

China Economic Update



Reorganising China's steel industry faces competing forces – economic and social

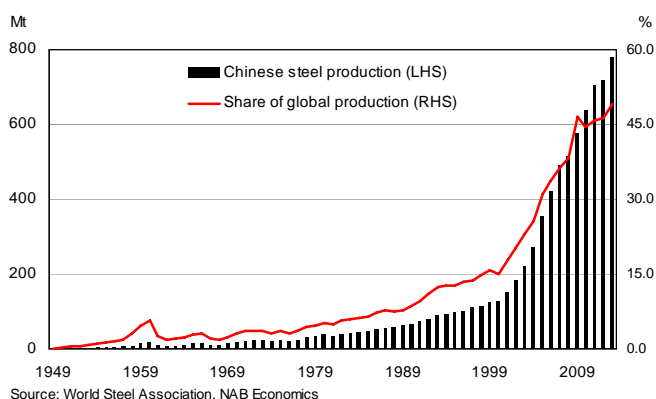
China's steel industry is the largest in the world and a key consumer of Australian commodity exports. The industry has been suffering in recent times due to excess capacity, weak profitability and its role in the air pollution crisis, prompting Government plans to rationalise the sector and demolish plants. However the steel industry's importance in local economies means that achieving this goal is easier said than done.

A brief history of China's steel industry

The steel sector was seen as a critical source of development in the early years of the People's Republic. In 1949, the country had 19 steel mills and 7 blast furnaces. Steel output for the year was 158 000 tonnes, six times below the level in 1943 under Japanese occupation (Reuters).

China's close relationship with the USSR brought financial aid and Soviet engineers to guide industrial development. During the first Five-Year Plan (1953-1957), the steel industry received 14% of total investment, and output rose from 1.3 million tonnes in 1952 to 5.9 million tonnes by 1958. Coal and iron ore output were also key areas of growth.

The long run growth in China's steel industry



The Great Leap Forward (1958-1961) was focussed on rapidly developing agriculture and industry, with steel again at the heart of industrial development. Mao Zedong predicted that China's steel production would exceed output in the United States by 1967.

Small scale blast furnaces (estimated at around 600 000 in total) were constructed in newly developed communes, producing vast quantities of low quality steel. Extreme production targets forced agricultural workers to focus on steel, resulting in widespread famine that forced the abandonment of the plans. That said, the legacy of the Great

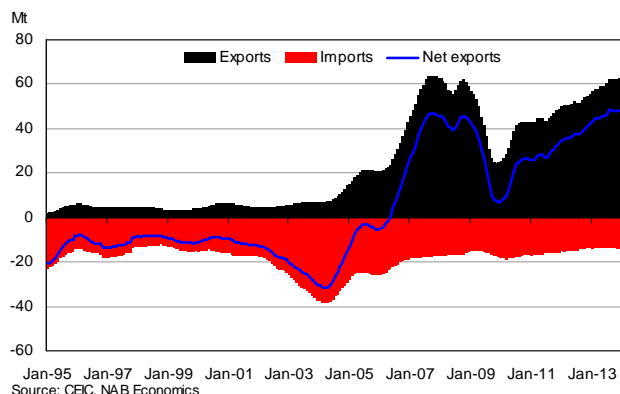
Leap Forward still exists in the disaggregated nature of China's steel industry.

After a period of recovery under the leadership of Liu Shaoqi and Deng Xiaoping, the early part of the Cultural Revolution saw steel production fall again – down from around 14 million tonnes in 1966 to 9 million tonnes in 1968. Skilled labour and management of steel mills were forced to move from industry to agricultural areas, impacting productivity. It took the intervention of the State Council in 1970 to restore previous management of steel mills and restart suspended development projects.

After years of volatility, sustained growth in steel output commenced under the post-Mao leadership of Deng Xiaoping and the period of opening up and economic reform. This was particularly the case after the turn of the century, with steel production increased in excess of 15% a year between 2001 and 2007. This growth was supported by the increasing domestic demand fuelled by the country's urbanisation and mass industrialisation.

China became the world's largest steel producer in 1996 (when output of 101 million tonnes exceeded Japan's levels for the first time). In 2013, China produced 779 million tonnes of steel, just over seven times the level in Japan. China has dominated growth in recent decades – since 1996, China's steel production increased at an annual average rate of 12.8%, whereas growth in the rest of the world increased by just 1.3% a year (World Steel).

As production has risen, steel has become an increasingly important export for China – having been a net importer of steel up until 2006. China's export pricing of steel has raised international trade issues – with the United States previously taking action in the WTO around low cost dumping.



