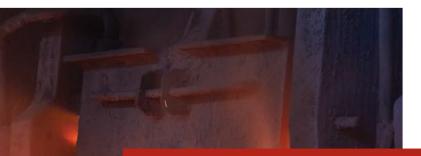


Australian Government

Bureau of Resources and Energy Economics





The Westpac-BREE

China Resources Quarterly

Southern winter ~ Northern summer 2013





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Acronyms and abbreviations

ABS	Australian Bureau of Statistics	
AUD, \$A	Australian dollar	Growth rate conventions and abbreviations.
bcm	billion cubic metres	"Year-ended growth", abbreviated %yr, is the level of an indicator in a single period (a month or
BREE	Bureau of Resources and Energy Economics	quarter) versus the corresponding period in the
CEIC	Chinese Economic Information Company	prior year, expressed as a percentage.
CFR	Cost including freight	The term "smoothed growth" should be understood to represent a 3 month moving average (3mma) of the year- ended growth rate.
CNY	Chinese yuan	"Year-to-date growth", abbreviated %ytd, is the
cm	cubic metres	accumulated level of an indicator at a point in the calendar year (for example year-to-June, year-to-
dltu	dry long tonne unit	Sep) versus the corresponding point in the prior
FDI	foreign direct investment	year, expressed as a percentage.
FOB	free on board	"Annual average growth", abbreviated %ann, is the level of an indicator over four quarters, versus
FX	Foreign exchange	the previous four quarter period, expressed as a percentage.
G3	United States, Europe and Japan	
GDP	gross domestic product	"Month-on-month and quarter-on-quarter growth", abbreviated %mth or %qtr, is the level of
GFC	global financial crisis	an indicator in one period, versus the immediately prior period, expressed as a percentage.
GFCF	gross fixed capital formation	"Annualised growth or annualised rate", is the
GCF	gross capital formation	change in an indicator in a single period grossed
IEA	International Energy Agency	up to a year, expressed as a percentage. If seasonally adjusted, this may be rendered as %saar.
IMF	Internetional Manaton / Eurod	
11 11	International Monetary Fund	
koe, mtoe	kilogram of oil equivalent, million tonnes of oil eq	uivalent
	,	juivalent
koe, mtoe	kilogram of oil equivalent, million tonnes of oil eq	uivalent
koe, mtoe kgpp	kilogram of oil equivalent, million tonnes of oil eq kilograms per person	uivalent
koe, mtoe kgpp kWh	kilogram of oil equivalent, million tonnes of oil eq kilograms per person kilowatt hour	uivalent
koe, mtoe kgpp kWh LNG	kilogram of oil equivalent, million tonnes of oil eq kilograms per person kilowatt hour liquefied natural gas	uivalent
koe, mtoe kgpp kWh LNG Mt	kilogram of oil equivalent, million tonnes of oil eq kilograms per person kilowatt hour liquefied natural gas million tonnes	uivalent
koe, mtoe kgpp kWh LNG Mt na	kilogram of oil equivalent, million tonnes of oil eq kilograms per person kilowatt hour liquefied natural gas million tonnes not available	
koe, mtoe kgpp kWh LNG Mt na NAR	kilogram of oil equivalent, million tonnes of oil eq kilograms per person kilowatt hour liquefied natural gas million tonnes not available net as received	
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koe, mtoe kgpp kWh LNG Mt na NAR NIEs ODI OECD OPEC PMI PPP ppt RET	kilogram of oil equivalent, million tonnes of oil equivalent and the second	an, Hong Kong, South Korea)
koe, mtoe kgpp kWh LNG Mt na NAR NIEs ODI OECD OPEC PMI PPP ppt RET RMB	kilogram of oil equivalent, million tonnes of oil eq kilograms per person kilowatt hour liquefied natural gas million tonnes not available net as received Newly Industrialised Economies (Singapore, Taiwa outward direct investment Organisation for Economic Cooperation and Deve Organisation of Petroleum Exporting Countries Purchasing Managers Index purchasing-power parity percentage point Department of Resources, Energy and Tourism Chinese Renminbi	an, Hong Kong, South Korea)

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Foreword

Welcome to the inaugural 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 Resources and Energy Economics (hereafter BREE).

The CRQ aims to 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.

There is great deal of freely available commentary on the Chinese economy. There is an equally voluminous public literature on the state of resources markets. There is, however, a lack of material that bridges these topics and treats them as a related whole. The CRQ aims to fill that gap by merging Westpac's market leading macroeconomic analysis with BREE's commodity specific insights.

The CRQ is designed to be accessible to non-specialists, while remaining relevant to the expert.

As we move deeper into the second decade of the Asian Century, no key decision maker can afford not to commit half an hour once a quarter to absorbing the key themes contained in this report.

Bill Evans

Chief Economist, Westpac

Bruce Wilson

Executive Director, BREE



Executive summary

The Chinese economy grew at a rate **slightly below its potential** in the first half of 2013, as external headwinds and a less accommodative policy stance combined to suppress overall activity. Accordingly, the **general impression left by the flow of data has been consistently underwhelming**.

Growth in **heavy industrial capacity** has slowed markedly over the last twelve months. Countering that, **investment in hard infrastructure** has been on an accelerating trajectory since the September quarter of 2012, with transport projects very much to the fore. **Real estate investment** has improved modestly from a mid 2012 lull, although **housing starts** are lagging behind property sales in the year to date. With sales now slowing in response to a further round of housing controls, developers look set to retain a selective approach to new projects.

Heavy industrial output was moribund in the first three quarters of 2012. The late year upswing, when it came, was modest. That recovery, which spilled into the early part of 2013, has now plateaued. As of June, China's exports to advanced markets are falling, while its shipments within Asia have decelerated sharply. Overall imports from commodity producing countries are rising by a modest 7.6% in year-ended terms; imports from the G3 economies are just positive on the same basis; while imports from elsewhere in Asia have slowed abruptly.

In response to **rapid credit growth** and **a sharp rise in capital inflows** in the early part of the year, the authorities engineered a liquidity 'squeeze by fiat' in the month of June. The result was **a dramatic rise in interbank interest rates**, a sharp outflow of hot money and a steep decline in global asset prices linked to the China story. While **interbank rates have returned to something approaching normality**, the evidence suggests that **international investors remain highly sceptical** regarding China's growth prospects.

As the world's largest consumer of most minerals resources, the **slowing of economic growth in China is starting to flow through to commodities markets**. Although China's metals use, energy output and raw material imports remain high (and are still growing in most cases); **most commodity prices have continued retreating** from the record high levels of recent years.

There is mounting evidence that **the current phase of the commodity price cycle is coming to an end**. Global supplies have caught up with the rapid demand growth of the past decade. Most markets now face surplus supply. The resulting accumulation of stocks has depressed prices to the point where many producers around the world are operating at a loss. Metal producers in China have not been immune to these market conditions and recent announcements of directed capacity closures suggests Government support for loss-making producers may be waning.

China's clear intention to **weight environmental amenity more heavily in its policy calculus** is already manifesting itself in the energy supply mix.

Recent developments in the Chinese economy

The Chinese economy grew at a rate slightly below its potential in the first half of 2013, and well below market expectations, as external headwinds and a less accommodative policy stance combined to suppress overall activity. Accordingly, the general impression left by the flow of data has been consistently underwhelming. Even so, the economy is firmer now than it was a year ago, when domestic demand and exports simultaneously experienced very weak conditions.

Real GDP expanded by 7.6% year-to-date in the first half and by 7.5% year-on-year in the June quarter alone. That latter pace compares to 7.7% year-on-year in the March quarter, 7.8% in calendar 2012 and 9.3% in 2011. Nominal GDP was quite weak at just 8.0% year-on-year, with the soft real growth rate allied to a barely positive deflator - a measure of economy wide prices - conspiring to hold nominal activity down. Note that the official growth target for the present year is 7½%, and Premier Li Keqiang has recently indicated that anything below 7% would be unpalatable.

Looking at the breakdown of real activity from the production side of the accounts, primary (3.0% yearto-date from 3.4% in Q1) and secondary industry (7.6% year-to-date from 7.8% in Q1) decelerated from a year ago, while tertiary activity (unchanged from 8.3% year-to-date in Q1) has consolidated the gains made through the second half of 2012.

Contributions to Chinese economic growth in terms of expenditure were 3.4 percentage points from consumption (4.3ppt prior); a sharp move higher to a 4.1 percentage point contribution from investment (2.3ppt prior); balanced by a considerably less supportive net exports position (+0.1 percentage points versus +1.1ppt in Q1).

Within investment, on a nominal basis, growth in heavy industrial capacity has slowed markedly over the last twelve months. Countering that, investment in hard infrastructure has been on an accelerating trajectory since the September quarter of 2012, with transport projects, notably railways, very much to the fore. Real estate investment has improved modestly from a mid 2012 lull, although new housing starts are lagging behind property sales (of which more below). State-owned enterprises contributed 29% of the growth in fixed investment in the first half.

Figure 1: Key economic indicators

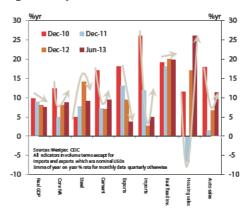
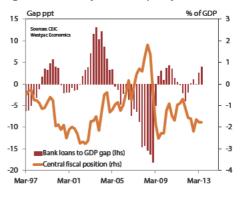


Figure 2: Monetary and fiscal policy in China



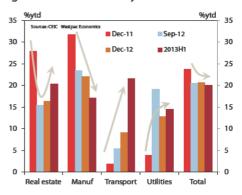


Figure 3: The investment cycle: a sectoral view

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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 economy 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.

At present, a balanced reading of the alternative indicators suggests that the official GDP figures, abstracting from quarter to quarter volatility, are providing a reasonable approximation of the true underlying state of affairs.

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 conditions deteriorated in the first half of 2013, with 'absolute' conditions now below the long run average.

In category (2), alongside the traditional proxy of electricity output, aquatic and terrestrial freight volumes provide additional insight. As of June 2013, the smoothed year-ended growth rate of these demand proxies was 6.9% (electricity); 9.7% (terrestrial freight) and 6.5% (aquatic freight). Overall import growth has been a little slower than these measures of logistics activity.

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 yearended growth rate of central government revenues was 10.1% in the June quarter. The profits of industrial enterprises (manufacturing, mining and utilities) increased by 11.1% year-to-date in the first half of 2013, having finished 2012 down more than 9% on the prior corresponding period. Profit margins have been relatively steady around long run average levels in recent months.

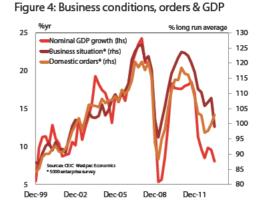
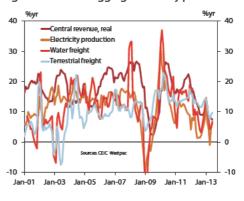


Figure 5: Selected aggregate activity proxies



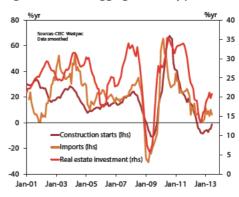


Figure 6: Selected aggregate activity proxies

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 at 20.3% year-to-date in the first half of 2013. That compares to 16.3% in the second half of 2012 and 16.6% in the first. Dwelling investment grew at 20.8%, 11.4% and 12.0% in those respective periods. The 2012 weak patch and the subsequent acceleration are both explained by shifts in housing policy.

The authorities had been working to slow private dwelling construction and sales turnover since the second half of 2010. Direct controls on investors and tight credit for developers succeeded in engineering the slowdown that troughed in early 2012. However, with the lagged impact of monetary tightening by then hindering overall demand, exports flagging and infrastructure investment contracting, the authorities came under pressure to break the downward circuit with an easier housing policy.

Freed from prior constraints, housing sales began to recover in 2012Q2, tentatively at first, before a decisive upswing in late 2012 that extended into early 2013. This drove land and housing prices higher and rapidly improved the inventory and liquidity positions of property developers. By March, with turnover buoyant and overall growth risks apparently contained, the authorities felt the need to curtail the strength of the upswing, thereby limiting the degree of damage done to affordability, particularly in the major cities.

The controls announced in March have been successful in reducing the growth of sales and price appreciation has slowed. The effect has been most pronounced in the eastern provinces. Notably, the volume of new starts have lagged well behind sales in this cycle, indicating that developers have primarily used the recovery in sales to clear inventory and bolster balance sheets, rather than to finance a major new round of projects. While some catch-up in starts can be expected in the second half of 2013, a relatively cautious approach from developers is anticipated.

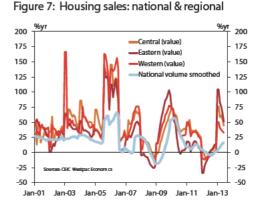
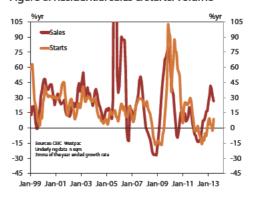


Figure 8: Residential sales & starts: volume



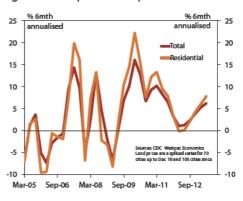


Figure 9: Metropolitan land prices

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.

