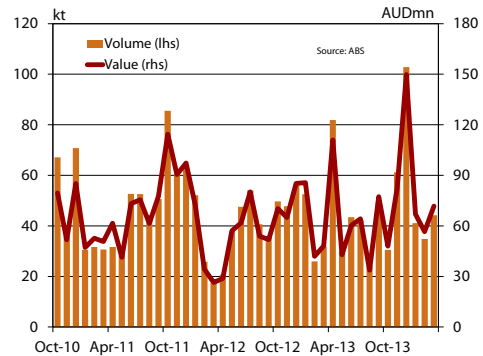


Figure 145: Zinc demand per capita

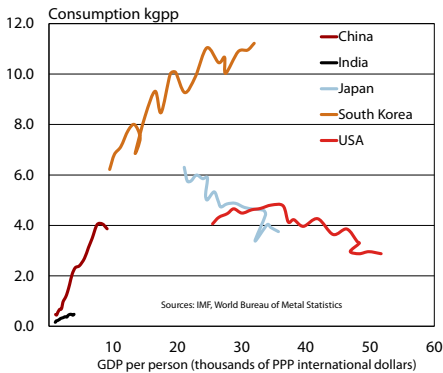


Figure 146: Zinc output by province

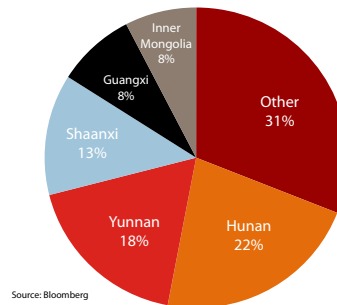


Table 22: Zinc summary data

	unit	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14
China imports	kt	418.0	357.5	244.6	359.9	374.5	347.0	374.4	345.5	427.9	na
	Australia	186.3	90.0	98.7	155.0	103.3	119.0	86.3	75.1	142.8	na
	Kazakhstan	25.1	19.5	19.4	38.0	44.5	46.5	35.1	41.6	39.6	na
	Peru	63.6	48.7	19.6	46.2	30.2	65.0	58.7	41.2	55.6	na
	Turkey	8.2	8.3	6.0	19.8	19.6	12.4	11.5	16.2	9.5	na
	other	134.9	191.0	100.9	100.9	177.0	104.1	182.7	171.5	180.3	na
Refined production	kt	1388.4	1168.7	1179.2	1138.8	1342.7	1241.5	1325.7	1330.8	1427.1	1259.3
World stocks	kt	1619.1	1702.3	1758.1	1678.9	1929.2	1903.2	1756.8	1589.3	1472.4	na
	weeks of stocks	6.4	7.6	7.5	7.1	7.8	8.1	7.1	6.2	5.4	na
Australian exports to China	kt	95	106	131	153	110	110	155	116	194	120
	value AUDm	133	148	186	220	176	176	214	175	280	195

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

Lead

Figure 147: LME prices & inventories

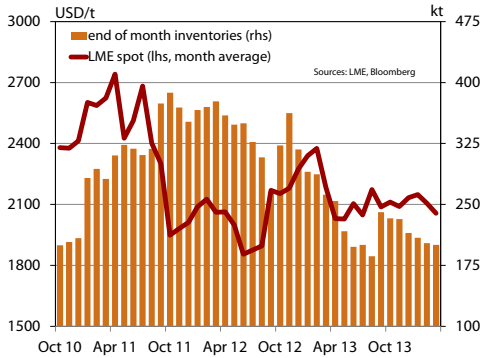


Figure 148: Chinese lead import volumes

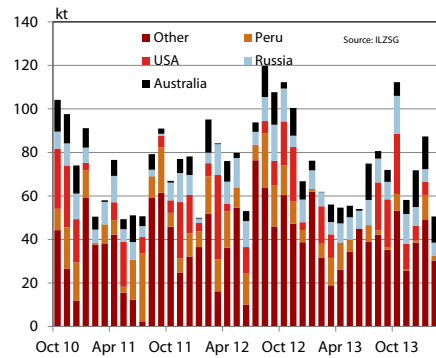


Figure 149: Australian lead exports to China

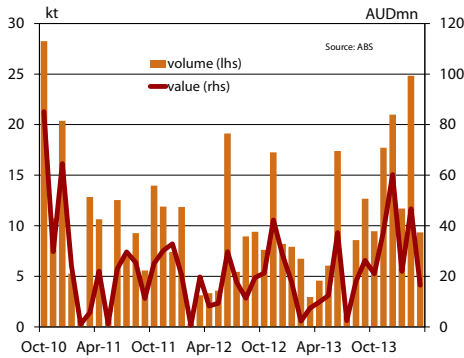


Figure 150: World trade in lead

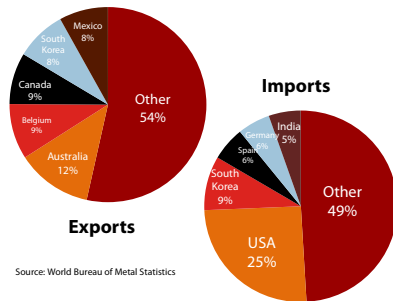


Table 23: Lead prices (USD/t unless specified otherwise).

LME spot prices	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14
Quarter average	1983	2093	1974	1975	2199	2301	2053	2102	2111	2106
Quarter end	1980	2021	1796	2300	2340	2094	2058	2075	2206	2041
Quarter high	2119	2288	2156	2300	2340	2448	2247	2238	2259	2212
Quarter low	1792	1943	1744	1817	2002	2089	1949	2017	2027	2008
3 Month forward	2000	2118	1984	1985	2200	2314	2066	2116	2134	2127
Shanghai avg RMB/t	15296	15760	15363	15212	15043	14734	13943	14141	14109	13928
Shanghai avg USD/t	2397	2485	2435	2401	2368	2360	2238	2308	2317	2282

Sources: LME, Bloomberg.

Table 24: Lead summary data

	unit	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14
China imports	kt	222.1	229.2	208.8	321.3	279.5	194.1	164.2	227.9	242.5	na
Australia	kt	15.7	15.8	16.4	33.6	24.0	12.6	13.4	25.7	29.6	na
Peru	kt	23.5	38.9	40.6	51.2	29.6	20.3	17.7	10.8	9.0	na
Russia	kt	30.7	21.0	35.7	33.6	30.7	20.7	27.4	30.9	40.0	na
USA	kt	49.3	48.8	15.2	16.9	48.8	28.0	0.1	44.0	46.5	na
Mexico	kt	7.5	7.6	15.4	15.9	16.3	11.9	9.2	7.0	6.7	na
other	kt	95.3	97.0	85.5	170.1	130.1	100.6	96.4	111.4	110.6	na
Refined production	kt	1224.0	899.9	1142.8	1296.1	1307.1	1058.8	1187.5	1136.9	1117.2	1055.7
World stocks	kt	581	634	614	533	627	680	600	603	586	na
weeks of stocks	weeks	2.9	3.5	3.1	2.5	2.9	3.5	3.0	3.0	2.9	na
Australian exports to China	kt	33	15	26	24	33	18	28	22	48	46
	value AUDm	88	41	47	48	92	27	59	47	119	85