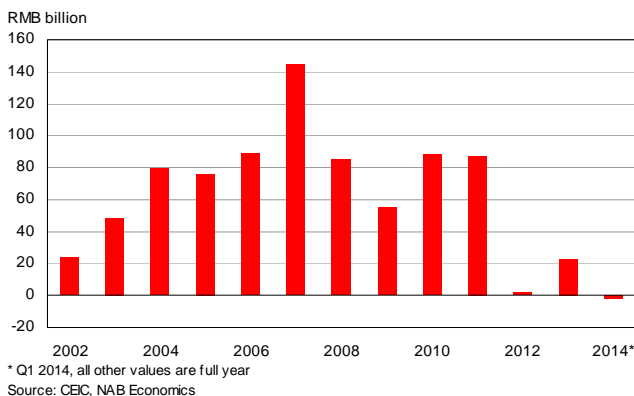
The profitability problem

The rapid, decentralised and largely uncontrolled expansion of the steel industry has caused a number of problems. From a producer perspective, excess capacity and declining profitability have been major concerns.

In the first quarter of 2014, the total losses of China Iron and Steel Association members were a combined RMB 2.3 billion (compared with a RMB 2.5 billion profit in the same period in 2013) – with 45% of members making losses. Profits have fallen steadily since 2011, as falling prices began to eat into margins.

Anecdotal reports suggest that some steel firms have sought alternative revenue sources – such as raising pigs or offering plumbing services – to offset losses from production (Business Spectator).

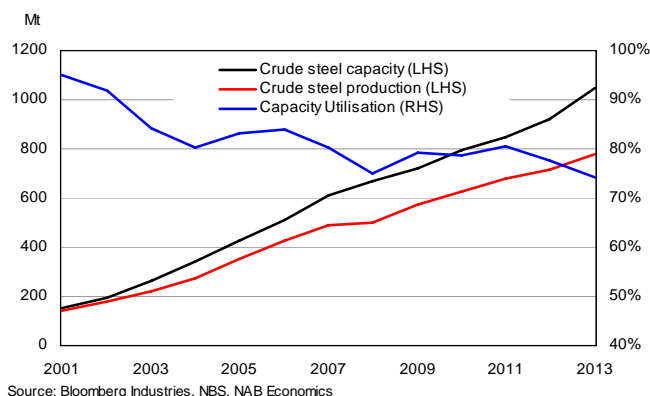
Profits for large steel mills have fallen since 2011



A key contributor to the worsening profitability levels has been increasing excess capacity in the steel sector. In 2013, the average level of excess capacity in China was estimated at 271 million tonnes – a level far in excess of total capacity in any other country. Capacity utilisation for the full year was estimated at around 74% (Bloomberg).

The majority of large scale steel mills are state-owned enterprises – meaning competing forces between profitability and the level of output to support provincial growth targets.

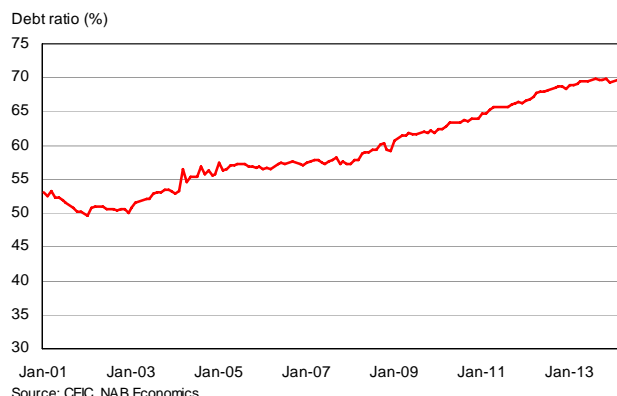
Overcapacity in steel has become an increasing concern



Debt levels in the steel sector have also been a concern in recent years. According to CISA, the debt ratio for China's largest steel mills is around 70%, while the ratio for the country's largest privately controlled steel producer is 83% (Business Spectator). Total liabilities for the steel sector at the end of 2012 were estimated at RMB 2.8 trillion.

In part, the growth in debt reflects expansion intended to avoid consolidation. Many smaller firms expanded to exceed the minimum scale requirements imposed by the government (necessary to avoid being forced to consolidate).

Debt ratio for large steel mills has increased considerably



The fragmented nature of the industry makes managing output an extremely difficult challenge. Steel is an industry where economies of scale are particularly evident. Based on World Steel Association data, the top ten Chinese steel mills accounted for just over 40% of the country's output in 2012. In contrast, South Korea's largest producer, POSCO, accounted for 58% of national production, and Japan's Nippon Steel & Sumitomo Metal (a merger created in 2012) accounted for 45%.