Exports recorded by Chinese customs began the year growing at a pace that was excessively strong relative to the state of global trade. This turned out to be illusory, as large illicit capital inflows were being effected by the over-invoicing of trade with Hong Kong. Once the authorities made it known they would target this practice, overall exports moved back into line with global trends. As of June, exports to advanced markets are falling, exports to non-Asian emerging markets are essentially flat on year-ago levels, while shipments within Asia, ex Japan, have decelerated sharply.

The business surveys have been describing an external environment where sales are contracting modestly. The "new export orders" sub-index in the two most watched surveys averaged in the high 40s in Q2, where 50 signifies the dividing line between expansion and decline.

Imports of machinery and transport equipment were soft in the second half of 2012, and have recovered just a little in the first half of 2013. The slowdown and the modest bounce are consistent with both weak processing export volumes, excess capacity in the onshore machinery sector and underwhelming domestic equipment investment. The value of food imports, which averaged growth of 31% in the three years to December 2012, has slowed from that spectacular pace in the year to date. Import volumes of crude oil and iron ore are close to their seasonally adjusted trend paths.

Overall imports from commodity producing countries are rising by 7.6% in year-ended terms; imports from the G3 economies are just positive on same basis; while imports from the NIEs (a proxy for the component and assembly trade) have slowed abruptly.

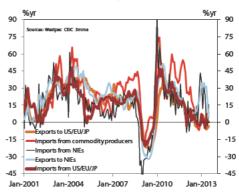
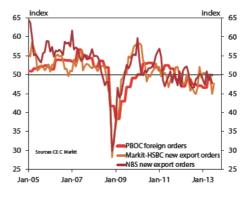
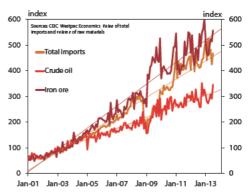


Figure 11: Export orders: survey measures







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 tight liquidity conditions, 'shadow banking' going into reverse and a catalogue of sectoral lending controls in place. The degree of restraint on conventional loans was eased soon after, but other forms of finance remained weak throughout the first half of 2012. However, with the targeted counter-cyclical measures introduced to stem the decline in the real economy beginning to gain traction from the middle of that year, which in turn led to a positive turn in the asset price cycle, 'shadow banking' re-engaged in 2012Q3, and new credit supply rebounded sharply. To be fair though, base effects exaggerated the year-ended growth rates of new loans and other financing.

That state of affairs persisted through the end of 2013Q1. However, official jawboning by the new administration made it increasingly obvious that policy would soon tilt back towards restraint. This encouraged borrowers to pre-fund their activities ahead of tighter liquidity, and lenders to maximise asset growth in the short term. Heavy refinancing needs, a legacy of the stimulus era, were added to that mix. The result was uncomfortably rapid credit expansion relative to apparent real demand.

Policymakers were simultaneously expressing their frustration that large capital inflows were complicating domestic liquidity management and generating currency appreciation pressures, which in turn encouraged further inflows. Attempting to break the circuit, the monetary and regulatory authorities announced measures limiting the foreign exchange activities of banks, indicated they would target disguised hot money inflows, increased oversight of financial innovation, while tightening domestic liquidity conditions. The result was an undignified scramble for funds in the interbank loan market, with short term interest rates rising dramatically in June. This 'squeeze by fiat' dissipated once the July 1 deadline for meeting the new regulatory guidelines passed.

Tighter monetary conditions will progressively weigh on activity, indicating that the growth pulse will be moderating entering 2014. The June disruption will exacerbate the softening trend.

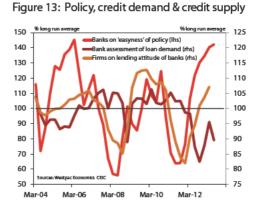


Figure 14: Total credit supply – new flows

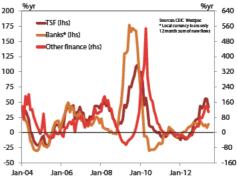
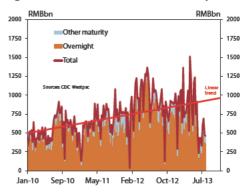




Figure 15: Interbank loan volumes: weekly



External finance & the currency

The bilateral exchange rate with the US dollar has appreciated by a cumulative 31% 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 37%. The real CNY has appreciated by 7% over the year to June 2013, while USD/CNY has fallen by 4.2% (an appreciation of the yuan). Around 1 percentage point of that gap is attributable to higher relative inflation in China. The remainder is due to appreciation against China's non-US trading partners, most notably the Japanese yen.

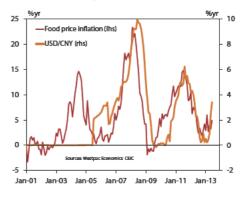
The spot exchange rate strengthened in the first half of the year, consistent with the overall bias to tighten monetary policy in the face of an expected uplift in inflation. Despite this trend, non-deliverable forward markets (NDFs), which represent market expectations of the future level of USD/CNY, have been predicting yuan depreciation over a twelve month horizon for most of the last year. These expectations reached a peak of negativity in late June, when depreciation of almost 3% was anticipated. With interbank interest rates settling down after July 1, those expectations were tempered somewhat, but they remained above 2%, indicating that investor scepticism regarding China's growth prospects over the next year or so remains high.

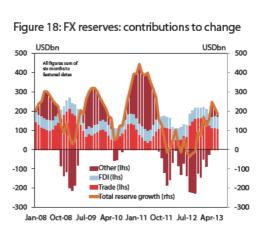
The capital flow backdrop has been volatile. It is apparent that inflows were very strong from January to April, while large outflows occurred in May and June. The level of foreign exchange reserves rose by \$U\$223bn in the first four months of the year and then declined by \$U\$38bn in the following two. In addition to the common global theme of capital withdrawal from emerging markets due to the US "QE tapering" trade, there were a number of Sino-specific overlays. They include the developments in interbank markets and the related regulatory impost on the foreign exchange exposure of Chinese banks, addressed on page 6; controls on investor property sales limiting the incentive of Mainland residents to repatriate offshore funds; and the crackdown on duplicitous trade-invoicing dealt with on page 5.



Figure 16: The exchange rate: broad & bilateral

Figure 17: Currency movements & food inflation





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.

Heavy industry attempted to pre-empt policy stimulus in the first half of 2012 and was burnt when activity remained moribund well into the September quarter. The resulting inventory build-up took a few months to clear beyond the trough in end-demand. The upswing, when it came, was modest. That recovery now appears to have plateaued at a meek pace relative to the experience of the past decade.

Total industrial value-added expanded at a yearended rate of 9.1% in the June quarter, which compares to an even 10% at the end of 2012 and 9.4% a year ago. The comparison growth rates for a weighted sub-set of heavy industries, (see the 'core' time series in Figure 19), are 8.7%, 8.0% and 5.3% respectively. The rebound in the 'core' index from its 2012 lows was broad based. In the most recent quarter, the improvement has come from the production of processed crude oil, electricity and cement, while steel output growth has been merely steady. The output of non-ferrous metals and automobiles has slowed.

Data from the various industry associations points to a reasonably balanced inventory-to-sales position for basic materials firms and a mixed dynamic in downstream manufacturing. Official figures on inventories are broadly in line with that characterisation. The divergence is consistent with the observed softening in equipment investment in the year to date vis-a-vis construction. It also squares with anecdotes from global capital goods firms. Note that a round of factory closures was ordered in July, as the central authorities seek to retire excess capacity and minimise environmental harm. Ferrous and non-ferrous metals, cement and paper-making were among the industries named.

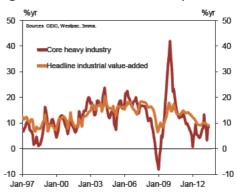
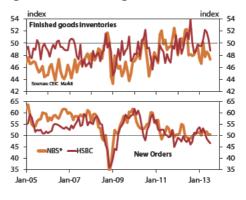


Figure 19: Core & headline industrial production

Figure 20: Manufacturing inventories & orders



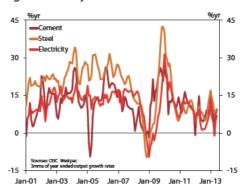


Figure 21: Heavy industrial bellwethers

The household sector

China's urban consumers had shown distinct signs of animation in late 2012 and early 2013. This was reflected in improvements in housing and auto sales, healthy demand for credit and a tangible shift towards greater optimism in the People's Bank of China's quarterly survey. Indeed, the Q1 survey depicted both a clear positive shift in the perception of current income and an expressed preference to tilt savings portfolios away from deposits and into more active investments.

Alas, these positive indications from Q1 have now reversed course. In Q2, sentiment towards current income moved adversely and confidence in future income fell. That is evidence that the job market is no longer tightening (see below). A more risk averse "best place for savings story" has emerged and purchasing intentions for housing have been wound back. This presumably reflects both the government's investor housing controls and the poor state of the equity market. Taken literally, the survey argues that the potential for cyclical upside in consumption has had a very limited life span.

Housing and auto sales are the two most reliable gauges of household activity available on a monthly basis. The development of the housing sales cycle was covered on page 4 and the Q2 decline in surveyed purchasing intentions has already been documented. Regarding autos, sales have been running at an average annualised pace of 21.6 million units in the first half of this year. That compares to a 19.2 million unit pace a year ago. In year-ended percentage terms, Q2 sales increased by 11.2%. Surveyed car purchase intentions diminished sequentially in both Q1 and Q2, but the net level remains comfortably above the long run average.

Official labour demand-supply ratios imply that the national job market eased in Q2, which is to say that urban labour demand out-stripped the supply by a lesser amount than in the previous quarter. There was a pronounced loosening in the eastern provinces, although in absolute terms workers are still deemed to be scarce on the coast, while the job market actually tightened further in the central region, perhaps reflecting the well documented inward migration of labour intensive assembly operations.

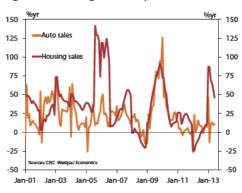
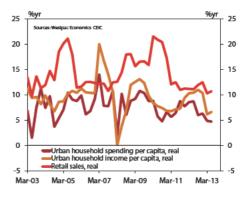
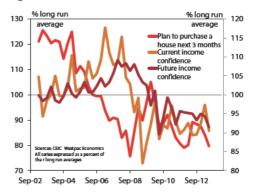


Figure 22: Housing and auto purchases

Figure 23: Household income, spending & retail







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<u>Quality</u>													
	Jun-10 S	Sep-10 [Dec-10 Mar-11	/ar-11	Jun-11	Sep-11	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13
Real GDP %yr	10.3	9.6	9.8	9.7	9.5	9.1	8.9	8.1	7.6	7.4	7.9	7.7	7.5
Nominal GDP %yr	17.7	17.6	17.6	18.0	18.1	18.5	17.0	11.3	9.7	8.5	9.8	9.6	8.0
Contributions to real GDP percentage points ytd													
Final consumption expenditure	5.0	4.3	4.5	6.1	5.1	5.0	5.3	6.4	4.7	4.2	4.1	4.3	3.4
Gross capital formation	5.5	5.4	5.5	0. 0	4.6	4.4	4.4	2.4	4.0	3.9	3.9	2.3	4.1
Net exports	0.7	1.0	0.4	-0.1	0.1	0.1	-0.4	-0.7	-0.9	-0.4	-0.2	1.1	0.1
Secondary industry %ytd	13.3	12.6	12.3	10.8	10.6	10.6	10.3	9.1	8.3	8.1	8.1	7.8	7.6
Tertiary industry %ytd	9.6	9.7	9.8	9.7	9.7	9.5	9.4	7.5	7.8	7.9	8.1	8.3	8.3
Current Account %GDP	3.8	4.3	3.9	3.4	3.2	2.5	1.8	2.1	2.1	2.5	2.3	2.7	2.7
GDP deflator %yr	7.4	8.0	7.8	8.3	8.6	9.4	8.1	3.2	2.1	1.1	1.9	1.9	0.5
Fixed investment deflator %yr	3.6	3.5	5.4	6.5	6.7	7.3	5.7	2.3	1.6	0.2	0.3	0.2	-0.1
Land price index %yr	11.5	11.4	11.1	8.5	8.9	8.4	5.8	3.8	2.3	1.7	2.6	3.9	5.1
Consumer price index %yr	2.9	3.5	4.7	5.1	5.7	6.3	4.6	3.8	2.9	1.9	2.1	2.4	2.4
Non-food %yr	1.5	1.5	1.9	2.5	2.9	2.9	2.3	1.8	1.5	1.5	1.7	1.8	1.6
Central revenue 4qma %yr	28.8	25.3	21.3	21.9	24.1	27.1	25.0	20.2	14.7	10.9	12.8	10.7	10.1
Central expenditures 4qma %yr	18.4	19.9	17.8	20.3	23.7	22.5	21.6	23.2	18.1	18.2	15.1	11.6	10.8
Central operating position 4qma %GDP	-0.9	-1.5	-1.7	-1.0	-0.9	-0.7	-1.1	-1.6	-1.6	-2.2	-1.6	-1.8	-1.8
Money supply M2 %yr	18.5	19.0	19.7	16.6	15.9	13.0	13.6	13.4	13.6	14.8	13.8	15.7	14.0
Bank loans (stock) %yr	18.2	18.5	19.9	17.9	16.9	15.9	15.8	15.7	16.0	16.2	15.0	14.9	14.1
Total credit supply (new, rolling annual) %GDP	45.9	43.1	40.5	39.5	37.9	34.8	31.5	30.9	30.3	31.1	32.4	34.0	35.3