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

Tin

Figure 151: Tin prices

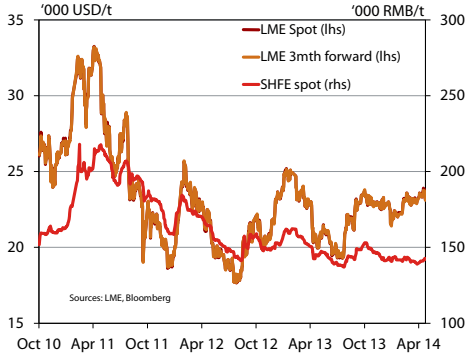


Figure 152: LME prices and inventory

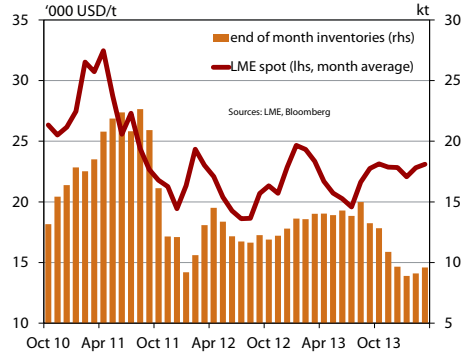


Figure 153: World tin producers and consumers

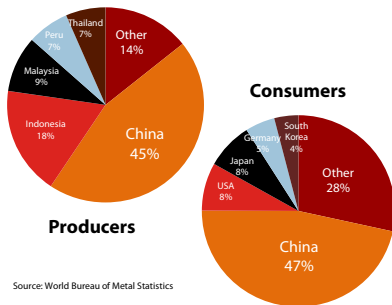


Figure 154: China's tin imports by source

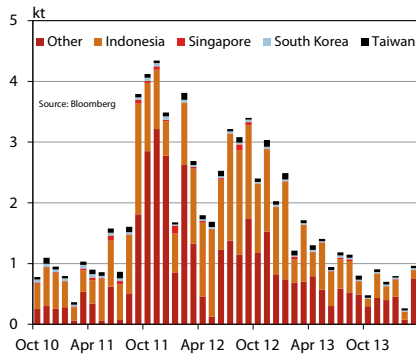


Figure 155: Tin use by sector

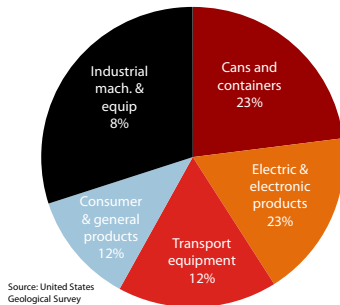
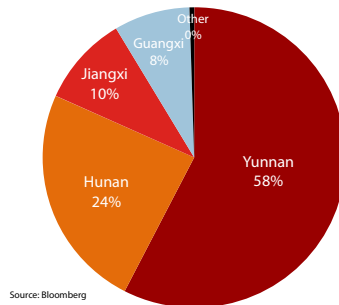


Figure 156: China's tin output by province



Molybdenum

Figure 157: Molybdenum prices

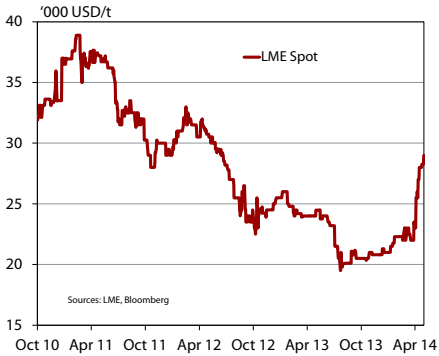


Figure 158: China's molybdenum ore imports

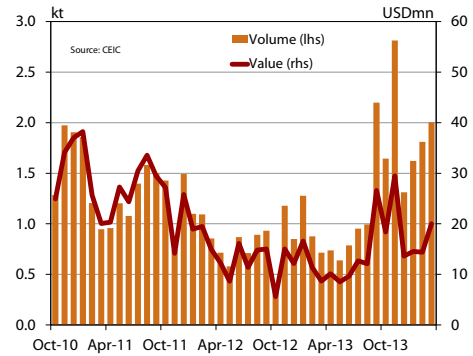


Figure 159: China's molybdenum articles exports

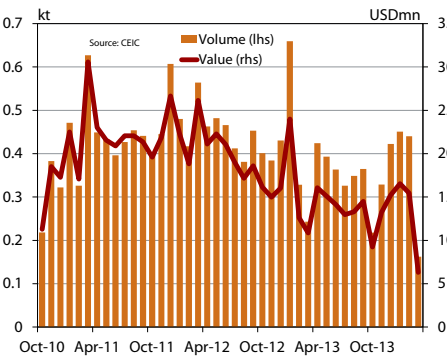


Figure 160: China's molybdenum ore exports

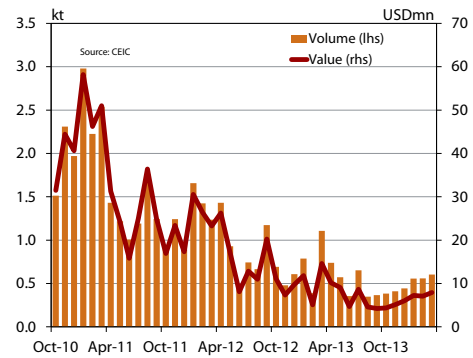


Figure 161: China's molybdenum production

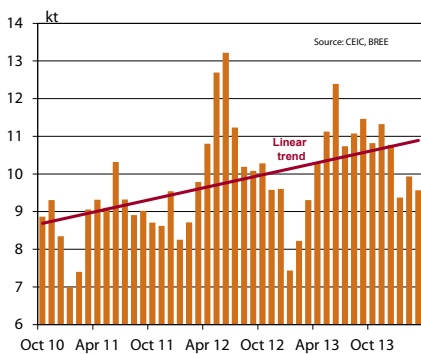
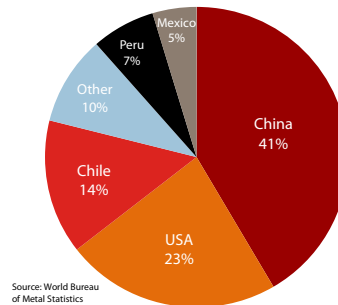