It is likely that some steel producers will default this year – with the most likely being Haixin, a relatively small private producer based in Shanxi. The company reportedly owes in excess of RMB 10 billion and failed to repay overdue loans in early March. That said, its failure may reflect poor management practices as much as the difficult industrial conditions.

Financing for the steel industry has become increasingly challenging over the past few years, with tightening credit requirements from the banking sector, and more recent attempts to crack down on shadow banking. Reuters has reported that banks have cut lending to industries with surplus capacity (such as steel) by 20% this year, while the steel sector is subject to closer financial monitoring by the China Banking and Regulatory Commission (CBRC).

This tighter funding environment encouraged steel mills to seek alternative financing – most recently using iron ore as collateral for loans. In March, Mysteel Research estimated that 40% of iron ore stocks at Chinese ports were part of financing deals. This type of collateral financing has previously been evident in copper markets – however its use in iron ore is considerably more risky. Compared with copper, markets for iron ore are far less liquid, paper trading is less established and the commodity is more difficult to store (due to the low value per tonne and tendency to oxidise).

Various reports suggest that the CBRC has warned banks to tighten controls on letters of credit for iron ore imports (the mechanism for collateral financing) from May 1. Tougher access to finance is likely to impact on growth within the steel industry and demand for bulk commodities longer term.

Steel a key contributor to the pollution problem

China's largest steel producing province is Hebei, which circles Beijing. Beijing's pollution problems have been high profile over the past year – however, the city is far from the most polluted in the country.

According to annual pollution data produced by the Ministry of Environmental Protection, Beijing was the 13th most polluted city in 2013. Instead, 7 out of the top 10 (and indeed the entire top 6) are located in Hebei – the province that produced almost a quarter of China’s steel output in 2013.

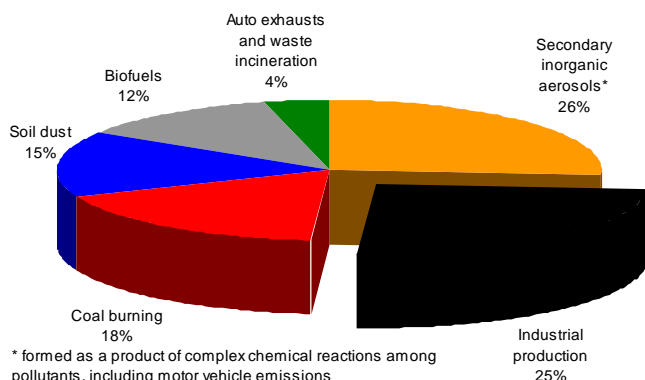
Steel intensive Hebei leads China’s most polluted cities

Rank	City	Province	Average Annual PM2.5 Measure (ppm)
1	Xingtai	Hebei	155.2
2	Shijiazhuang	Hebei	148.5
3	Baoding	Hebei	127.9
4	Handan	Hebei	127.8
5	Hengshui	Hebei	120.6
6	Tangshan	Hebei	114.2
7	Jinan	Shandong	114
8	Langfang	Hebei	113.8
9	Xi’an	Shaanxi	104.2
10	Zhengzhou	Henan	102.4
13	Beijing	Beijing	90.1

*The World Health Organisation considers average PM2.5 measures in excess of 10 ppm to be hazardous to health
Source: Ministry of Environmental Protection

According to the China Academy of Sciences, around one-third of Beijing’s air pollution was the result of activities in surrounding provinces – such as steel production in Hebei (along with coal fired electricity generation and cement).

Industrial production a major contributor to Beijing pollution



Concerns around air pollution in 2013 led to agreements between Beijing and the Hebei government to slash steel capacity in the province – ultimately agreeing to a target of 86 million tonnes (or around 35% of capacity) by 2020, including cuts of around 15 million tonnes in 2014. More generally, around 27 million tonnes of capacity is planned to be eliminated across the country this year, with smaller blast furnaces (under 400 cubic metres) the main targets.

That said, there are questions as to the effectiveness of these cuts. Most of the plants that are being shutdown are reportedly older, inefficient facilities that were already offline, while producers in the province are continuing to add new capacity, at around 30 million tonnes a year, according to comments from the Hebei Iron & Steel Group in February.

Attempts to consolidate have not been successful

Until this year, the government held a long term goal of consolidation of the steel industry, to improve efficiency and

profitability of the sector. Under the previous plan, 60% of the steel sector was to come under control of the ten largest producers by 2015 – however this target was dropped from this year’s Ministry of Industry and Information Technology plan.

Consolidation attempts have been unpopular with larger mills – some of whom have often been forced to take on unprofitable capacity. For example, in January, a number of firms merged into the Hebei Iron & Steel Group were seeking to break away. The company incorporated twelve private firms into the group in 2010, however difficulties in management, a failure to deliver on agreements and poor profitability has encouraged a break-up (Caixin).