Table 1 continued on page 11

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Quarterly

Exports %yr 40.9 32.2 24.9 26.4 22.0 to G3 37.3 32.2 24.9 26.4 22.0 to Asia ex Japan 40.6 26.8 23.8 30.9 25.8 to Asia ex Japan 40.6 26.8 23.8 30.9 25.8 to non-Asian emerging markets 59.4 55.2 39.2 29.7 32.4 Imports from Asia ex Japan 48.1 27.4 29.7 32.8 23.1 Imports from Asia ex Japan 48.7 29.0 26.1 27.9 21.9 Imports from Asia ex Japan 48.7 29.0 26.1 27.2 29.7 32.4 Imports from Asia ex Japan 48.7 29.0 26.1 27.2 29.7 27.9 27.9 Imports from Asia ex Japan 48.7 29.0 26.1 27.2 29.7 27.9 27.9 27.9 27.9 27.9 27.9 27.9 27.9 27.9 27.9 27.9 27.9 27.9 27.9 27.9 27.9 27.9 27	26.4 19.7 30.9 29.7 29.7 29.7 29.7 48.5	222.0 222.0 25.8 25.8 32.2 23.1 23.1 23.1 21.9 21.9 21.9 21.9 21.9 21.0 21.0 21.0 21.0 21.0 21.0 21.0 21.0	20.5 14.3 16.6 11.5 22.5 14.6 26.2 15.6	20.5 14.3 7.6 10.5 4.5 9.4 16.6 11.5 7.0 6.8 -4.9 -1.6 22.5 14.6 9.2 12.1 13.4 21.7	10.5 6.8	4.5	9.4 -1 6	18.3 3.4	3.7
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to non-Asian emerging markets 59.4 55.2 44.1 27.4 from G3 36.0 26.9 from Asia ex Japan 48.7 29.0 from Australia 48.6 46.0 from Australia 48.6 46.0 from non-Asian emerging markets 52.8 20.1 in FX reserves USDbn 41.2 65.6 in FX reserves USDbn 7 194 se survey - net balance 88.8 70.3 Business conditions 68.8 70.3	29.7 32.8 29.7 27.9 48.5			5.6 10.5	15.1	7.6	12.4	5.7	-5.3
44.1 27.4 from G3 36.0 26.9 from Asia ex Japan 48.7 29.0 from Australia 48.6 46.0 from non-Asian emerging markets 52.8 20.1 alance USDbn 41.2 65.6 in FX reserves USDbn 7 194 se survey - net balance Business conditions 68.8 70.3	32.8 29.7 27.9 48.5		29.4 24.7	.7 15.5	16.7	11.7	10.2	22.2	0.4
from G3 36.0 26.9 from Asia ex Japan 48.7 29.0 from Australia 48.6 46.0 sian emerging markets 52.8 20.1 ain emerging markets 52.8 20.1 bis 41.2 65.6 business conditions 68.8 70.3	29.7 27.9 48.5		24.8 20.6	.6 7.1	6.5	1.6	2.7	8.5	5.0
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sian emerging markets 52.8 20.1		34.5 3	39.9 29.7	.7 18.0	19.0	-8.3	-8.1	7.5	9.1
41.2 65.6 6 7 194 business conditions 68.8 70.3 7	45.0	26.8	38.5 42.4	.4 26.0	24.6	4.9	-1.7	-0.9	-6.8
2 194 Business conditions 68.8 70.3 7	-0.7	46.7 (63.8 48.1	.1 1.1	68.89	79.5	83.3	43.5	65.7
Business conditions 68.8 70.3	197	153	4 –21	21 124	-65	45	26	131	57
68.8 70.3									
	71.1	70.6 6	69.3 67.5	.5 64.3	63.7	61.1	61.8	62.6	57.1
Profitability 60.1 60.4 61.1	58.2	58.7	57.6 55.5	.5 51.2	52.6	51.4	53.1	52.8	55.6
Domestic orders 55.9 57.9	56.9	56.7	55.3 53.2	.2 50.5	50.2	47.4	47.7	48.8	50.3
Foreign orders 53.0 53.2 52.0	51.1	52.5	51.6 48.7	.7 46.9	48.8	47.5	47.1	46.6	49.9
Banking climate - % of long run average									
Demand for loans 101.9 101.4 102.6	105.2	102.3 10	102.5 98.6	.6 98.3	87.4	82.5	87.8	92.6	89.5
Ease of policy stance 104.0 124.6 94.2	70.7	63.8	64.0 76.6	.6 106.3	121.8	130.2	134.5	140.2	142.2
Willingness to lend (corporate perception) 107.9 108.7 106.0	96.1	89.0	84.1 82.0	.00 9.06	94.5	100.9	103.6	107.1	na
Urban consumer confidence - % of long run average									
Current income 88.3 92.0 91.1	97.2	92.9	89.7 90.8	.8 92.6	89.3	89.5	92.4	97.4	90.4
Future income 92.1 95.7 95.4	95.2	95.0	93.3 95.0	.0 94.3	91.4	92.4	96.7	95.9	92.4
Desire for more risky investments 149.5 159.8 186.2	182.1	168.9 16	163.5 145.0	.0 146.6	138.0	na	138.0	154.9	147.0
Desire for more safe investments 118.6 115.3 97.6	108.0	109.0 11	111.9 122.5	.5 121.7	122.5	na	122.3	115.5	119.9



indicator	
Resource related economic indicator	
related e	
Resource	
Table 2: I	Monthly

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											CI-YBINI CI-IUA		
Industrial production %yr 3mma		9.4	9.2	9.1	9.2	9.6	10.0	10.1	10.0	9.6	9.4	9.1	9.1
	Electricity	1.6	1.4	2.1	3.6	5.4	7.4	13.2	6.3	4.6	-1.1	4.9	6.9
	Processed crude oil	0.4	1.4	3.4	5.9	8.3	8. 0.0	8.9	6.5	5.6	4.2	4.0	5.2
	Cement	4.5	5.4	7.3	9.2	9.1	7.0	16.9	9.0	9.1	-1.1	7.6	9.5
	Steel products	7.2	5.6	5.0	9.9	11.1	14.1	16.8	14.0	11.7	7.7	9.1	9.1
	Non-ferrous metals	4.6	5.2	5.9	8.9	11.3	14.2	15.7	13.7	13.2	11.4	11.3	9.3
	Automobiles	15.8	12.1	10.2	7.4	5.3	4.2	18.7	12.1	14.8	4.1	13.7	12.4
	Civilian ships	-3.8	-8.6	-35.2	-17.2	-16.4	-10.4	-18.1	-18.3	-12.5	-18.8	-22.3	-34.2
	Metal cutting tools	31.4	36.4	18.5	18.8	24.4	33.6	50.3	57.5	52.9	36.0	30.9	11.2
		Jul-12	Aug-12 §	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13
Fixed asset investment %yr 3mma		21.2	20.6	21.0	21.6	21.8	20.4	20.0	20.4	21.3	20.8	20.3	19.8
Manufacturing, of which		25.3	23.2	22.1	20.0	20.2	17.6	16.7	15.9	18.0	18.2	18.1	16.5
	Heavy industry	26.7	24.3	22.5	20.3	20.4	17.1	16.0	15.4	18.9	19.4	19.3	15.8
Hard infrastructure, of which		13.6	16.1	18.5	22.2	21.3	19.2	18.4	22.0	24.7	24.1	24.5	22.8
	Highways	20.9	22.2	25.9	29.3	37.6	42.1	36.9	32.3	22.2	20.1	20.5	19.0
	Railways	-19.8	4.1	36.6	62.9	58.6	39.7	14.0	10.5	5.7	24.6	30.9	34.1
	Utilities	18.1	18.8	17.0	18.6	10.6	1.7	3.0	9.9	16.9	14.0	9.8	13.3
Real estate, of which		33.6	32.3	31.0	27.2	23.4	19.2	20.1	22.6	25.1	18.9	15.7	13.0
	Market residential	35.2	35.4	34.2	30.9	25.5	19.6	18.2	19.1	20.5	14.1	10.7	8.3
2	Aarket on-residential	29.8	24.9	23.3	18.4	18.3	18.2	24.8	31.4	36.0	30.6	27.9	24.8
Off-market	et urban construction	19.4	17.3	21.7	15.6	10.4	25.4	26.7	37.5	16.4	17.4	21.1	20.5
		Jul-12 /	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13 /	May-13	Jun-13
Value of new project starts		24.8	28.2	30.0	33.2	38.5	36.6	28.2	15.2	12.0	14.6	16.3	27.1
Number of new project starts		-3.5	4.2	13.5	12.1	1.7	8.2	14.6	18.4	10.9	9.3	0.0 0.0	17.5
Local government projects		22.0	21.0	21.2	21.3	21.9	21.9	22.0	22.4	22.0	21.6	20.9	20.5
Central government projects		9.9	14.7	18.3	26.3	20.8	8.5	0.5	0.1	10.0	9.6	11.6	8.5
State owned enterprise investment		16.2	16.7	16.4	18.0	17.9	15.7	15.0	15.5	18.0	18.1	17.6	16.4

Monthly												
%yr 3mma unless otherwise specified	Jul-12 Aug-12		Sep-12 (Oct-12 Nov-12 Dec-12	lov-12 D		Jan–13 F	Feb-13 Mar-13		Apr-13 May-13		Jun-13
Volume of housing starts	-15.9	-9.7	-12.3	-5.5	-7.8	-0.3	6.8	9.4	3.1	3.0	-2.4	9.1
Volume of housing sales	0.3	7.6	7.5	10.8	16.7	16.6	25.4	31.8	41.9	38.8	31.7	26.5
Value of housing sales - Nationwide	-6.1	-1.8	1.5	4.1	6.8	9.0	35.8	61.5	81.1	73.8	63.7	56.0
Eastern provinces	-6.4	-0.9	3.2	6.4	9.4	11.9	43.5	73.8	97.0	87.7	74.6	64.1
Central provinces	-2.8	0.5	2.8	4.4	6.7	8.7	32.1	54.1	70.3	65.4	58.3	53.6
Western provinces	-7.7	-6.2	-4.5	-2.5	-0.4	1.4	18.2	34.1	47.0	42.8	37.8	35.2
Volume of land sales	-31.9	-9.5	-8.1	-2.0	-13.2	-4.8	1.2	-10.6	-21.4	1.4	24.8	65.8
70 city new house prices net % rising m-o-m	57.1	27.1	12.9	22.9	57.1	65.7	71.4	92.9	95.7	94.3	88.6	84.3
Auto sales	11.4	00. 00	4.9	3.9	3.9	6.9	20.6	13.3	14.5	3.5	11.2	11.4
Excavator sales	-20.7	-21.5	-26.3	-30.0	-28.4	-22.8	-13.8	-26.6	-24.0	-20.7	1.8	4.2
Bulldozer sales	-18.2	-7.6	-6.2	-1.9	1.7	33.0	40.0	23.5	0.7	-1.6	9.7	1.5
Terrestrial freight	12.2	11.6	11.4	12.0	13.3	14.1	14.4	11.3	9.2	7.4	9.0	9.7
Aquatic freight	6.7	4.1	3.1	5.4	8.1	11.4	14.7	11.8	7.8	4.2	4.7	6.5
International air freight	-4.4	-4.9	0.8	1.5	7.2	3.1	40.5	12.4	16.2	-14.7	11.7	9.8
P	Aug-12 Sep-12		Oct-12 N	Oct-12 Nov-12 Dec-12		Jan–13 F	Feb-13 Mar-13		Apr-13 May-13		Jun-13	Jul-13
Manufacturing PMI – index – of which	50.1	49.2	49.8	50.2	50.6	50.4	50.1	50.9	50.6	50.8	50.1	50.3
Output	51.8	50.9	51.3	52.1	52.5	51.3	51.2	52.7	52.6	53.3	52.0	52.4
New orders	49.0	48.7	49.8	50.4	51.2	51.6	50.1	52.3	51.7	51.8	50.4	50.6
New export orders	46.6	46.6	48.8	49.3	50.2	48.5	47.3	50.9	48.6	49.4	47.7	49.0
Order backlog	41.9	45.1	46.5	43.8	45.3	44.4	44.4	47.1	43.6	44.9	42.9	44.7
Raw material inventories	48.5	45.1	47.0	47.3	47.9	50.1	49.5	47.5	47.5	47.6	47.4	47.6
Finished goods inventories	48.0	48.2	47.9	48.1	48.8	47.4	46.6	50.2	47.7	48.6	48.2	47.3
Purchases of inputs	46.8	48.8	49.8	51.2	51.4	53.2	50.2	51.9	51.0	51.5	49.5	50.0
Imports	45.0	47.0	47.7	48.4	48.5	49.1	48.1	48.9	48.7	50.3	47.9	48.4
New orders to finished goods inventories ratio	1.02	1.01	1.04	1.05	1.05	1.09	1.08	1.04	1.08	1.07	1.05	1.07
Source: Westpac Economics, CEIC.												