Figure 162: World molybdenum output



Tungsten

Figure 163: China's tungsten ore imports

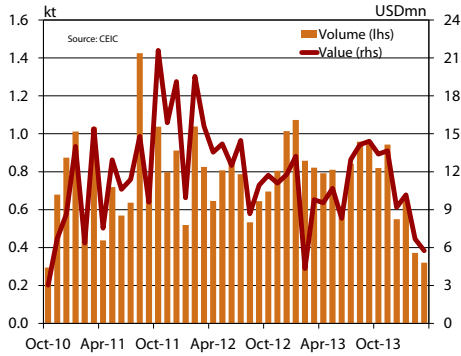


Figure 164: China's tungsten articles imports

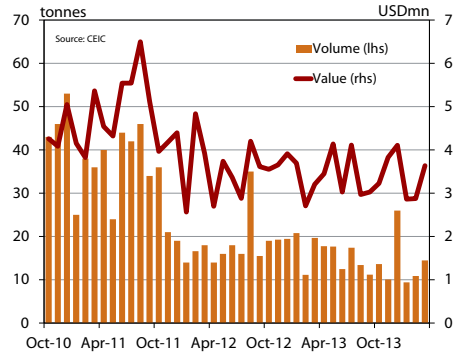


Figure 165: China's tungsten and articles exports

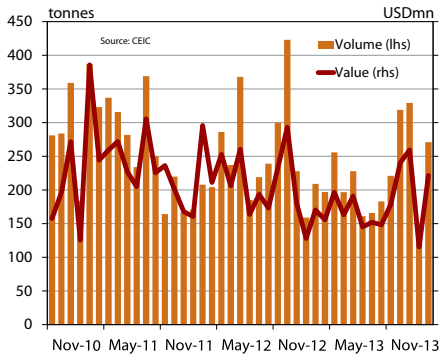


Figure 166: China's tungsten products exports

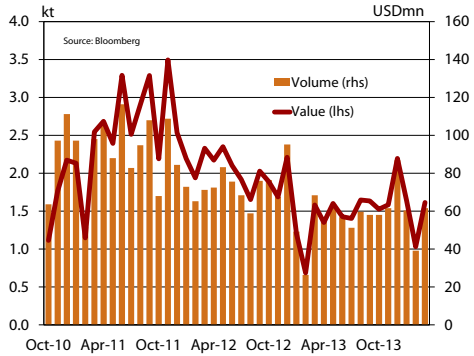


Figure 167: World tungsten output

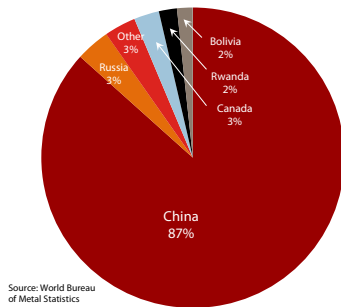
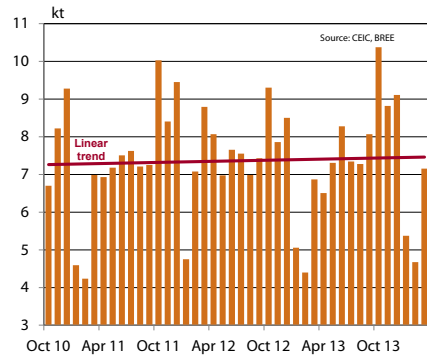


Figure 168: China's tungsten output (metal content)



Cobalt

Figure 169: Cobalt prices

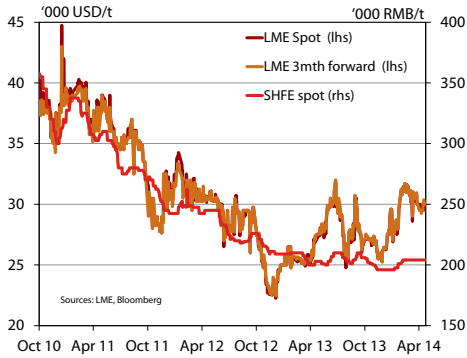


Figure 170: China's cobalt ore imports

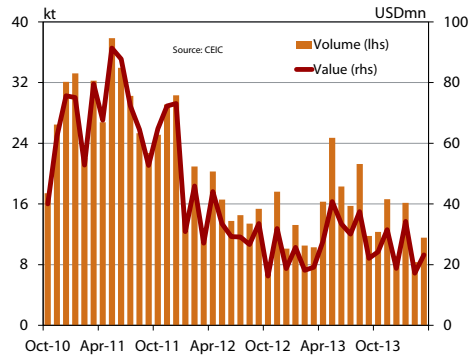


Figure 171: China's cobalt articles imports

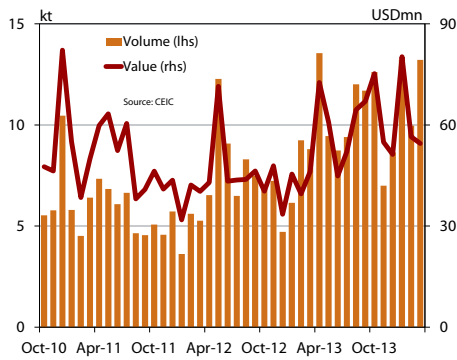


Figure 172: World cobalt mine output

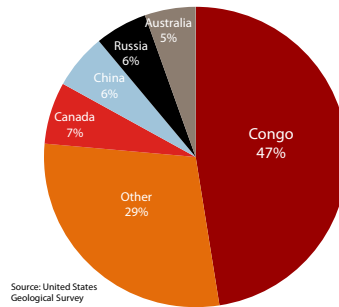


Figure 173: World cobalt refined output

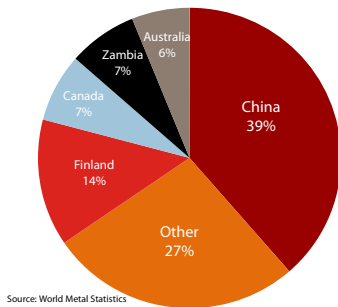
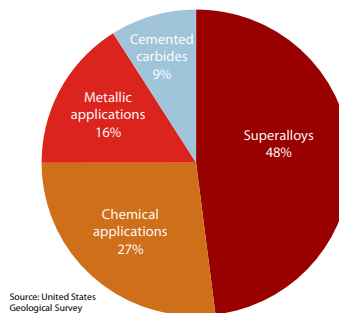


Figure 174: Cobalt use by sector



Antimony

Figure 175: Antimony prices



Figure 176: China's antimony ores imports

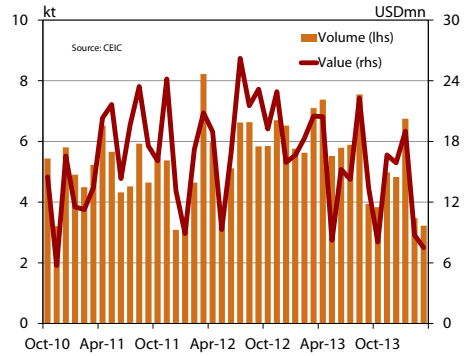


Figure 177: China's unwrought antimony exports

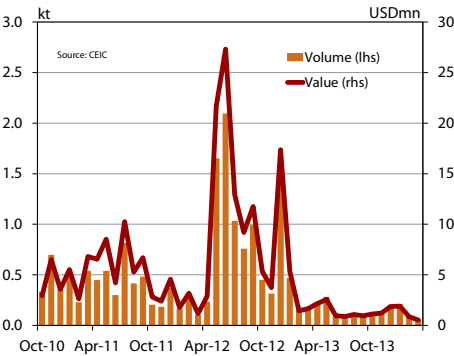


Figure 178: Australian antimony exports to China

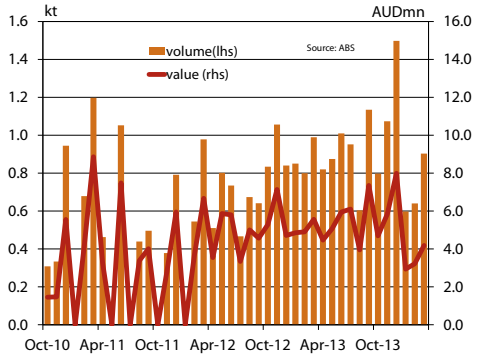


Figure 179: China's antimony mine output

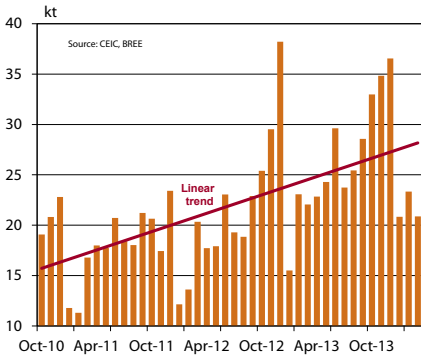
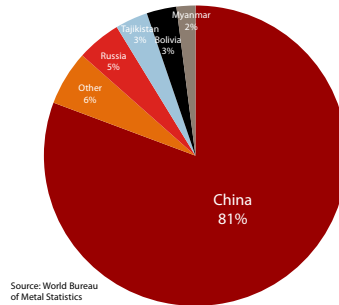