Provincial governments have often been reluctant to enforce proposed closures – reflecting the importance of state owned industries for their tax income along with the potential impact on employment and local economic growth.

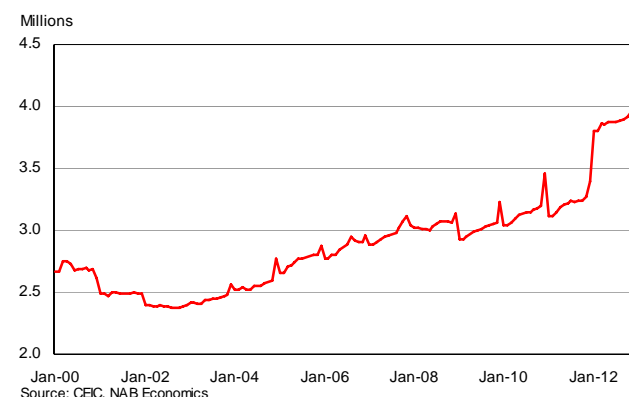
Economies of scale are critical in the steel sector – however simply consolidating firms together is unlikely to have a significant impact. While such a union would reduce costs associated with administration, marketing and raw material procurement, the largest gains are from the physical scale of individual furnaces – something that cannot be achieved by merging a number of small, relatively inefficient producers together.

Steel’s role in employment and social services

A major challenge in addressing the problems caused by excess steel production and capacity is the critical role of steel in both employment and in the provision of social services to their communities.

According to official data from the National Bureau of Statistics, total employment in the steel sector (including industries like metal casting and steel pressing) was 4.0 million at the end of 2012. This figure is likely distorted – with many state owned enterprises including their pension obligations among employee numbers.

Steel sector employment has risen sharply across last decade



That said, it highlights the importance of the industry – with steel being the major employer in many industrial cities. Rising unemployment could threaten social stability – one of the key concerns of the central government.

Beyond employment alone, steel mills provide services to communities of regional cities – including hospitals and schools. In Wuhan Iron & Steel’s Red Steel City, 300 000 people – workers and their families – live within the company’s

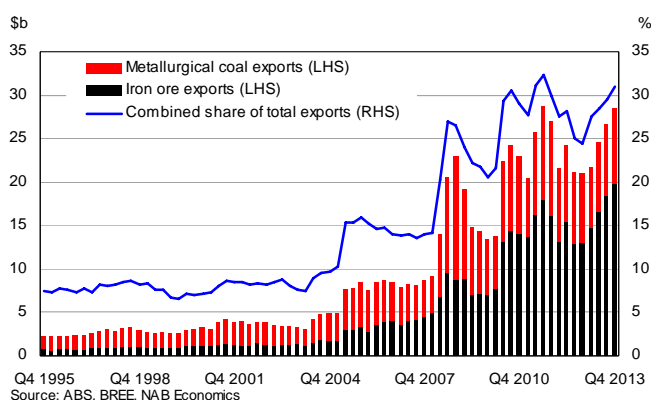
facility, which provides among other things, sporting teams, cultural performances and newspaper services (TIME).

The impact on Australia

Uncertainty in the prospects for China’s steel industry over coming years could have a significant impact on Australia’s resource commodity exports. China is (by far) the world’s largest importer of iron ore – accounting for around two-thirds of global trade in 2013 – as well as a major importer of metallurgical coal (almost 30% of global trade last year).

Australia is the largest exporter of these steel making raw materials. Combined, iron ore and metallurgical coal accounted for around 29% of Australia’s total exports of goods and services in 2013 – a share that has steadily risen since the turn of the century.

Steel inputs account for large share of Australian exports



Conclusions

Implementing the production cuts and consolidation necessary to return the steel industry to profitability and reduce its contribution to air pollution will remain a major challenge for Chinese authorities, reflecting the key role in both employment and the provision of social services.

Recent economic trends

Partial economic indicators continue to highlight softening trends in China, evident since the latter part of 2013. These trends remain in line with our expectations, and as such, our forecasts for Chinese economic growth are unchanged at 7.3% in 2014 (before slowing to 7% in 2015).

Recent commentary by both China's President and the Governor of the People's Bank of China appears to indicate an acceptance of slower growth trends – with Governor Zhou Xiaochuan commenting that the Government would 'fine tune' its policy to counter economic cycles but not use any large-scale stimulus to boost the economy (China Daily).

Industrial Production and Investment

Industrial production was marginally softer in April – increasing by 8.7% yoy (compared with 8.8% in March). Although production levels are slightly above the recent lows of February, output remains comparatively soft, around the weakest levels since China recovered from the GFC.