Table 2: Resource related economic indicators

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Steel

- China domestic average steel prices were down between 3% and 10% in Q2. The lower steel prices, combined with higher iron ore prices resulted in China's steel industry recording a loss of CNY699 million (US\$113 million) in Q2, according to the China Iron and Steel Association (CISA).
- Steel production in China has grown strongly in the first half of 2013, with a new monthly production record of 67 Mt achieved in the 31 days of May. Steel production in Q2 also reached a new record, with 197 Mt of steel produced, an increase of 2.9%qtr and 8.4%yr.
- CISA forecast earlier this year that China's steel consumption growth would be 3.1%yr in 2013, up 0.6ppts from growth in 2012.

Figure 26: Crude steel output: level & growth

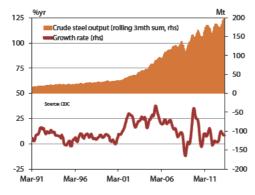
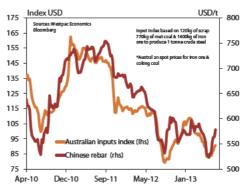


Table 3: Steel prices (quarterly averages)

5500 ·	RMB/t	RMB/t 6500
	Source: Bloomberg	
5000 ·		6000
4500	Mar ha	5500
4000	rebar	5000
3500	-hot-rolled sheet	4500
5500	-wire rod	¥ 1500
	-cold-rolled sheet (rhs)	
3000	+	4000
Ap	or-10 Apr-11 Apr-12	Apr-13

Figure 25: Benchmark steel prices

Figure 27: The rebar price and input costs



Domestic RMB/t	Mar-11	Jun-11	Sep-11	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13
Rebar	4748	4946	4922	4319	4240	4160	3676	3683	3749	3527
Hot-rolled sheet	4763	4856	4801	4268	4272	4255	3663	3849	4043	3623
Cold-rolled sheet	5652	5588	5510	5322	5214	5099	4599	4565	4865	4697
Plate	4879	4956	4853	4312	4273	4255	3655	3703	3934	3676
Wire rod	4758	4881	4979	4466	4257	4179	3686	3653	3697	3526
Benchmarks USD/t										
Rebar benchmarker	633	643	575	561	551	485	495	503	476	476
HRC benchmarker	630	629	568	567	564	483	513	545	493	493
CRC benchmarker	722	719	703	689	670	601	612	647	629	629

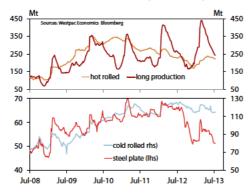
Source: Bloomberg.

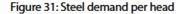
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- Demand for long products used in construction has out-stripped demand for flat products used in industrial production, especially machinery.
- Overall steel product inventories were just 1.7% higher than year ago levels in June. That compares to a 6.1% increase in sales. That benign starting point for inventories is a vivid contrast to the equivalent period a year ago, when a sharp non-discretionary inventory build was beginning to unfold.
- The state of the construction cycle implies that steel sales growth will initially flatten out and then slow going in to the end of the year. Modest machinery demand at home and abroad is likely to amplify this trend.

Figure 29: Steel inventories by product type





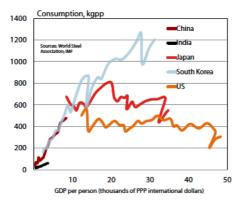


Figure 28: Steel end-use by sector

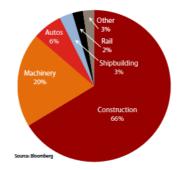
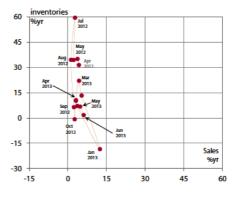


Figure 30: Steel inventory-to-sales scatter plot



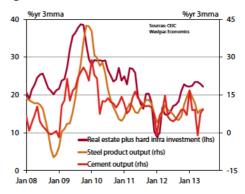


Figure 32: Construction, cement and steel

Iron ore

- The Steel Index (TSI) 62% spot iron ore price CFR Tianjin averaged US\$125.8 a tonne in Q2, down 15.1% from Q1. Prices declined steadily from a peak of US\$141 a tonne in mid-April to end the quarter at US\$116.5 a tonne. In July prices rebounded to around US\$127.2 a tonne in response to lower stock levels in China.
- At the end of Q2 port inventories of iron ore were 71.5 Mt, up from 68.1 Mt at the end of Q1, but still substantially lower than the 92.6 Mt that was held at the end of 2012Q3. This may indicate that stocks have been held increasingly at individual mills, or that buyers are unwilling to restock at prevailing spot prices and are relying on deliveries, and not stocks, to produce steel.

Figure 34: Iron ore prices and rebar steel





Figure 33: Iron ore prices: spot and forward

Figure 35: Port inventories versus end demand

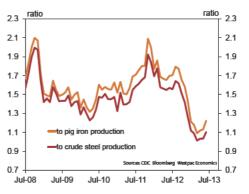


Table 4: Iron ore prices (USD/t, 62% ferrous metal content unless otherwise indicated).

TSI spot price, CFR	Mar-11	Jun-11	Sep-11	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13
Quarter average	178	175	176	141	142	139	112	121	148	126
Quarter end	172	167	171	139	148	134	104	145	137	117
Quarter high	192	183	181	171	148	149	136	145	159	141
Quarter low	164	167	168	117	134	130	87	104	133	110
TSI in CNY terms, CFR	1174	1140	1129	895	895	882	712	753	922	774
IODEX Aust FOB	172	169	168	129	135	133	106	113	141	118
IODEX Brazil FOB	160	156	152	111	121	120	93	99	129	106

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

- China imported a record 198 Mt of iron ore in Q2, around 5 Mt higher than the previous record set in 2012Q4. In Q2 imports from Australia comprised more than 50% of China's total imports in a quarter for the first time, reflecting strong production growth from key Pilbara producers.
- The value of iron ore imports increased 9% in Q2 to total US\$26 billion with higher volumes offsetting lower prices.
- Australia exported 108 Mt to China in Q2, up 16.1% from Q1. Higher export volumes were supported by capacity expansions and strong production at BHP Billiton and Fortescue mines. The value of exports increased 12.0% in Q2 to total \$A12.6 billion.

Figure 37: Australian iron ore exports to China

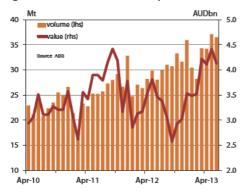
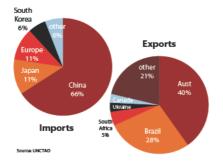


Figure 39: World trade in iron ore - seaborne



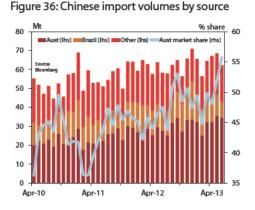


Figure 38: Chinese import values & volumes

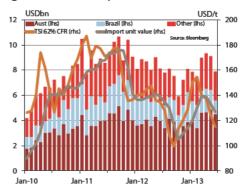
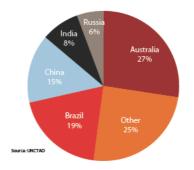
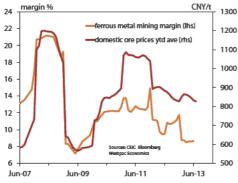


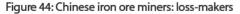
Figure 40: Shares of world iron ore output



- China's total iron ore needs are met roughly 60% • internally and 40% by imports. The import share has risen in trend terms over the last decade, with Australia's share within imports also on the increase.
- A great deal of China's domestic mines are high . cost and the overall reserve is low in metal content. The profit margins of domestic miners have been narrowing since late 2011. At current prices, around 17% of Chinese miners (by number of firms, unweighted) are making losses.
- Further market share gains for imported supply . are anticipated. A swing factor in coming years will be India's willingness to re-enter the trade.

Figure 42: Chinese iron ore miners' margins







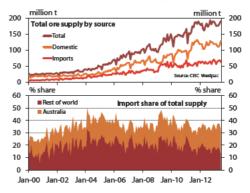


Figure 41: China's total ore supply

Figure 43: Chinese output, imports & stocks

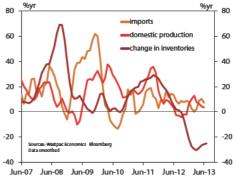
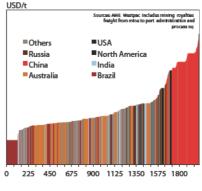


Figure 45: Iron ore cost curve



Cumulative export supply, Mt

data
summary
coal
metallurgical
ore & r
Table 5: Iron

Iron ore		unit	Mar-11	Jun-11	Sep-11	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13
China iron ore imports		Mt	177.1	157.3	174.2	178.2	187.2	179.8	185.3	193.1	186.5	198.0
	Australia	Mt	68.1	65.5	81.1	82.1	83.0	82.7	91.6	94.3	89.8	102.6
	Brazil	Mt	40.0	28.6	36.2	38.1	41.6	35.4	38.8	48.8	38.4	32.1
	value L	USDbn	27.8	26.0	30.3	28.2	25.6	25.1	23.4	21.2	24.2	26.3
Raw production *		Mt	240.7	324.2	372.0	378.0	256.4	342.1	361.1	369.0	287.4	356.6
Iron ore stocks at ports, end of qtr		Mt	82.2	92.3	92.8	94.8	96.1	94.8	92.6	70.5	68.1	71.5
weeks of imports	~	weeks	6.0	7.6	6.9	6.9	6.7	6.9	6.5	4.7	4.7	4.7
Australian exports to China		Mt	62.3	73.3	81.0	88.6	78.1	86.1	91.8	100.9	92.9	107.9
	value A	AUDbn	9.2	11.2	12.4	11.1	9.2	10.8	0.0	9.5	11.2	12.6
Metallurgical coal												
China met coal imports		Mt	10.5	8.7	11.2	14.3	12.2	15.4	8.9	17.0	17.2	18.1
	value U	JSDmn	1666	1153	1632	2230	2022	2355	1220	2048	2431	2498
Australian exports to China		Mt	2.0	2.0	4.3	5.4	6.9	4.8	3.6	13.0	9.1	9.7
Share of exports to China		%	7	9	12	15	20	13	10	32	24	23
Source: Bloomberg, ABS, CEIC. * Run of mine output with a low iron content.	In of mine out	put with a	a low iron c	ontent.								

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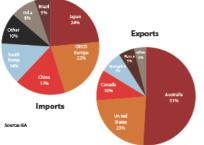
Metallurgical coal

- Spot prices for metallurgical coal have been . decreasing steadily since February 2013, with prices averaging around 15% lower in Q2 compared with Q1. At current price levels, the margins of many producers around the world are believed to be under significant pressure with some already operating at a loss.
- Imports of metallurgical coal into China in Q2 reached a new record of 18.1 Mt, surpassing the previous record of 17.2 Mt achieved in Q1. Supported by higher volumes, import values for Q2 edged higher to US\$2.5 billion.
- Australia's exports of metallurgical coal to . China totalled 9.7 Mt in Q2, up 6.3%. Export values increased 2.0% to \$A1.3 billion as a result of higher export volumes.



Figure 46: Met coal spot prices

Figure 48: Met coal use and supply by country



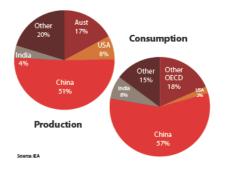


Table 6: Metallurgical coal prices (quarterly average spot prices).

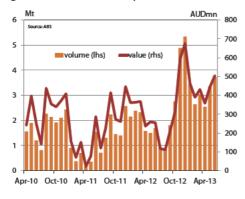
	unit	Jun-11	Sep-11	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13
Prem Low Vol HCC CFR China	USD/t	332.1	308.2	255.1	230.1	236.3	188.0	169.0	179.7	155.0
Low Vol PCI CFR China	USD/t	na	na	174.7	165.3	164.9	135.2	136.3	154.9	127.2
Semi Soft CFR China	USD/t	na	na	167.4	156.4	141.3	114.6	120.4	132.6	114.5
Prem Low Vol HCC FOB Aust	USD/t	313.4	291.1	237.2	214.3	221.0	174.3	155.2	165.9	141.5
Prem Low Vol HCC FOB Aust	AUD/t	295.1	277.2	234.6	203.0	219.2	168.0	149.4	159.6	142.6

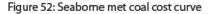
Sources: Bloomberg; Platts. CFR is cost including freight. FOB is free on board. HCC is hard coking coal.