Figure 180: World antimony mine output



Platinum & Palladium

Figure 181: Platinum prices

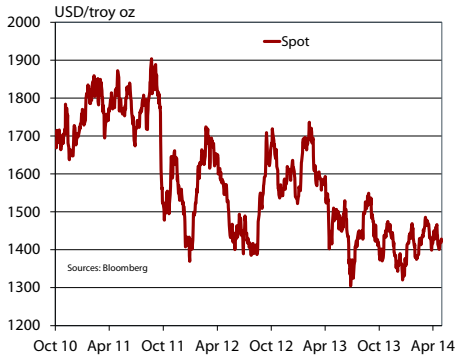


Figure 182: Palladium prices

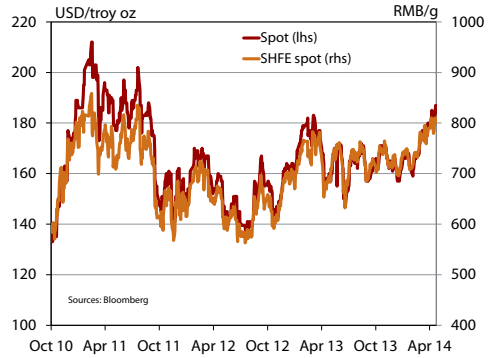


Figure 183: China's platinum imports

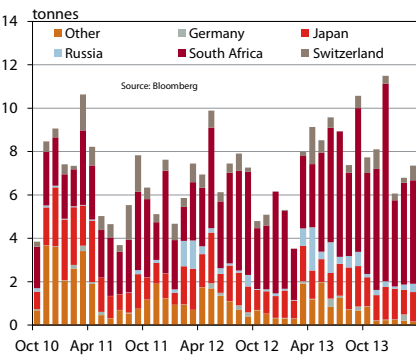


Figure 184: China's platinum exports

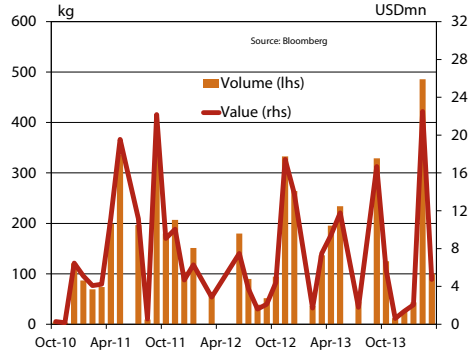


Figure 185: World platinum output

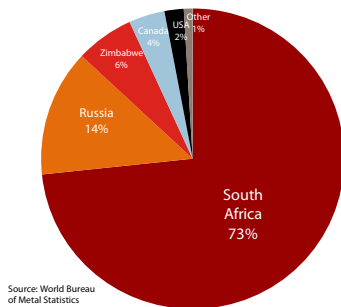
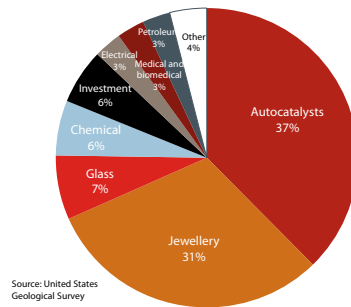


Figure 186: Platinum end use by sector



Mineral Sands

Figure 187: China's titanium dioxide imports

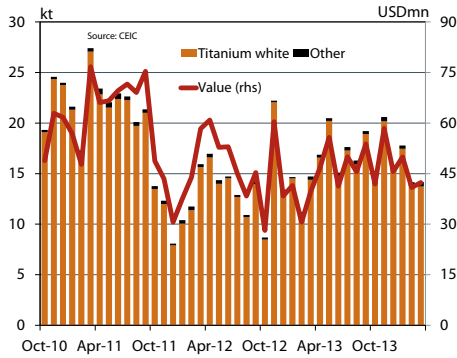


Figure 188: China's titanium dioxide exports

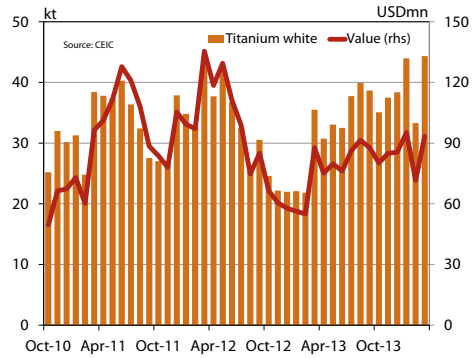


Figure 189: Aust titanium dioxide exports to China

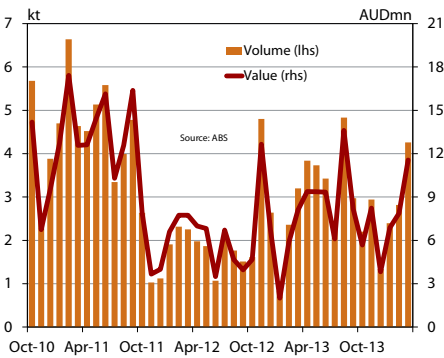


Figure 190: Australian rutile exports to China

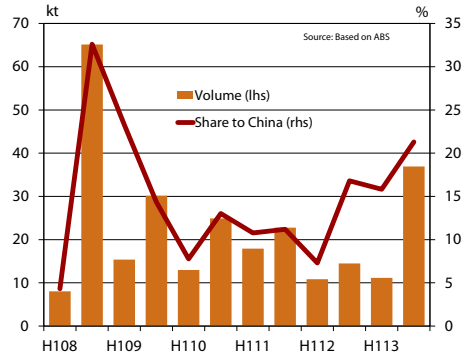


Figure 191: Australian zirconium exports to China

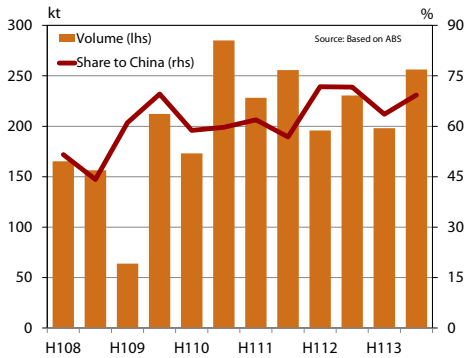
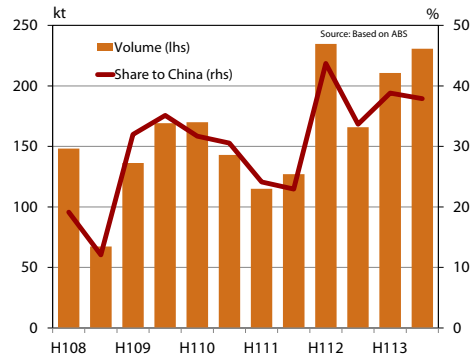