The various manufacturing PMI surveys highlight mixed conditions in the industrial sector – between large state-owned producers and small-to-medium private firms. The official NBS PMI (covering larger firms) was slightly improved in April at 50.4 points (compared with 50.3 points last month), while the HSBC Markit PMI continued to weaken – down to 48.1 points (from 48.3 points previously).

The trends in major industrial sectors remained mixed. Growth accelerated in rolled steel output (5.4% yoy from 5.0% in March) and motor vehicles (7.9% yoy compared with 7.3% previously). In contrast, growth rates slowed for electricity output – down to 4.4% yoy versus 6.2% in March – and cement, which increased by 3.9% yoy (down from 5.9% last month).

Fixed asset investment continued to slow in April, with the growth rate easing to 16.8% yoy (on a seasonally adjusted basis) – compared with 17.4% in March.

Investment trends have continued to weaken across a range of key segments – with seasonally adjusted investment in real estate slowing to 16% yoy (compared with 18% in March), while manufacturing increased by 15.2% yoy (edging down from 15.3% last month) – the weakest growth rate since disaggregated data was first released in 2004.

As highlighted in our major release last month, growth trends in the residential property sector appear to be slowing (although data is quite inadequate). Weak conditions in the residential property market could have a major impact on construction and demand for land, and therefore impact local government revenues and increase concerns around local government debt (due to the importance of land sales in servicing government debt).

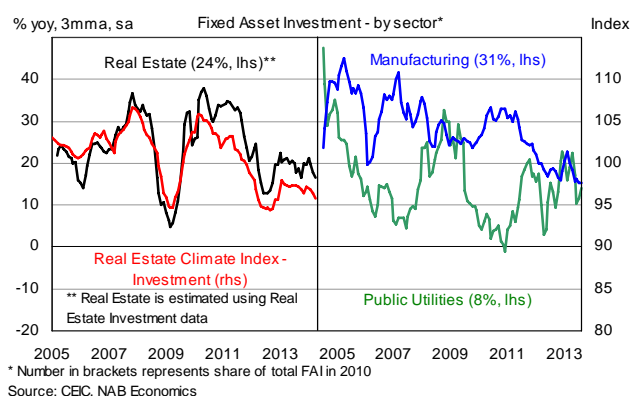
International trade

In year-on-year terms, trade data for April was marginally stronger, a surprising result given the distortions in export data recorded in the first half of last year. There were slight increases in both exports and imports, with the trade surplus widening to US\$18.5 billion (compared with US\$7.7 billion in March) – ahead of market expectations.

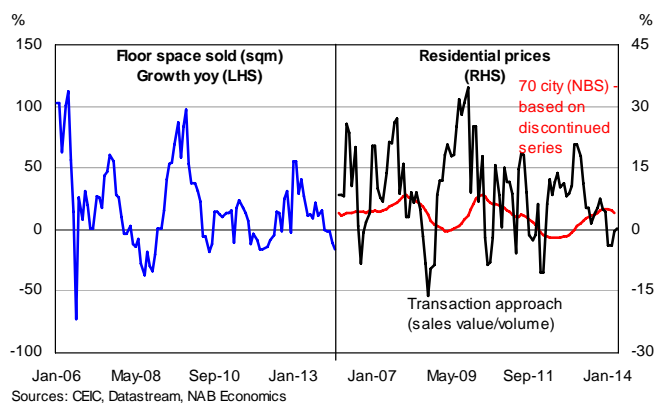
Industrial production trends remaining soft in April



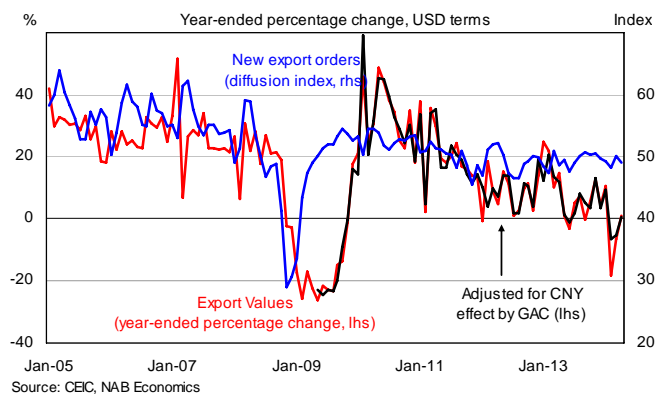
Investment easing in real estate and manufacturing



Residential property sector slowing – concern for local gov'ts



Export trends to remain weak in the first half of 2014



Merchandise exports rose by 0.8% yoy (in US dollar terms) in April. In year-to-date terms, exports are down around 2.3% - reflecting the crackdown that commenced in the second half of last year on false invoicing used by some firms to avoid capital controls. We continue to anticipate weak export trends in the first half, given these trends.