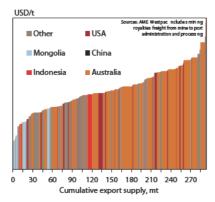
Figure 47: World trade in met coal

- China is far and away the world's major producer of metallurgical coal. In the seaborne market, Australia is a major player, while China's land neighbours have a material market share in it's imports. In recent years the USA has emerged as a swing exporter when global prices spike on supply disruptions in other jurisdictions.
- The six-to-twelve month outlook for metallurgical coal demand is subdued, given that the growth rate of Chinese steel output has plateaued, with deceleration anticipated heading into 2014. However, as noted, spot markets are presently trading at or around the reservation price of higher cost producers, which implies limited downside for prices.

Figure 50: Aust met coal exports to China







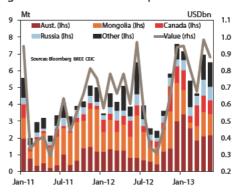


Figure 49: Chinese met coal import volumes

Figure 51: Queensland met coal exports - total

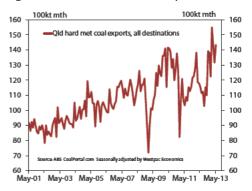
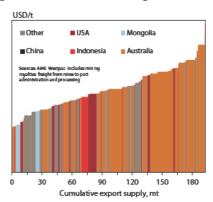


Figure 53: Seaborne hard coking coal cost curve



Developments in China's energy policy

China's 12th Five-Year Plan on Energy Development was released in January 2013. The overarching aim of the plan is to limit energy consumption growth and increase the use of non-fossil energy. Major goals for 2015 include:

- Cap total energy consumption at 4 billion tonnes of coal equivalent.
- Cap total electricity consumption at 6.15 trillion kilowatt hours.
- Cut energy consumption per unit of GDP by 16% compared with 2010.
- A broader energy efficiency improvement of 38%.
- Non-fossil energy to account for 11.4% of total primary energy consumption.
- Natural gas to account for 7.5% of total primary energy consumption by 2015.

In February, the government announced its intention to close around 5000 small-scale coal mines during 2013 to improve safety performance. All coal mines were required to install emergency systems by the end of June 2013, with priority placed on the construction of refuge chambers.

New pricing arrangements for diesel and gasoline were introduced in March 2013. Under the new system, the price adjustment cycle has been reduced from 22 to 10 working days so that the domestic oil price more closely reflects international market prices.

In March, China introduced new fuel economy standards to help address air quality and energy security concerns. The average fuel consumption of motor vehicles is expected to be reduced from around 7.8 litres per 100 kilometres in 2009 to 6.9 litres by 2015 and to 5.0 litres by 2020. Chinese automakers must now calculate the fuel efficiency of the vehicles they produce and will need to use more fuel-efficient engines to meet these requirements.

China restructured the National Energy Administration (NEA) in March to streamline the regulatory and administrative aspects of China's energy sector. As part of this process, the State Electricity Regulatory Commission was absorbed into the NEA to remove duplicated functions. The main tasks of the NEA will now include: formulating and implementing energy strategies and policies; advising on energy market reform and sector regulation.

China proposed, but has yet to approve, new standards for imported coal that require energy content of 4540 kilocalories per kilogram, maximum sulphur content of 1% and maximum ash content of 25%. It is expected that similar, but less strict, rules may be applied to domestic coal. This is most likely to affect imports from Indonesia (lower calorific content) and the US (high sulphur) and may open up opportunities for increased exports for Australia.

In order to address air quality and pollution issues, China plans to invest CNY2.3 trillion (\$A414 billion) in energy saving and emission reduction projects. They are also intending to introduce a carbon tax.

Plans to build a uranium processing facility in Guangdong were cancelled in July following public protests. China is targeting 58 gigawatts electric (GWe) of nuclear power capacity to be installed by 2020.

Electricity trends

China's electricity generation increased by 5% in Q2 to total 1235 billion kilowatt hours of electricity. The increase is primarily seasonal. Industrial demand for power is predictably weak over the Lunar New Year period, and secondary industry is the major consumer of electricity at this stage of Chinese economic development.

Investment in new electricity generation capacity has been declining since 2010. New investment in thermal sources (including both coal and gas) declined at an average annual rate of 10.7% between 2010 and 2012, with more investment being directed to new hydro projects (which increased at an average annual rate of 16%).

Notably, the contribution to the growth in generation coming from thermal sources was negative through much of 2012.

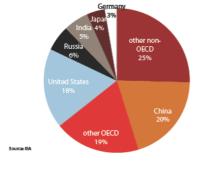
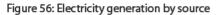


Figure 54: World energy consumption



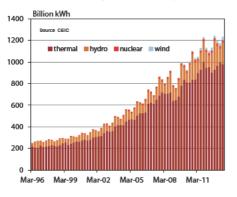


Figure 58: Growth in electricity output by source

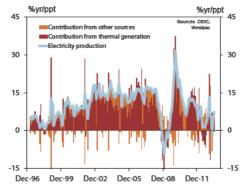


Figure 55: World energy production

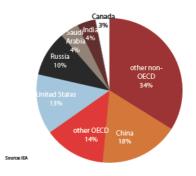


Figure 57: Electricity use by sector

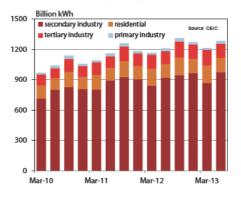
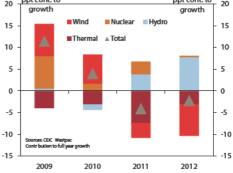


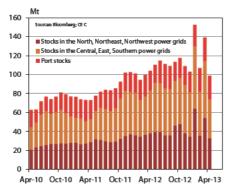
Figure 59: Investment in new electricity capacity



Thermal coal

- Benchmark thermal coal price indexes continued to decline in Q2. The Q2 average spot price decreases were 6.8% for Newcastle, 5.4% for Richards Bay and 1.9% for Qinhuangdao. However, the recent appreciation of the USD against many currencies has resulted in lower domestic price variations. Although Newcastle spot prices were down 6.8% based on USD prices in Q2, this was a 1.4% decrease in AUD terms.
- At current price levels the profitability at many coal mines around the world is under substantial pressure and some operations in the USA, Russia, Indonesia and Australia may already be operating at a loss.

Figure 61: Thermal coal stocks: ports & generators



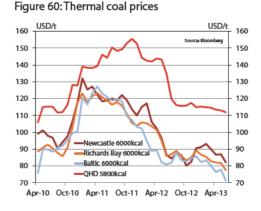


Figure 62: Export thermal coal cost curve

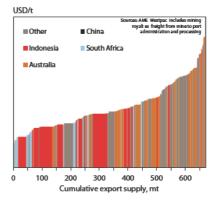


Table 7: Thermal coal prices (USD/t, NAR unless otherwise indicated).

Quarterly averages	Mar-11	Jun-11	Sep-11	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13
QHD 5800kcal	138.5	144.0	149.5	153.8	143.0	139.8	117.2	116.6	114.9	112.8
QHD 5800kcal RMB/t	911.5	935.4	959.5	977.6	901.6	885.5	744.6	728.7	715.2	694.4
Newcastle 6000kcal	128.2	120.1	120.5	113.9	112.3	94.5	86.1	84.3	91.3	85.4
Newcastle 6000kcal AUD/t	127.5	113.0	115.1	112.0	106.4	93.5	82.7	81.2	88.0	86.7
Richards Bay 6000kcal	120.8	121.1	116.6	106.6	104.8	93.5	87.5	85.8	84.8	80.5
Baltic 6000kcal	120.1	123.0	118.9	106.7	95.3	83.7	84.4	84.4	82.0	75.5

Sources: Bloomberg. NAR stands for net as received.

- China's imports of thermal coal (including lignite) decreased 3.7% in Q2 to total 60.5 Mt. Imports were, however, 4.0% higher than Q2 2012. Imports from Indonesia were down 11.0%qtr and 3.6%yr in Q2, and totalled 29.4 Mt. Imports from Australia were down 5.4% compared with Q1, but up 6.9% compared with Q2 2012.
- Australia's exports of thermal coal to China totalled 11.3 Mt in Q2 2013, up 43% from Q1, although down 1.0% from an all-time high of 11.4 Mt in Q4 2012. In line with higher volumes, export values increased 48% to \$A829 million.



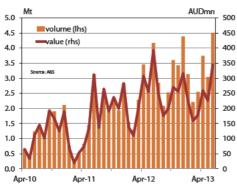
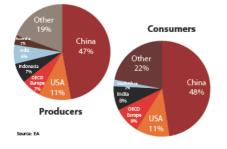


Figure 66: Thermal coal use and supply by country



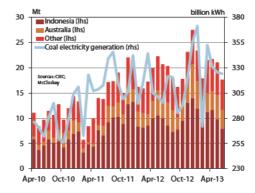


Figure 65: Capital investment in coal mining

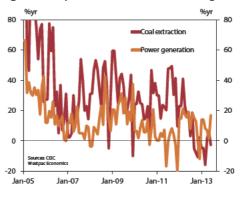


Figure 67: World trade in thermal coal

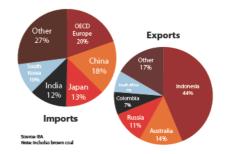


Figure 63: Thermal coal imports volumes

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Table 8:Thermal coal summary data	
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	unit	Mar-11	Jun-11	Sep-11	Mar-11 Jun-11 Sep-11 Dec-11 Mar-12		Jun-12	Sep-12	Jun-12 Sep-12 Dec-12 Mar-13	Mar-13	Jun-13
China imports	Mt	27.5	37.8	53.5	58.8	49.3	62.9	54.4	68.5	62.8	60.5
Indonesia	Mt	15.4	18.6	29.7	34.9	25.1	30.5	23.6	36.5	33.1	29.4
Australia	Mt	2.9	3.4	8.3	7.6	8.1	11.4	11.3	14.8	12.9	12.2
value	USDmn	2.01	2.90	4.53	4.83	4.94	5.97	4.88	5.29	4.85	4.68
End of quarter stocks at ports	Mt	21.2	19.3	17.6	20.5	20.6	25.6	21.1	22.9	25.0	29.7
weeks of imports	weeks	10.0	6.6	4.3	4.5	5.4	5.3	5.0	4.4	5.2	6.4
Stocks in Noth, Northeast, Northwest power grids	Mt	27.3	31.2	29.3	37.0	36.6	39.6	46.2	34.7	54.4	na
Stocks in Central, East, Southern power grids	Mt	23.5	34.1	35.2	44.7	40.1	51.7	47.0	46.5	59.7	na
Exports to China	Mt	1.5	5.4	5.9	7.1	5.1	10.3	7.5	11.4	7.9	11.3
Share of exports to China	%	4.8	14.9	14.9	17.3	13.9	25.4	16.6	23.6	19.0	24.2
Source: CEIC, ABS, Bloomberg.											

Oil

- Global oil prices were lower on average in Q2 in response to expectations of weaker economic performance in major economies, particularly China; strong production, especially in non-OPEC countries; and reduced geopolitical tensions. Developments in Egypt contributed to a modest rally in prices in July.
- In March 2013, China introduced new domestic pricing arrangements for diesel and gasoline. The reform will see users face prices closer to those prevailing on world markets. Domestic prices will now be reviewed every 10 working days, while the types of crude oil used for the adjustment calculations have been updated.

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

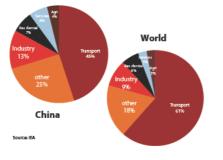


Table 9: Crude oil spot prices (USD/bbl, quarterly).

Table Frendae on sport	pinces (o	50,000	quarte							
Brent	Mar-11	Jun-11	Sep-11	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13
Quarter average	105.5	117.0	112.1	109.0	118.4	108.8	109.4	110.1	112.6	103.3
Quarter end	117.4	112.5	102.8	107.4	122.9	97.8	112.4	111.1	110.0	102.2
Quarter high	117.4	126.7	118.8	115.0	126.2	125.4	116.9	115.8	118.9	111.1
Quarter low	93.3	105.1	102.6	99.8	109.8	89.2	97.3	105.7	107.5	97.7
Tapis										
Quarter average	109.7	124.4	121.0	118.9	128.0	117.2	115.9	113.3	118.3	108.9
Quarter end	122.6	119.7	115.0	117.5	133.0	101.1	119.0	114.1	116.0	109.7
Quarter high	122.6	132.1	127.2	125.5	135.6	133.7	124.5	117.3	125.2	116.1
Quarter low	92.8	113.3	114.3	113.0	119.5	97.9	103.1	108.1	113.7	103.8
West Texas intermediate										
Quarter average	94.5	102.3	89.5	94.0	103.0	93.3	92.2	88.2	94.3	94.1
Quarter end	106.7	95.4	79.2	98.8	103.0	85.0	92.2	91.8	97.2	96.6
Quarter high	106.7	113.9	99.6	102.6	109.5	106.2	99.0	92.5	97.9	98.4
Quarter low	84.3	90.6	79.2	75.7	96.4	77.7	83.8	84.4	90.1	86.7
C										

Source: Bloomberg.