Figure 192: Australian ilmenite exports to China



China's exports of rare earth oxides

Figure 193: China's total rare earth oxides exports

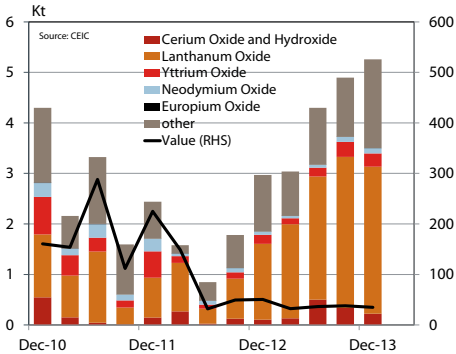


Figure 194: Cerium oxide & hydroxide exports

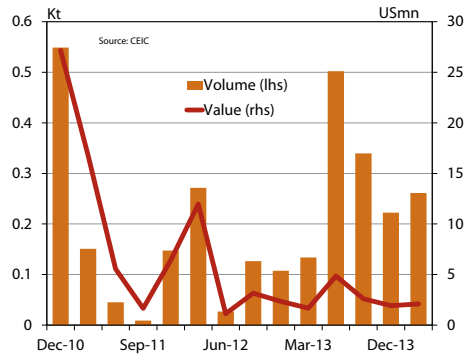


Figure 195: Lanthanum oxide exports

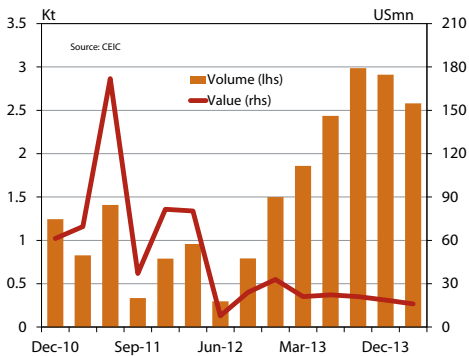


Figure 196: Neodymium oxide exports

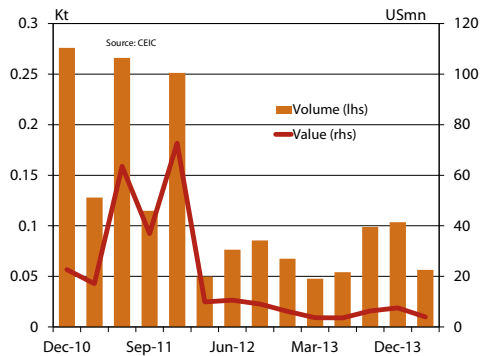


Figure 197: Europium oxide exports

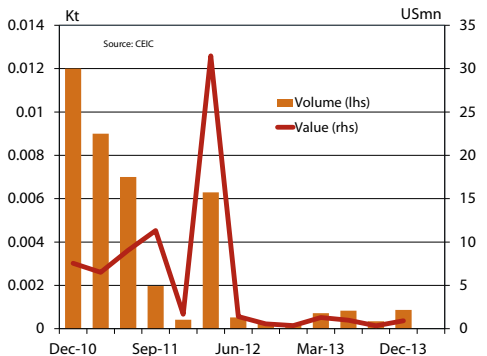
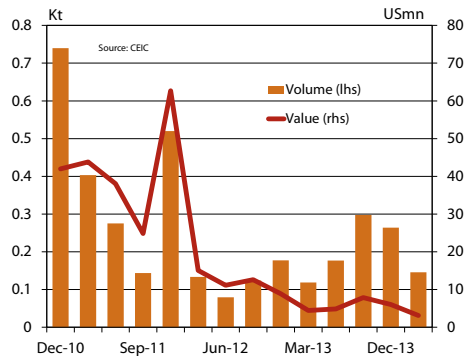


Figure 198: Yttrium oxide exports



Manganese & Cadmium

Figure 199: Manganese & cadmium prices

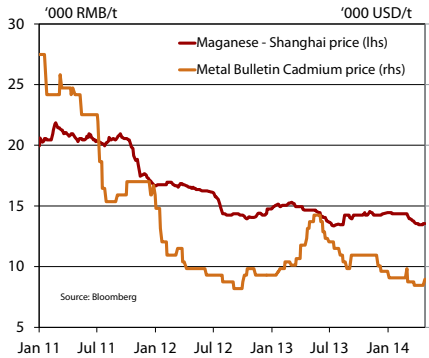


Figure 200: China's manganese ore imports

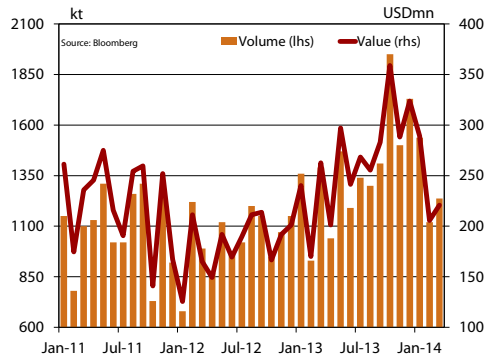


Figure 201: Australian manganese exports to China

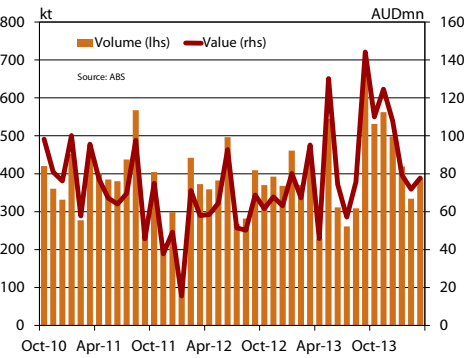


Figure 202: World manganese mine output

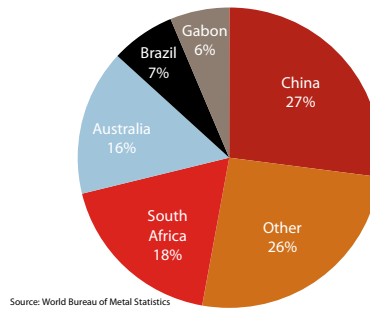


Figure 203: World cadmium production

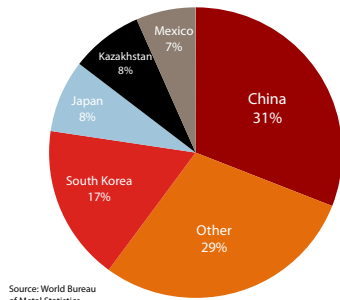
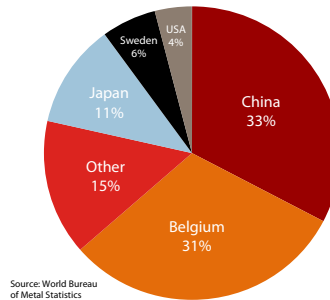