There was a marked divergence in export trends by region. Exports to both Europe and the United States increased strongly – up 15% yoy and 12% yoy respectively. In contrast, exports to East Asia remained weak – down by around -16% yoy (albeit compared with -25% yoy in March). Hong Kong was the main destination for the false invoice schemes and exports to the region were down -31% yoy, while East Asia excluding Hong Kong saw exports rise by 3.0%.

By product category, export trends remained negative for both High Tech products and Mechanical & Electrical goods – which may be connected to the invoicing issues – with exports falling by -11% and -3.2% yoy (in seasonally adjusted terms). In contrast, exports of Agricultural products increased by 6.2% yoy (seasonally adjusted).

Imports recovered in April, increasing by 0.7% yoy – after a sharp (and surprising) fall in March of -11%. Growth in imports has been driven more by increasing volume than the price of goods – with commodity prices softening since peaks in late 2011.

By commodity, import volumes remained mixed – with coal imports down by around -5.5% yoy (particularly for metallurgical coal, although this may reflect destocking trends by steel mills), while there were large increases in copper (52% yoy), iron ore (24% yoy) and crude oil (21% yoy).

Retail Sales and Inflation

Retail sales growth was largely unchanged in April – with nominal growth of 11.9% yoy (compared with 12.2% in March) – slightly below market expectations.

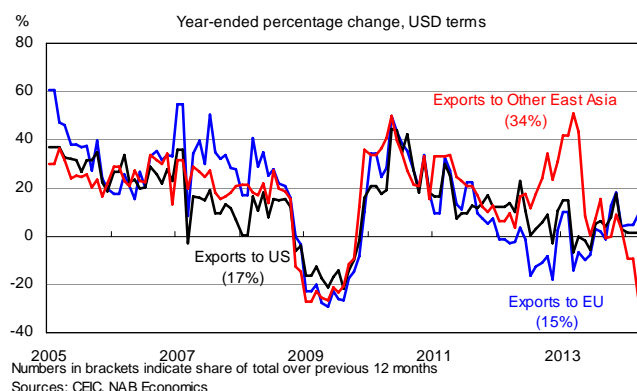
Similarly, there was little change in real sales growth – with an increase of 11.0% yoy (compared with 10.9% previously). There was a noticeable increase in consumer confidence in March – pushing up to its highest level since February 2013.

Sales growth for food and drink was in line with total retail sales – increasing by 11.9% yoy (compared with 9.9% in March). In contrast, there were marked slowdowns in both Household goods – with growth at 2.9% yoy (compared with 13% previously) – and Jewellery (which contracted by -30% yoy, from -6.1% last month). Motor vehicle sales remained robust at 12% yoy (from 14% in March).

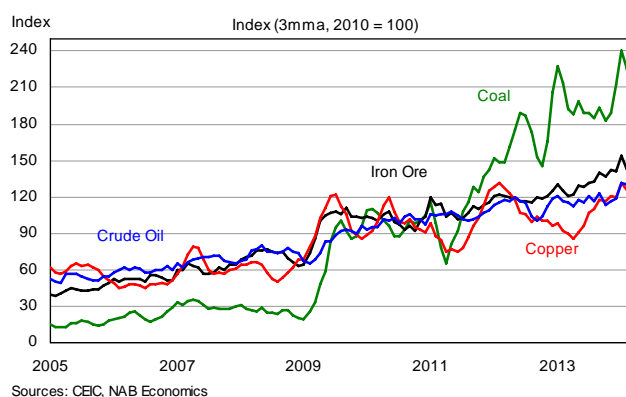
Price growth was soft in April, with the headline consumer price index recording an increase of 1.8% yoy (compared with 2.1% in March). Softening in the growth rate for food prices was the main contributor to this trend – with food prices increasing by 2.3% yoy (compared with 4.1% in March), while non-food prices were relatively stable at 1.6% yoy (from 1.5% previously). The lower growth in food prices was driven by falling prices for fresh vegetables (-7.9% yoy).

Trends for producer prices remained negative – with prices down by -2.0% yoy in April (compared with -2.3% in March). Producer prices have now fallen for twenty-six straight months (the longest decline since late 1999). The falls remain most evident in heavy industry (-2.6% yoy), reflecting the ongoing declines in US dollar denominated commodity prices.