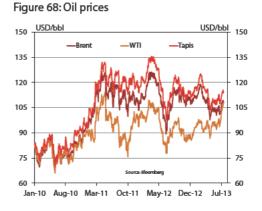
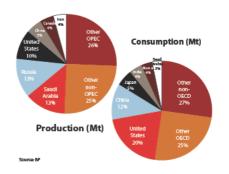


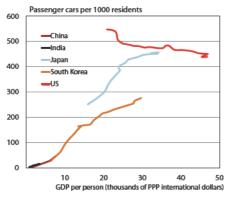
Figure 70: Oil use and supply by country



- China imports more than half of the oil it uses with the majority sourced from the Middle East, Russia and Angola. Chinese oil imports increased marginally (0.3%) in Q2 compared with Q1 following the commencement of the driving season (April–October) and stock building at refineries.
- Imports of crude oil from Australia increased by 178% compared with Q1 because of lower imports from Saudi Arabia (down 7% in Q2). However, the 2013 year-to-date value of crude oil imports from Australia declined by 32% to \$979 million, driven by lower volumes.







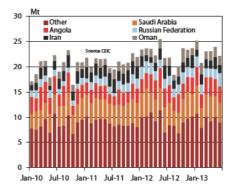
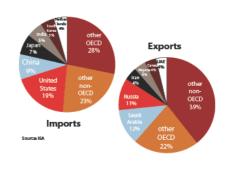
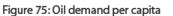
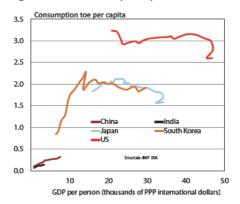


Figure 71: Chinese oil import volumes









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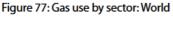
Oil		unit	Mar-11	Jun-11	Sep-11	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13
China imports		Mt	63.4	62.8	60.9	65.4	70.6	69.5	60.3	70.7	69.0	69.2
	Saudi Arabia	Mt	12.5	11.6	12.0	14.1	14.3	13.7	11.6	14.3	14.0	13.0
	Angola	Mt	8.1	7.5	7.5	8.1	9.5	11.5	9.8	9.4	9.7	10.4
	Russian Federation	Mt	4.0	4.9	4.0	5.7	7.2	5.6	5.5	6.1	6.0	6.4
	Iran	Mt	6.5	7.0	6.8	7.5	4.3	6.4	5.1	6.2	5.0	5.5
	Oman	Mt	3.9	3.8	5.6	4.8	4.3	4.7	4.8	5.8	5.6	5.7
	other	Mt	28.5	28.0	25.0	25.2	31.1	27.6	23.5	28.9	28.7	28.2
China production												
	Crude	Mt	51.3	51.5	50.7	50.1	51.0	50.8	52.0	53.2	17.7	52.3
	Gasoline	Mt	19.8	19.5	20.5	21.0	21.5	21.1	22.6	24.1	8.3	24.0
	Diesel	Mt	41.3	41.9	41.1	42.5	42.8	41.8	41.6	44.3	14.8	42.1
Australian exports to China												
	volume	ML	717	1046	1206	1158	949	1084	609	838	371	1031
	value	AUDmn	479	748	848	829	672	765	416	598	263	715
Gas												
China pipeline imports		Mt	1.9	2.7	2.7	3.0	3.5	3.7	3.9	4.6	4.5	4.9
China LNG imports		Kt	2310	2860	3380	3650	3260	3410	3800	4230	4180	4160
	Qatar	Kt	337	502	456	1037	1021	1161	1526	1284	1933	1432
	Australia	Kt	722	906	972	1039	779	908	904	972	842	974
	Indonesia	Kt	301	483	597	605	551	666	543	665	363	788
	Malaysia	Kt	333	470	410	359	406	426	444	577	648	645
	other	Kt	617	499	946	610	503	248	384	733	394	320
China production		Bcm	27	24	24	27	33	25	25	29	10	27
Chinese imports from Australia												
	volume	Kt	722	906	972	1039	779	908	904	972	842	974
	value	USDm	124.4	192.0	166.3	176.6	132.2	160.3	172.9	164.3	143.4	182.9
Source: CEIC, ABS.												

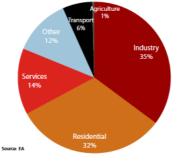
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Gas

- The import unit value of LNG and pipeline gas • into China each declined by 12% in Q2. Most domestic gas prices are regulated and have exhibited little volatility in response to the recent import price fluctuations.
- China currently accounts for around 4% of • world gas consumption with the majority of China's gas used in the industrial and residential sectors. The Government is targeting higher gas consumption in the 12th Five-Year Plan for Energy Development and aims to increase its share of total energy consumption to 7.5%. However, water supplies may limit the development of domestic shale gas reserves and pose a challenge to achieving this target





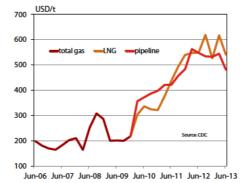
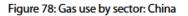


Figure 76: Gas unit values in China



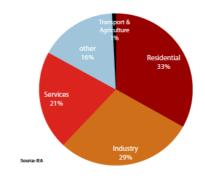


Figure 79: Gas demand per capita

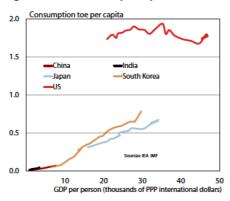
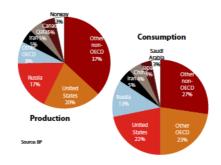


Figure 80: Gas use and supply by country





- China became a net gas importer in 2007, and imports have grown substantially since. China's total gas imports increased by 5% in 2013Q2 relative to Q1, with a 10% increase in pipeline imports offsetting a 0.3% decrease in LNG imports.
- Australia was the second largest supplier of LNG to China behind Qatar in Q2. LNG imports from Australia increased by 16% to total 974 kt while imports from Qatar dropped 26%. In 2013 yearto-date, LNG imports have increased by 8% to 1817 kt. The value of LNG imports from Australia increased by 28% in Q2 to US\$183 million and 12%ytd to US\$326 million.



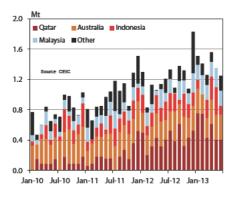
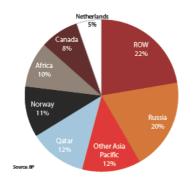


Figure 84: World gas exports by country



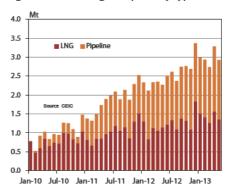


Figure 81: Chinese gas imports by type

Figure 83: Australian LNG exports to China

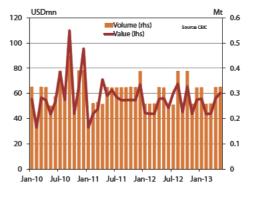
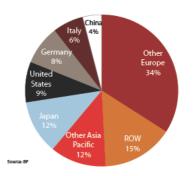


Figure 85: World gas imports by country



USDmn

ce: CEIC China Pet

Volume (rhs)

Value (Ihs)

1500

1200

900

600

Tonnes U₃O₈ 15000

12000

9000

6000

3000

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bree.gov.au

Uranium

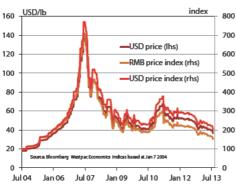
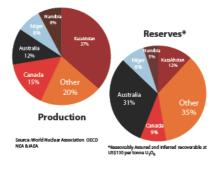


Figure 86: Uranium prices

Figure 88: Global uranium output & reserves



300 0 Jun-08 Jun-09 Jun-10 Jun-11 Jun-12 Jun-13

Figure 87: Australian uranium exports to China

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Figure 89: Uranium use by country

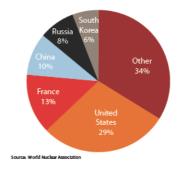


Table 11: Uranium summary data.

	Units	Jun-11 S	Sep-11 D	Dec-11 l	Mar-12	Jun-12 S	Sep-12	Dec-12	Mar-13	Jun-13
Uranium spot price U ₃ O ₈	USD/lb	56	52	52	52	51	49	43	43	41
China nuclear power output	bn kWh	21	24	21	21	22	26	25	23	24
Investment in nuclear	RMBbn	19	19	23	17	15	20	26	12	14
China uranium imports	t	2741	3620	7150	1978	0	2510	10734	4516	2567
Value	USDmn	324	440	807	231	0	290	1189	491	292

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

FOLIO NO. 34

- Uranium spot prices declined by 5% in Q2 to average US\$41 a pound. World uranium prices have been depressed since the 2011 Fukushima Daiichi incident as demand from newly commissioned reactors in China have not offset lower demand associated with the closure of capacity in Japan and Europe. Prices have now dropped below US\$35 since the end of Q2.
- China has been investing heavily in new nuclear generation capacity, increasing capex by 4% to RMB24 billion in Q2. China is targeting 58 GWe of nuclear power capacity to be installed by 2020 and currently has 28 nuclear reactors under construction.

Figure 91: New capacity: planned & underway

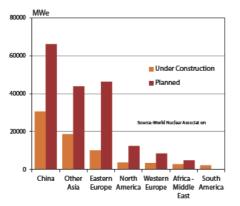
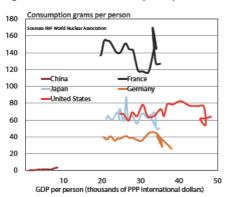


Figure 93: Uranium demand per capita



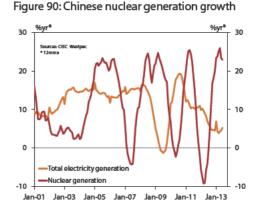
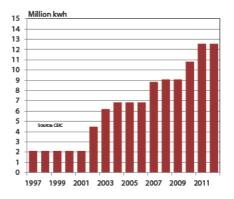


Figure 92: Chinese nuclear generation capacity



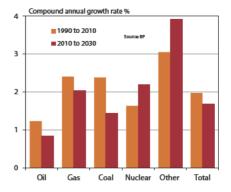


Figure 94: Growth in world energy by source

Gold

- World gold prices fell significantly in Q2, partially in response to announcements by the US Federal Reserve Chairman that the US' unconventional monetary policy setting would soon become less accommodative (i.e. 'QE' would be 'tapered'). Selling by Japanese holders taking profits in the wake of the sharp decline in the yen also contributed. Subsequent outflows of gold from Exchange Traded Funds accelerated the downward spiral. Prices averaged around US\$1417 for the quarter but ranged from a high of US\$1600 at the start of April to a low of US\$1200 near the end of June.
- Chinese gold prices mirrored world markets in Q2, trending down to average CNY286 a gram, 13% lower than Q1. The price of gold in China ended June at CNY243.5 a gram, 27% lower than at the start of the year.
- China's imports of gold through Hong Kong declined by 32% to 253 tonnes in Q2 reflecting the usual seasonal pattern of higher buying activity for gift giving during Chinese New Year celebrations in Q1.
- The volume of Australia's gold exports to China increased 21% in Q2. Increased volumes into China supported an 11% increase in Australian export earnings from gold in Q2.



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	Mar-11	Jun-11	Sep-11	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13
Quarter average	1388	1509	1706	1683	1691	1612	1653	1718	1632	1417
Quarter end	1432	1500	1624	1564	1668	1597	1772	1675	1597	1235
Quarter high	1437	1564	1900	1795	1784	1678	1777	1790	1693	1600
Quarter low	1314	1429	1488	1546	1566	1540	1567	1648	1565	1201
Shanghai avg RMB/g	297	316	353	346	345	329	338	345	329	286
Shanghai avg USD/g	45	49	55	54	55	52	53	55	53	46

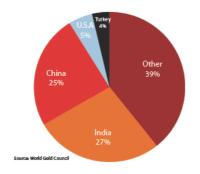
FOLIO NO. 32

- China's share of world gold consumption increased from 5% in 2003 to 19% in 2012. China is currently the second largest consumer of gold behind India. However, initiatives by the Indian government to restrain gold purchases and to sponsor financial over physical saving, as the authorities there look for ways to trim their external financing needs, may result in China becoming the largest gold market.
- Even so, on one score China is not a major player in gold: the share of its enormous foreign exchange reserves held in the metal. IMF data cited by the World Gold Council argues that only 1.3% of China's reserves are held in gold, even though its physical holding of 1054 tonnes makes it the fifth largest national holder.