Figure 204: World cadmium consumption



Diamonds & Magnesium

Figure 205: World diamond exports

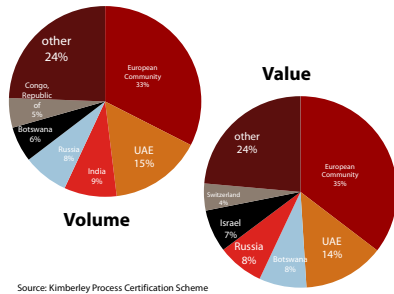


Figure 206: World diamond imports

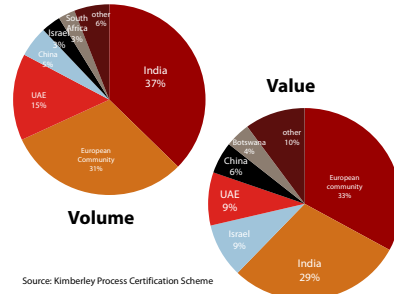


Figure 207: World diamond output

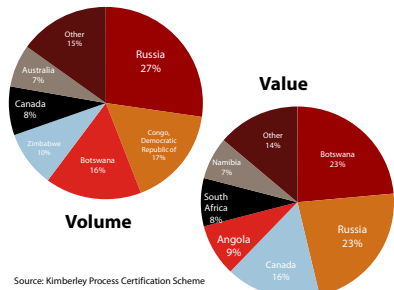


Figure 208: Magnesium prices

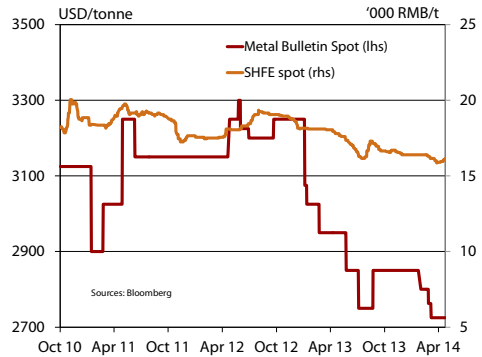


Figure 209: China's magnesium exports

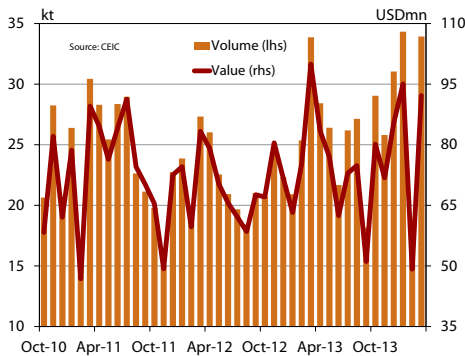


Figure 210: Shares of world magnesium output

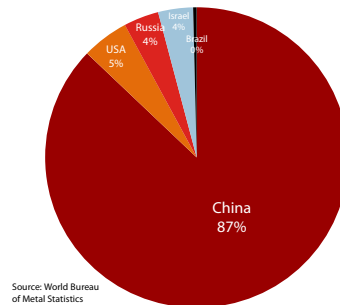


Table 24: China mineral and energy import summary

	unit	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14
Iron ore	Mt	179.8	185.3	193.1	186.5	198.0	216.7	219.1	222.0
from Australia	Mt	82.7	91.6	94.3	89.8	102.6	111.8	112.9	118.2
Australian share	%	46	49	49	48	52	52	52	53
Thermal coal	Mt	62.9	54.4	68.5	62.8	60.5	60.9	67.6	71.0
from Australia	Mt	11.4	11.3	14.8	12.9	12.2	17.0	15.9	15.4
Australian share	%	18	21	22	21	20	28	24	22
Metallurgical coal	Mt	15.4	8.9	17.0	17.2	18.1	19.4	20.7	13.0
from Australia	Mt	2.9	1.7	5.5	7.9	5.4	7.7	9.2	6.5
Australian share	%	19	19	33	46	30	40	44	50
Aluminium	kt	144.9	179.8	104.6	67.8	82.8	137.7	193.0	175.5
from Australia	kt	18.3	25.5	21.6	14.5	14.3	31.7	31.5	48.0
Australian share	%	13	14	21	21	17	23	16	27
Alumina	kt	1304	1255	1299	1035	612	829	1354	1484
from Australia	kt	1102	1224	1292	1028	603	767	1177	1184
Australian share	%	85	97	99	99	98	92	87	80
Bauxite	Mt	12.6	5.1	9.3	14.0	19.0	21.1	17.6	13.1
from Australia	Mt	2.0	3.0	2.3	2.7	4.0	4.2	3.4	3.1
Australian share	%	16	58	24	19	21	20	19	24
Copper	kt	1327	1403	1477	1356	1380	1731	1819	1836
from Australia	kt	75	80	78	97	157	135	128	165
Australian share	%	6	6	5	7	11	8	7	9

Table 24 continued on page 65

Table 24 continued:

	unit	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14
Oil	Mt	69.5	60.3	70.7	69.0	69.2	73.2	70.8	74.7
from Australia	Mt	1.4	0.6	1.0	0.5	0.8	1.2	0.5	0.7
Australian share	%	2.0	1.0	1.4	0.8	1.2	1.7	0.7	1.0
Gas (LNG)	kt	3410	3800	4230	4180	4160	4560	5140	5629
from Australia	kt	908	904	972	842	974	834	906	843
Australian share	%	27	24	23	20	23	18	18	15
Zinc	kt	244.6	359.9	374.5	347.0	374.4	345.5	427.9	na
from Australia	kt	98.7	155.0	103.3	119.0	86.3	75.1	142.8	na
Australian share	%	40	43	28	34	23	22	33	na
Nickel	USDmn	2086	1890	2376	2149	1842	1766	2095	1585
from Australia	USDmn	252	158	147	172	189	119	112	67
Australian share	%	12	8	6	8	10	7	5	4
Lead	kt	208.8	321.3	279.5	194.1	164.2	227.9	242.5	na
from Australia	kt	16.4	33.6	24.0	12.6	13.4	25.7	29.6	na
Australian share	%	8	10	9	7	8	11	12	na
Tin	kt	6.0	9.7	7.5	5.4	3.7	3.1	2.1	2.1
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	0	2510	10734	4516	2567	9069	6216	4045

Source: CEIC and Bloomberg.

Electricity generation and consumption

Figure 211: Electricity generation by region, 2013

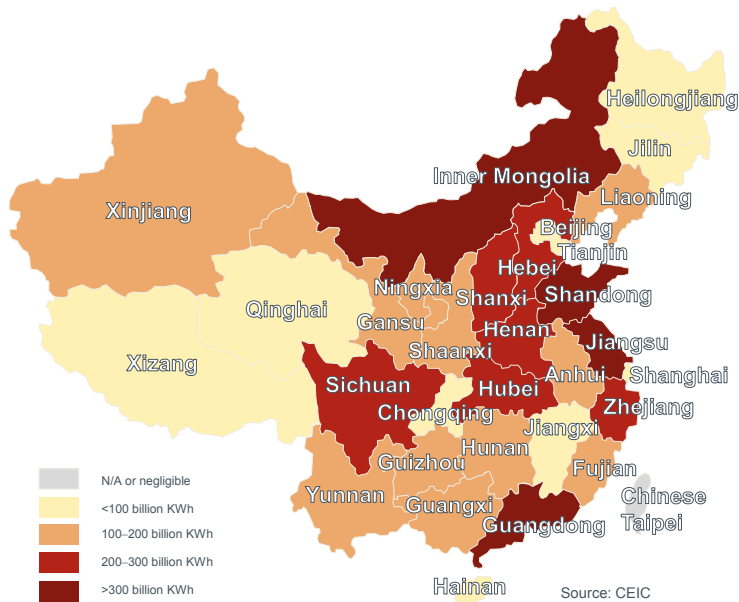
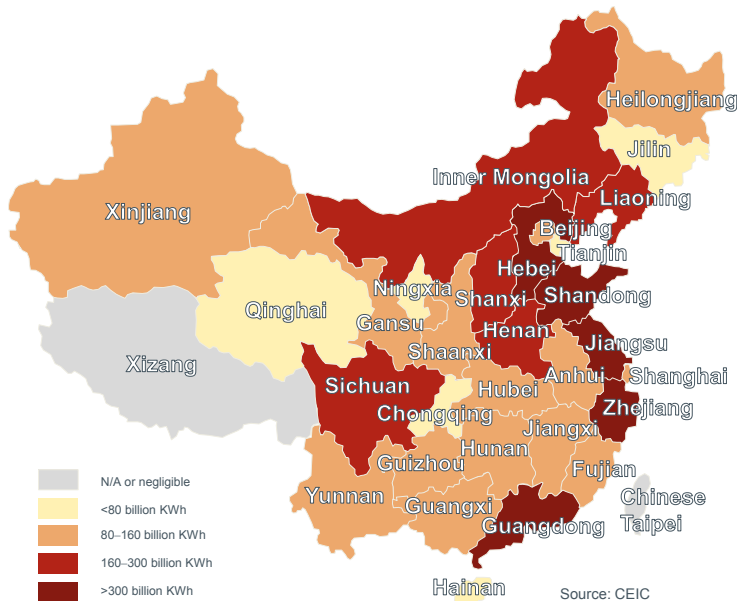