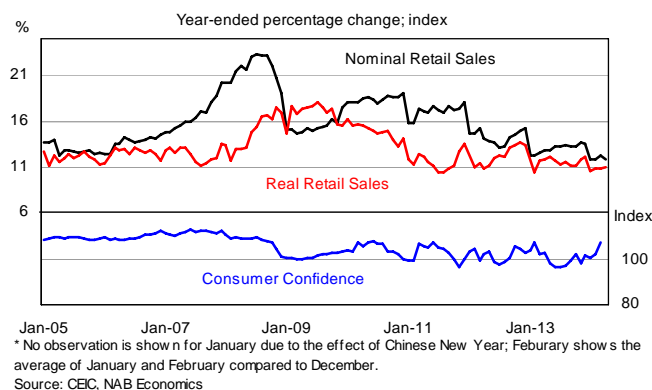
Exports to United States & Europe pick up in April



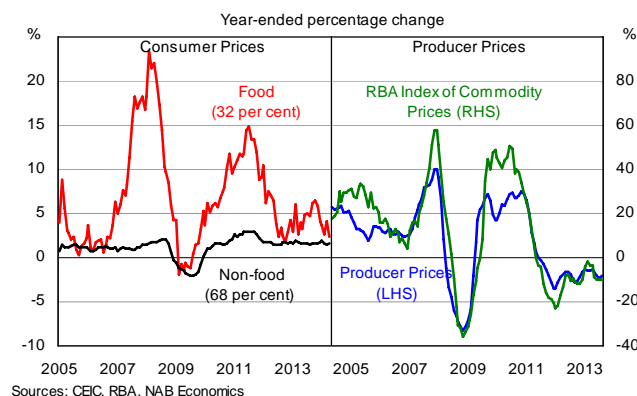
Commodity import volumes supported by investment



Retail sales growth remaining stable, confidence higher



Consumer and Producer Prices



Policy expectations

The concerted efforts to slow shadow banking appear to have had an effect, with a substantial pullback in the growth rate for the People’s Bank of China’s (PBoC) Total Social Financing measure since the second half of 2013 – down from 22% yoy in May 2013 to 16.2% yoy in April 2014.

The slowing trend is particularly evident outside the traditional banking sector. Outstanding non-bank lending (which includes some, but not all, components of Shadow Banking) grew by 23% yoy – compared with 41% in May 2013 – with a particularly noticeable slowdown in entrusted and trust loans. In addition, reports have suggested that tighter regulation has forced banks to bring a range of off-balance sheet items (such as Wealth Management Products) back on-book.

That said, credit growth continued to outpace nominal GDP growth in the first quarter – with growth for the twelve months to March 2014 slowing to 9.1% yoy (from 9.5% in the December quarter) – a trend that continues to concern policy makers.

The PBoC was less active in Chinese money markets in April – with the scale of open market operations far below the levels observed in February and March.

That said, the 7-day Shanghai Interbank Offered Rate remained relatively volatile, and remained at comparatively low rates across April. In early May, the SHIBOR was around 3.2%, 100 basis points below the level in early April, and well below the rates during the latter part of 2013.

Longer term rates converged across April – reflecting a marginal increase in 3 year rates and a softening in 5 year, bringing the interest spread back to more typical levels seen across most of 2012 and 2013.

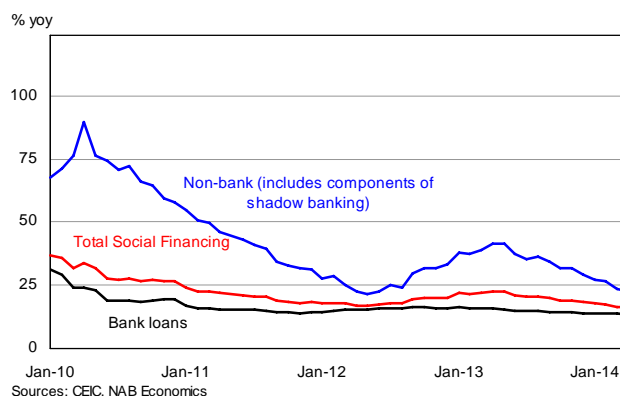
We continue to expect tightening in the SHIBOR across 2014, with the current comparatively low rates at odds with the PBoC’s broader goals of cooling credit growth.

The pace of reform around interest rates remains slow. While there is a broad goal for liberalisation of deposit rates in ‘one to two years’ (as announced by the Governor of the PBoC in March), various Chinese academics believe that the process will be slower – reflecting both the caution of Chinese authorities and the complex range of reforms – including deposit insurance and a workable bankruptcy legal framework – that must be implemented first.