Figure 98: Gold exchange traded funds



Figure 100: Gold fabrication consumption



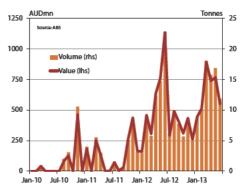


Figure 99: Gold output by country

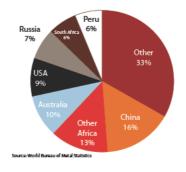


Figure 101: Gold end-use by sector

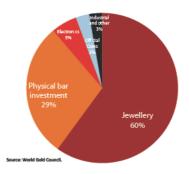


Figure 97: Australian gold exports to China

Gold	unit	Mar-11	Jun-11		Sep-11 Dec-11 Mar-12	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13
China imports (via Hong Kong)	t	20.7	45.2	138.7	227.6	135.5	247.3	199.1	252.6	371.9	253.1
Domestic production	t		32.4	31.3	32.1	29.6	31.7	43.2	40.1	39.1	na
total Australian exports	t	77.8	71.0	78.1	80.7	61.9	83.0	69.4	67.8	67.7	75.6
value	a AUDmn	. ,	3143.2	3897.7	4210.1	3143.2 4	4210.9	3784.6	4088.7	3614.3	3551.6
Australian exports to China	Ļ	9.6	3.0	2.2	16.4	17.8	49.9	23.9	18.9	36.9	44.5
value		7	135.6	1	864.2	924.9	2529.0	1185.1	1000.8	1849.4	2053.7
Share of exports to China	%	12.3	4.3	2.9	20.3	28.7	60.1	34.4	27.9	54.5	58.9
Silver											
China imports	t	101.7	118.0	154.2	129.3	93.7	111.4	110.3	99.7	83.6	85.5
Domestic production	t	2.7	3.0	2.9	3.7	3.2	3.2	3.3	3.8	na	na
Source: CEIC, ABS.											

Table 13: Gold and silver summary data

FOLIO NO. 31

FOLIO NO. 30

Fabrication

Othe

30%

States

Silver

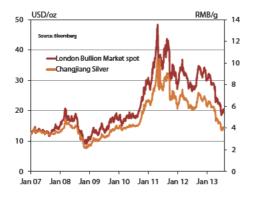


Figure 102: Silver prices, London & Changjiang

Figure 104: Chinese silver import volumes: annual

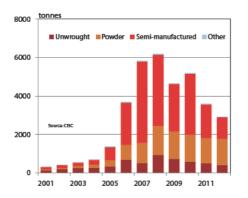


Figure 105: Silver end-use by sector

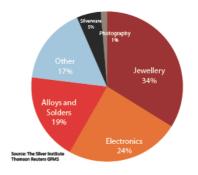


Table 14: Silver prices (USD/oz unless specified otherwise)

LBMA spot prices	Mar-11	Jun-11	Sep-11	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13
Quarter average	32.0	38.5	38.9	31.8	32.7	29.5	29.9	32.6	30.1	23.2
Quarter end	37.7	34.7	29.9	27.8	32.3	27.5	34.5	30.3	28.5	19.7
Quarter high	37.7	48.4	43.8	35.3	36.9	33.0	34.8	35.0	32.3	28.0
Quarter low	26.8	33.6	29.9	27.1	27.9	26.4	26.8	29.9	28.4	18.5
Changjiang RMB/g	7.02	8.44	8.34	6.81	6.79	6.18	6.27	6.65	6.11	4.72
Changjiang USD/g	1.06	1.29	1.29	1.07	1.07	0.98	0.99	1.05	0.98	0.76

Sources: LME, Bloomberg.

Figure 103: Silver output & fabrication demand

12%

China

20%

Othe

32%

Peru

14%

China

15%

Production

The 5 lver institute The

Copper

- In Q2 the average LME copper price decreased by 9.9%. Copper was one of the 'China-linked' asset prices that suffered during June's interbank interest rate spike. Copper peaked in early April at US\$7547 but fell to US\$6638 towards the end of June with the temporary closure of the Grasberg mine in Indonesia providing only minor support to prices.
- Chinese onshore copper prices decreased by 7.7%qtr in Q2 and 6.7%yr, a slightly better performance than the LME. In July, the Chinese Government announced the closure of out-dated domestic production capacity across 19 industries which included around 650 kt of refined copper production capacity.



USD/t '000 RMB/t'000 11 - 75 -LME Spot (Ihs) LME 3mth forward (lhs) 70 10 -SHFE spot (rhs) 65 9 60 8 55 50 6 45 Jan 10 Jul 10 Jan 11 Jul 11 Jan 12 Jul 12 Jan 13 Jul 13

Figure 106: Copper prices, London & Shanghai

Figure 108: Copper use and supply by country

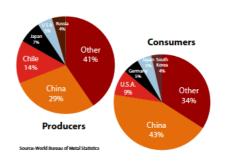


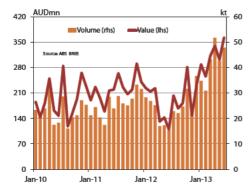
Table 15: Copper prices (USD/t unless specified otherwise)

LME spot prices	Mar-11	Jun-11	Sep-11	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13
Quarter average	9646	9137	8982	7489	8310	7869	7706	7909	7931	7148
Quarter end	9400	9301	7132	7554	8480	7605	8268	7915	7583	6751
Quarter high	10148	9823	9827	8040	8658	8576	8401	8340	8243	7547
Quarter low	8980	8537	6976	6785	7471	7252	7327	7541	7539	6638
3 Month forward	9640	9155	9003	7511	8314	7829	7712	7921	7964	7180
Shanghai avg RMB/t	71305	69488	67506	56590	58931	56554	56518	56984	57189	52778
Shanghai avg USD/t	10774	10613	10431	8868	9292	8965	8922	8971	9161	8473

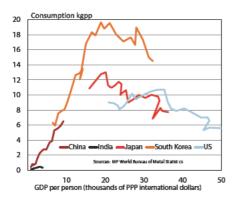


- China's copper imports (in metal content) decreased by 5.3% in Q2 to total 1028 kt as higher domestic production reduced the need for imports. China's refined copper production totalled 1693 kt in Q2, 9.5% higher than Q1. China's copper imports decreased by 3.8%ytd to 2114 kt.
- Chile remained the principal supplier of copper to China, accounting for around 30% of imports in Q2, with Australia supplying around 12%. In Q2 imports from Chile decreased by 12% to 383 kt while imports from Australia increased by 62% to a record high of 157 kt.
- Australia's copper exports to China increased by 17.7% in Q2 with value increasing by 31.1%, driven by a rise in refined exports.

Figure 110: Australian copper exports to China







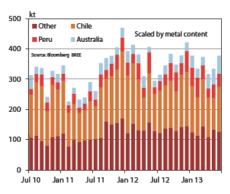


Figure 109: Chinese copper import volumes

Figure 111: Copper end-use by sector

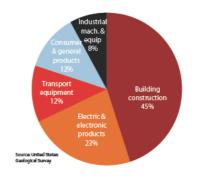


Figure 113: Copper output by Chinese province

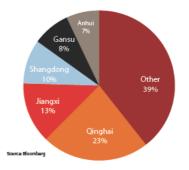


Table 16: Copper summary data

		unit	Mar-11		Sep-11	Jun-11 Sep-11 Dec-11 Mar-12	Mar-12	Jun-12	Sep-12	Sep-12 Dec-12	Mar-13	Jun-13
China												
tc	total imports	文	843	762	983	1251	1187	1009	1043	1148	1086	1028
	Australia	¥	58	77	104	82	97	75	80	78	97	157
	Chile	¥	403	323	417	557	558	393	439	485	436	383
	Peru	¥	82	72	93	136	127	125	127	169	171	120
	other	¥	300	290	368	477	406	416	397	415	382	369
refined production		¥	1194	1327	1412	1231	1300	1465	1440	1618	1546	1693
world metal exchange stocks		¥	688	617	652	545	555	444	432	589	888	911
total world stocks		ᅶ	1397	1068	1107	981	961	860	860	1061	1297	na
stocks - weeks		weeks	3.9	2.8	2.9	2.5	2.4	2.2	2.2	2.8	3.4	na
total Australian exports		kt	208	222	219	255	210	242	223	271	228	265
	value	AUDmn	2041	2132	2212	2251	1851	2186	1894	2194	1890	2117
Australian exports to China		¥	99	70	80	93	81	50	70	06	108	142
	value	AUDmn	614	596	669	751	661	385	554	660	853	1003
Share of exports to China		%	32	32	36	36	38	21	31	33	48	54
Source: Bloomberg, World Metal Statistics, CEIC	EC.											



Aluminium

- LME spot prices fell by 8.4%qtr in Q2. Despite production cuts, world supply continued to exceed demand as weaker economic growth stifled consumption in key markets. Prices averaged around US\$1835 for the quarter but ranged from a high of US\$1939 at the start of June to a low of US\$1720 at the end of June.
- Reflecting the drop in LME prices, Changjiang (Shanghai) spot prices averaged around RMB14 500 during Q2, down 1.2%qtr and 8.7%yr. Aluminium spot prices have been lower than average production costs in China (around RMB 16 200). The majority of Chinese aluminium producers are believed to be operating below cost but continue to receive Government support.

Figure 115: LME prices & inventories

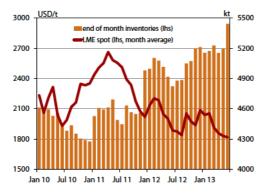




Figure 116: Aluminium use & supply by country

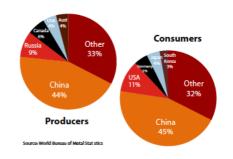


Table 17: Aluminium prices (USD/t unless specified otherwise)

LME spot prices	Mar-11	Jun-11	Sep-11	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13
Quarter average	2503	2600	2399	2090	2177	1978	1918	1997	2003	1835
Quarter end	2609	2509	2207	1971	2099	1835	2094	2040	1882	1731
Quarter high	2609	2772	2623	2234	2308	2091	2177	2164	2123	1939
Quarter low	2360	2466	2170	1945	2004	1811	1794	1874	1868	1720
3 Month forward	2527	2618	2432	2110	2216	2019	1945	2017	2042	1870
Shanghai avg RMB/t	16611	16762	17759	16244	15957	15946	15467	15161	14722	14551
Shanghai avg USD/t	2510	2560	2745	2545	2516	2528	2442	2387	2358	2336

- In Q2 China's total unwrought aluminium imports rose 22.1% to 82.8 kt. However, imports were down 57.5%ytd in 2013 with recent strong growth in domestic production capacity reducing the need for imports.
- Russia and Australia were the principal sources of imports for China in Q2. Imports from Russia increased by 55.2% to 28.1 kt while imports from Australia decreased by 1.6% to 14.3 kt.
- Australia's total aluminium exports to China increased by 17.7%qtr in Q2, underpinned by higher demand. Accordingly, export values increased by 16.3% over the same period.

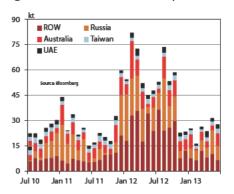


Figure 117: Chinese aluminium import volumes



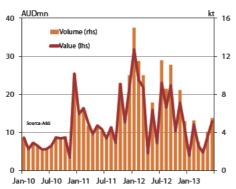
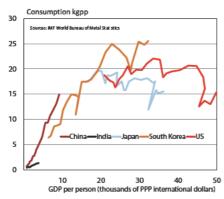


Figure 120: Aluminium demand per head



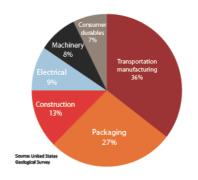
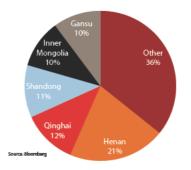


Figure 121: Aluminium output by province



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Table 18:Aluminium summary data	mmary	data										
		unit	Mar-11		Jun-11 Sep-11	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13
China imports		ξt	101.6	62.2	59.4	109.9	209.0	144.9	179.8	104.6	67.8	82.8
	Australia	¥	25.0	15.2	15.6	24.0	38.2	18.3	25.5	21.6	14.5	14.3
	Indonesia	¥	0.0	2.8	1.5	5.6	10.0	5.0	28.0	0.5	0.0	2.9
	Russia	Ŕ	47.4	19.8	9.3	30.0	70.5	36.9	53.3	19.6	18.1	28.1
	other	Ŕ	29.2	24.4	33.0	50.3	90.3	84.7	72.9	62.9	35.2	37.6
refined production		ξt	4036	4650	4790	4586	4691	5002	5357	5217	5215	5363
world metal exchange stocks		kt	5004	4742	4641	5187	5446	5135	5452	5653	5733	5850
total world stocks		kt	6920	6601	6436	6669	7239	6839	7203	7361	7400	na
stocks - weeks		weeks	8.9	7.8	7.6	9.0	8.8	7.7	8.2	8.3	8.7	na
total Australian exports		kt	420.7	391.7	428.9	439.3	422.2	402.7	399.2	425.5	358.5	387
	value	AUDmn	1075.5	997.6	1043.3	982.9	908.4	862.3	792.0	897.3	777.1	838
Australian exports to China		첫	17	12	[25	36	13	31	19	10	12
	value	AUDmn	44	32	27	57	78	28	62	39	23	26
Share of exports to China		%	4	£	m	9	6	m	00	4	£	£
Source: Bloomberg, World Metal Statistics.												



Nickel

- Average LME nickel spot prices fell by 13.6% to US\$14963 in Q2, trading at a high of US\$16390 in early April before ending the quarter at US\$13680. Nickel prices have trended downwards over the past year as excess supply placed downward pressure on prices. World nickel exchange stocks increased by 103% from 93kt in 2012Q2 to 188kt in 2013Q2.
- Changjiang nickel prices decreased by 12.6% in 2013Q2, coinciding with a large and rapid increase in domestic refined nickel production. Continuing the trend among the base metals, Chinese onshore nickel prices were more resilient than their LME counterparts, perhaps reflecting a more mature local response to the financial developments of June.