Figure 212: Electricity consumption by region, 2012



Coal and gas

Figure 213: Coal production by region, 2012

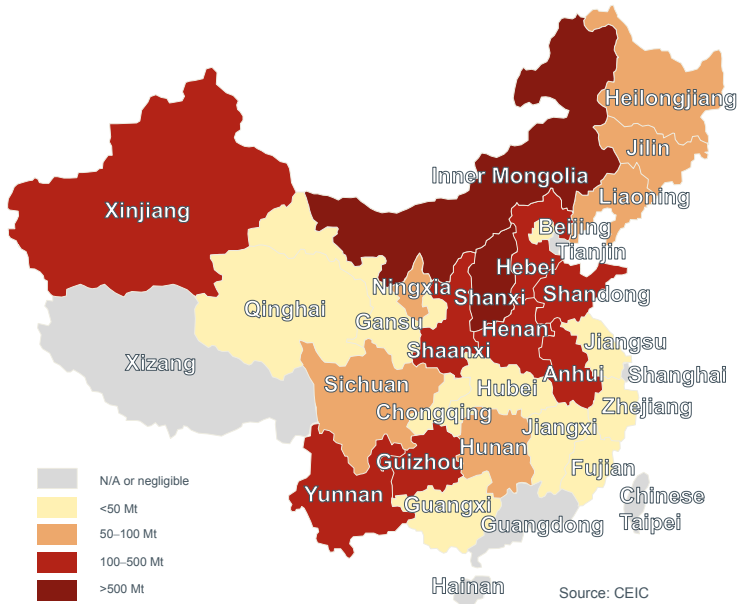
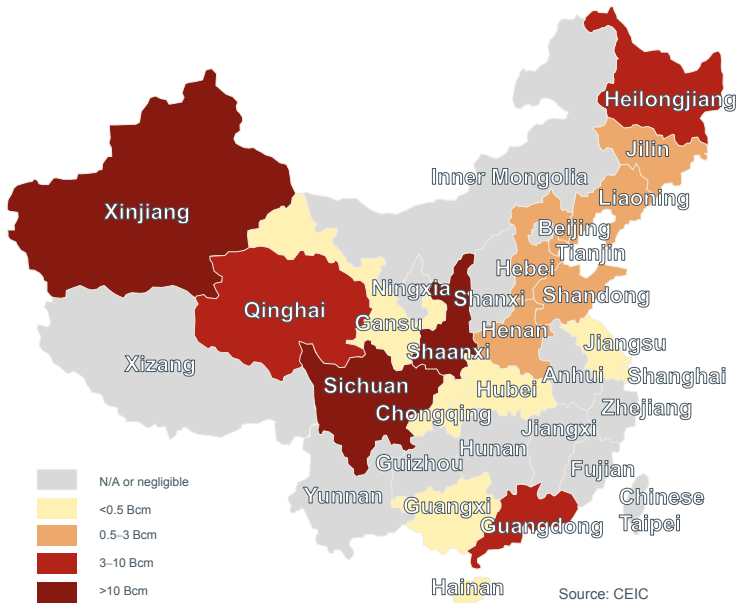


Figure 214: Gas production by region, 2013



Ferrous metals

Figure 215: Iron ore production by region, 2013

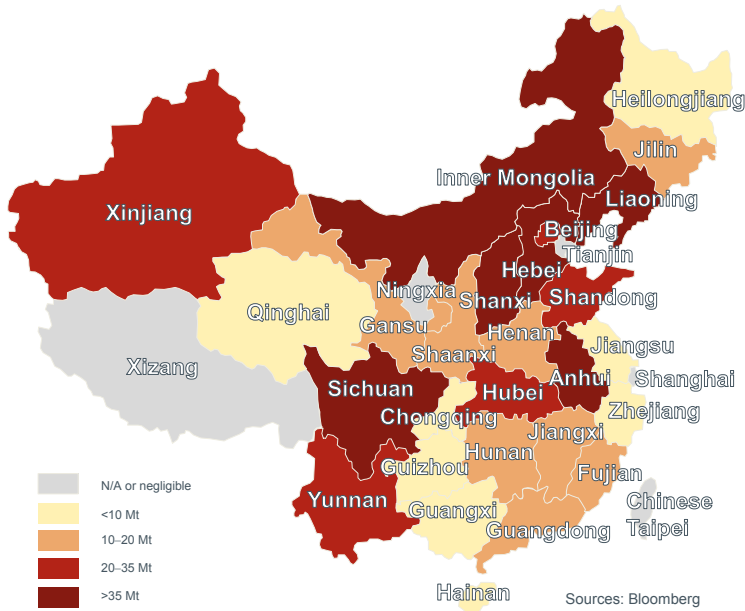
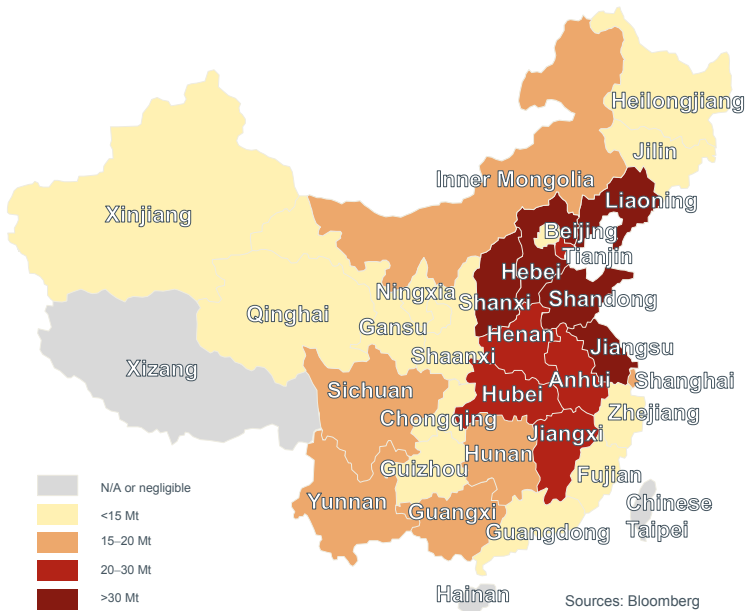