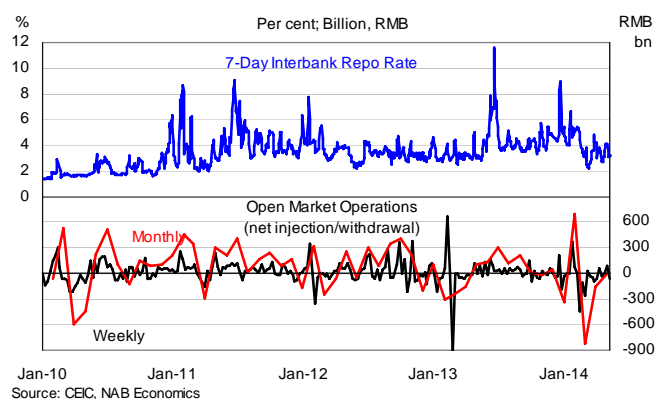
For more information, please contact

Gerard Burg +613 8634 2788

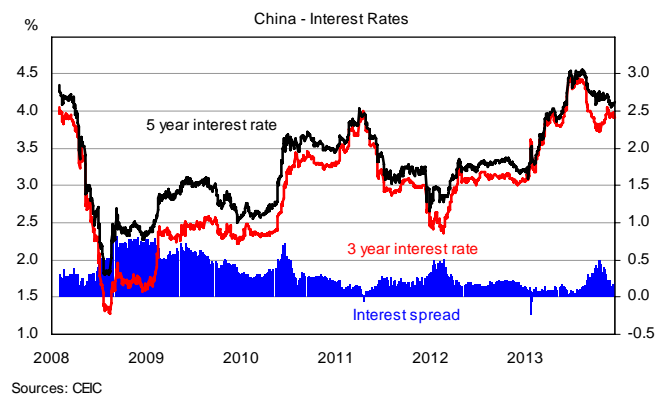
Credit growth outside the banking sector has slowed



Liquidity conditions more volatile in recent months



Interest spread narrows as longer term rates converge



Global Markets Research

Peter Jolly
Global Head of Research
+61 2 9237 1406

Australia

Economics

Spiros Papadopoulos
Senior Economist
+61 3 8641 0978

David de Garis
Senior Economist
+61 3 8641 3045

FX Strategy

Ray Attrill
Global Co-Head of FX Strategy
+61 2 9237 1848

Emma Lawson
Senior Currency Strategist
+61 2 9237 8154

Interest Rate Strategy

Skye Masters
Head of Interest Rate Strategy
+61 2 9295 1196

Rodrigo Catril
Interest Rate Strategist
+61 2 9293 7109

Credit Research

Michael Bush
Head of Credit Research
+61 3 8641 0575

Equities

Peter Cashmore
Senior Real Estate Equity Analyst
+61 2 9237 8156

New Zealand

Stephen Toplis
Head of Research, NZ
+64 4 474 6905

Craig Ebert
Senior Economist
+64 4 474 6799

Doug Steel
Markets Economist
+64 4 474 6923

Raiko Shareef
Currency Strategist
+64 4 924 7652

Kymberly Martin
Strategist
+64 4 924 7654

UK/Europe

Nick Parsons
Head of Research, UK/Europe,
and Global Co-Head of FX Strategy
+ 44207710 2993

Gavin Friend
Senior Markets Strategist
+44 207 710 2155

Tom Vosa
Head of Market Economics
+44 207710 1573

Simon Ballard
Senior Credit Strategist
+44 207 710 2917

Derek Allassani
Research Production Manager
+44 207 710 1532

Group Economics

Alan Oster
Group Chief Economist
+61 3 8634 2927

Tom Taylor
Head of Economics, International
+61 3 8634 1883

Rob Brooker
Head of Australian Economics
+61 3 8634 1663

James Glenn
Senior Economist – Australia
+(61 3) 9208 8129

Vyanne Lai
Economist – Agribusiness
+(61 3) 8634 0198

Karla Bulawan
Economist – Australia
+(61 3) 86414028

Dean Pearson
Head of Industry Analysis
+(61 3) 8634 2331

Robert De lure
Senior Economist – Industry Analysis
+(61 3) 8634 4611

Brien McDonald
Economist – Industry Analysis
+(61 3) 8634 3837

Amy Li
Economist – Industry Analysis
+(61 3) 8634 1563

John Sharma
Economist – Sovereign Risk
+(61 3) 8634 4514

Gerard Burg
Senior Economist – Asia
+(61 3) 8634 2788

Tony Kelly
Senior Economist – International
+(61 3) 9208 5049

Important Notice

This document has been prepared by National Australia Bank Limited ABN 12 004 044 937 AFSL 230686 ("NAB"). Any advice contained in this document has been prepared without taking into account your objectives, financial situation or needs. Before acting on any advice in this document, NAB recommends that you consider whether the advice is appropriate for your circumstances. NAB recommends that you obtain and consider the relevant Product Disclosure Statement or other disclosure document, before making any decision about a product including whether to acquire or to continue to hold it.

Please click [here](#) to view our disclaimer and terms of use.