Figure 123: LME prices & inventories

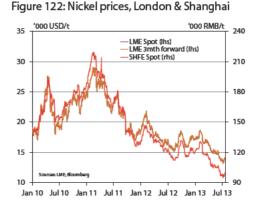


Figure 124: Nickel use and supply by country

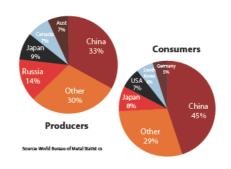


Table 19: Nickel prices (USD/t unless specified otherwise)

LME spot prices	Mar-11	Jun-11	Sep-11	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13
Quarter average	26899	24165	22043	18303	19651	17146	16317	16967	17314	14963
Quarter end	26080	23125	18305	18280	17430	16475	18520	17085	16540	13680
Quarter high	29030	27420	25080	19825	21830	18400	18520	18840	18600	16390
Quarter low	24050	21410	17925	16935	17405	16025	15190	15850	16425	13560
3 Month forward	26919	24189	22075	18328	19721	17215	16381	17036	17387	15039
Shanghai avg RMB/t	203730	183095	165038	133408	138025	126669	118070	120920	121306	106053
Shanghai avg USD/t	30784	27958	25503	20904	21760	20080	18640	19038	19432	17026



- In Q2, the value of China's nickel imports fell by 14.3% compared to Q1 and 11.7% compared to 2012Q2, driven largely by lower imports of refined products. Conversely, China's yearto-date nickel imports increased by 4.5%, underpinned by a stock build-up by the State Reserves Bureau.
- The majority of nickel imports are sourced from Indonesia and the Philippines which together accounted for 58.2% of China's nickel import values in Q2. Australia was the fourth largest source of China's imports in Q2, accounting for 10.3% of total import values.

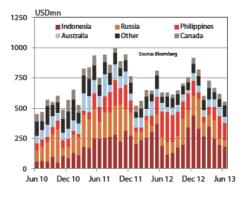


Figure 125: Chinese nickel import volumes



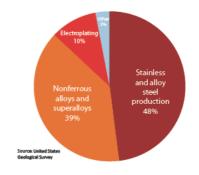
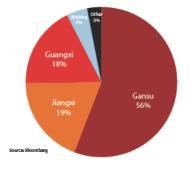


Figure 126: Nickel output by province



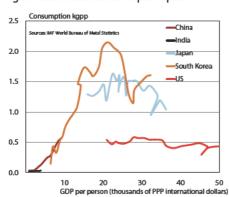
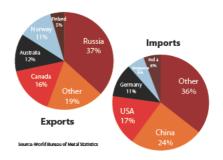


Figure 128: Nickel demand per capita

Figure 129: World trade in nickel



data
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Table

	-		71_INC	zi-dac	Dec-12	Mar-13	Jun-13
USDmn 2007 2523	2801 2597	7 1731	2086	1890	2376	2149	1842
USDmn 315 333	369 265	5 221	252	158	147	172	189
USDmn 200 229	166 156	6 166	103	93	110	143	107
USDmn 565 623	646 676	6 309	196	290	514	456	257
USDmn 425 671	801 814	4 699	871	425	985	952	629
USDmn 96 312	522 439	9 114	445	673	411	168	442
USDmn 406 354	296 248	8 221	220	252	209	258	217
73 116	151 129	9 105	149	172	198	152	na
124 107	97 91	1 99	93	124	142	167	188
130 113	103 9	97 105	110	130	162	186	207
weeks 4.7 3.6	3.0 2.	2.8 3.3	3.4	3.8	4.5	5.5	9.2
48 58	61 6	69 61	64	69	67	61	na
AUDmn 1131 988	908 990	0 1077	1081	936	911	827	na
Source: Bloomberg, World Metal Statistics, International Nickel Study Group.							
udy Group.							

FOLIO NO. 20

Zinc

- LME zinc prices fell by 9.5% in Q2 to average US\$1840 per tonne as a result of a global market oversupply and bearish sentiment on the outlook for economic growth in China. LME zinc prices were less volatile than other base metals, ranging from a high of US\$1925 to a low of US\$1784.
- Similarly, Changjiang zinc prices decreased by 4.8% to average RMB14596 per tonne in Q2 despite purchases by the State Reserve Bureau to support domestic producers.



Figure 131: LME prices & inventories kt 2500 1400 end of month inventories (rhs) LME spot (Ihs, month average 2300 1200 2100 1000 INCE: LME 1900 800 1700 600 1500 400 Jan 11 Jan 12 Jan 13 Jan 10

Figure 132: Zinc use and supply by country

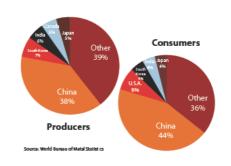


Table 21: Zinc prices (USD/t unless specified otherwise)

LME spot prices	Mar-11	Jun-11	Sep-11	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13
Quarter average	2393	2250	2224	1897	2025	1928	1885	1947	2033	1840
Quarter end	2319	2315	1905	1828	2003	1843	2088	2035	1871	1823
Quarter high	2546	2496	2495	2060	2179	2049	2105	2098	2188	1925
Quarter low	2228	2099	1860	1750	1827	1760	1760	1785	1854	1784
3 Month forward	2413	2269	2251	1909	2040	1932	1902	1979	2057	1875
Shanghai avg RMB/t	18657	17314	17342	15173	15369	15132	14640	15021	15330	14596
Shanghai avg USD/t	2819	2644	2680	2378	2423	2399	2311	2365	2456	2343

- The estimated average Chinese smelter breakeven point is around US\$2500 per tonne. With lower average zinc prices, a number of smelters are believed to be unprofitable. Despite this, refined production in Q2 totalled 1329 kt, 7% higher than Q1.
- Chinese zinc imports (by metal content) decreased by 21.9% in Q2, driven by higher domestic production. Similarly, China's zinc imports declined 7.6% ytd to 616.9 kt.
- Australia's zinc export volumes to China increased 22.7% in Q2 to 219 kt with export value increasing 39.7% to \$A157mn in the same period. Export volume and value are 41.6% and 33.9% higher ytd, respectively.
- As with all of the non-ferrous metals, the announcement that the authorities are instructing specific heavy industrial facilities to close before the end of the year, may have an impact on the demand for zinc. It is too early to say anything specific on this matter, as in the past such edicts have mainly served to slow the expansion of new capacity, not to reduce smelting capacity outright. Indeed, instructions that factories under a certain scale must close has historically created perverse incentives to rapidly expand smaller, less efficient facilities so that they exceed the threshold.

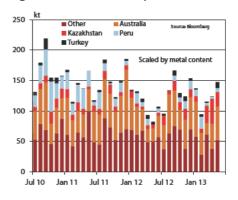
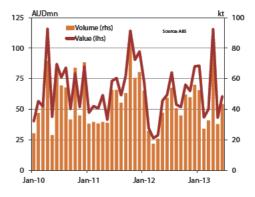


Figure 133: Chinese zinc import volumes

Figure 134: Australian zinc exports to China



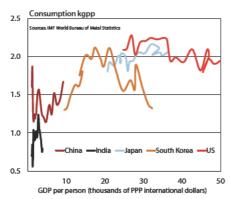


Figure 135: Zinc demand per capita

Figure 136: Zinc output by province

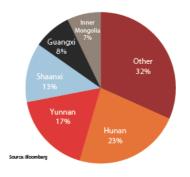


Table 22: Zinc summary data

		tinit	Mar-11	lin-11	Sen-11	Dec-11	Mar-17	lin-17	Sen-12	Dec-17	Mar-13	lin-13
China imports		보	427.6	420.7	466.2	456.3	385.8	281.6	395.2	406.3	346.4	270.5
	Australia	kt	138.8	125.7	168.6	204.7	134.3	78.3	161.6	133.2	92.8	60.3
	Kazakhstan	¥	37.6	22.4	38.0	22.6	20.9	17.7	38.3	44.4	45.5	64.3
	South Korea	첫	15.9	35.6	19.1	20.5	12.3	18.2	11.1	1.5	6.8	7.3
	Peru	kt	75.5	65.9	42.4	36.3	24.3	17.7	9.0	34.1	35.2	9.8
	Turkey	kt	8.8	2.6	11.6	6.7	9.4	12.8	11.0	18.3	7.4	9.6
	other	kt	150.9	168.6	186.5	165.5	184.6	136.9	164.1	174.7	158.7	119.2
refined production		kt	1232.4	1298.6	1292.8	1388.4	1168.7	1179.2	1138.8	1342.7	1241.2	1328.8
world metal exchange stocks		kt	1099.3	1261.5	1220.1	1184.5	1273.5	1325.9	1291.2	1531.5	1493.6	1333.5
total world stocks		kt	1437.1	1614.8	1634.7	1619.1	1702.3	1758.1	1678.9	1929.2	1903.2	na
stocks - weeks		weeks	6.2	6.8	6.9	6.4	7.6	7.5	7.1	7.8	8.1	na
total Australian exports		첫	342.5	411.5	372.4	423.3	373.6	402.7	379.5	407.8	350.1	309
	value	AUDmn	569.8	651.4	567.5	625.3	520.4	578.5	518.1	561.9	506.5	621
Australian exports to China		첫	151	176	215	302	133	148	186	220	179	219
	value	AUDmn	93	115	147	210	95	106	131	153	112	157
Share of exports to China		%	44	43	58	71	36	37	49	54	51	71
Source: Bloomberg, World Metal Statistics, International Lead and Zinc Study Group.	International Le	ead and Zin	c Study Gro	.dnc								

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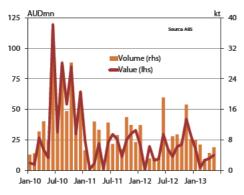


Lead



Figure 137: LME prices & inventories





k 125 Other Peru US Russia Australia 100 75 50 25 0 Jul 10 Jan Jul 11 Jan 12 Jul 12 lan

Figure 138: Chinese lead import volumes

Figure 140: World trade in lead

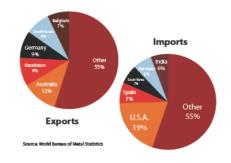


Table 23: Lead prices (USD/t unless specified otherwise)

LME spot prices	Mar-11	Jun-11	Sep-11	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13
Quarter average	2605	2550	2459	1983	2093	1974	1975	2199	2301	2053
Quarter end	2720	2623	2061	1980	2021	1796	2300	2340	2094	2058
Quarter high	2730	2939	2745	2119	2288	2156	2300	2340	2448	2247
Quarter low	2429	2272	1994	1792	1943	1744	1817	2002	2089	1949
3 Month forward	2575	2531	2459	2000	2118	1984	1985	2200	2314	2066
Shanghai avg RMB/t	17438	16539	16329	15296	15760	15363	15212	15043	14734	13943
Shanghai avg USD/t	2635	2526	2523	2397	2485	2435	2401	2368	2360	2238

Table 24: Lead summary data

		+init	11-7eM	11- 11	Can_11	Dor-11	Mar-11 []1 Con-11 Doc-11 Mar-12	11-01	Can-17 Dar-17	Dar-17	Alar-13	13
China imports			206.4	1871	2779	2305	2346	2073	3770	2850	2 agot	1150
		N	1.007	1.701	C. 177	C:007	0.107	C: 107	0.120	0.007	0.00	
	Australia	Ŕ	15.0	15.0	14.1	25.3	24.8	11.1	32.4	21.5	14.9	6.5
	Peru	¥	62.0	22.7	19.6	31.8	41.0	30.9	57.8	30.6	31.3	5.4
	Russia	¥	0.0 0.0	23.2	33.4	23.1	16.9	30.6	42.6	29.0	21.1	18.5
	US	¥	12.8	3.4	39.9	38.4	13.2	12.1	37.0	67.5	28.0	0.0
	Mexico	kt	6.9	7.6	8.4	5.7	9.8	15.8	16.1	13.5	13.9	5.4
	other	kt	100.9	110.2	112.5	106.2	128.9	106.8	141.1	122.9	89.6	79.3
refined production		kt	1075.9	1144.2	1159.4	1224.0	899.9	1142.8	1296.1	1307.1	1070.4	1200.2
world metal exchange stocks		kt	225.7	366.5	438.6	382.3	403.7	376.3	287.4	392.7	402.2	313.1
total world stocks		kt	509	569	609	581	634	614	533	627	680	na
stocks - weeks		weeks	2.7	2.9	3.1	2.9	3.5	3.1	2.5	2.9	3.4	na
total Australian exports		첫	158.2	176.7	167.7	193.0	155.1	187.3	164.6	180.9	137.3	118
	value	AUDmn	500.8	531.7	522.0	626.9	482.0	569.6	467.7	559.6	399.9	529
Australian exports to China		¥	19	24	22	33	15	26	24	33	18	28
	value	AUDmn	31	46	99	80	41	47	48	92	27	60
Share of exports to China		%	12	14	13	17	10	14	14	18	13	24
Source: Bloomberg, Wolrd Metals Statistics, International Lead and Zinc Study Group.	ternational L	ead and Zir	ic Study Gi	roup.								



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