Figure 216: Crude steel production by region, 2013



Alumina and aluminium

Figure 217: Alumina production by region, 2013

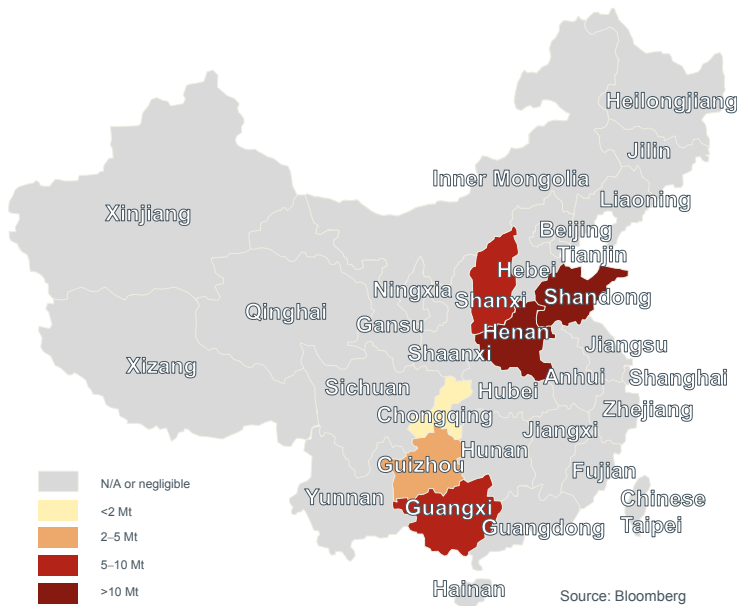


Figure 218: Aluminum production by region, 2013



Copper and gold

Figure 219: Copper production by region, 2013

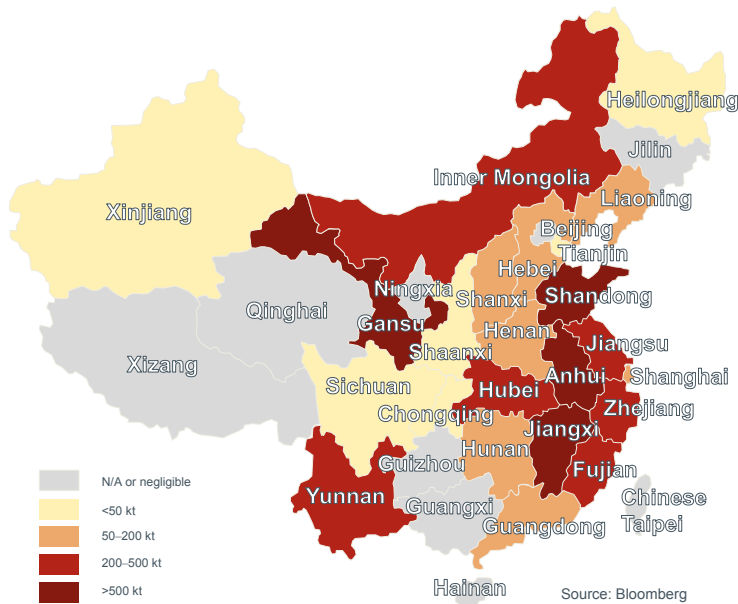
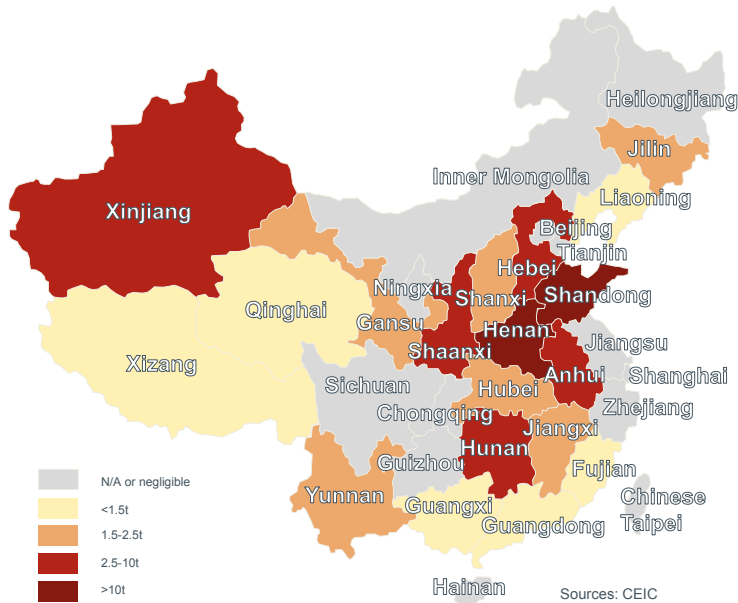


Figure 220: Mined gold production by region, 2013



Nickel and zinc

Figure 221: Nickel production by region, 2013

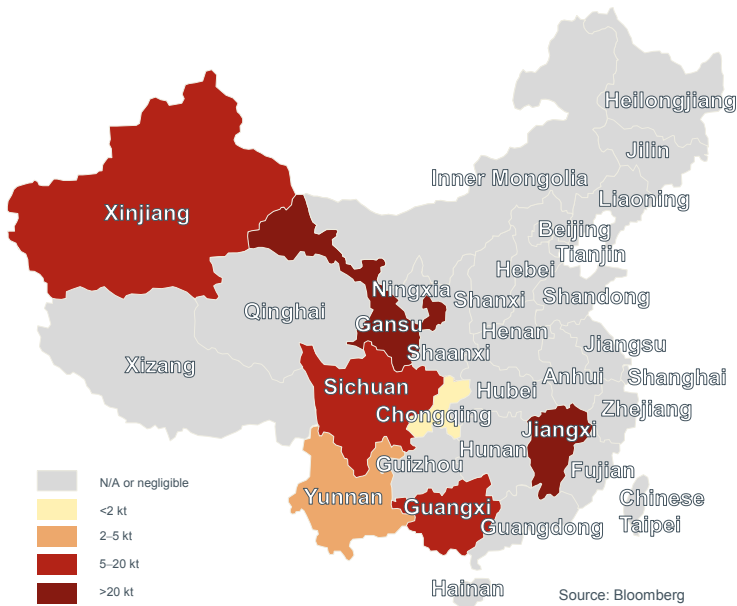
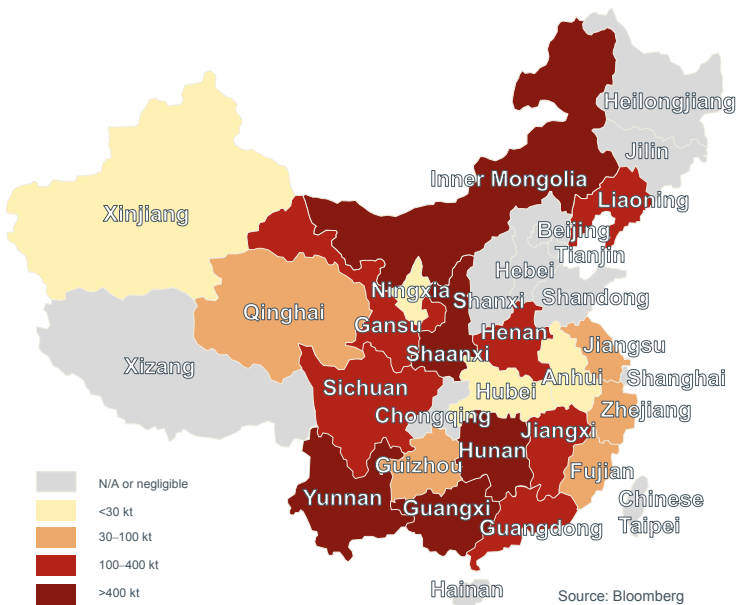


Figure 222: Zinc production by region, 2013



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