

## Box A

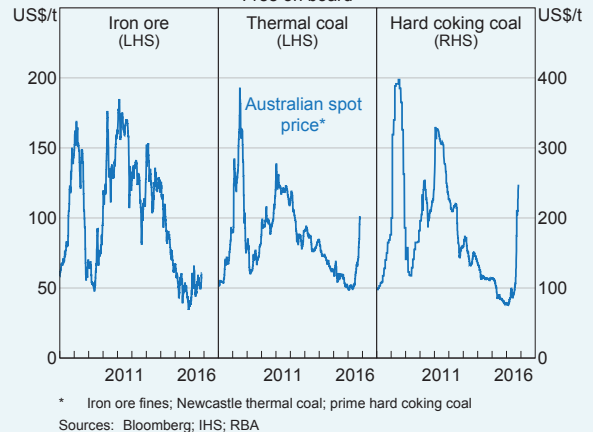
# Production of Iron Ore and Coal in China

The global prices of bulk commodities (iron ore and coal) have risen noticeably since early 2016 following significant declines over the previous few years. In China, a recovery in the demand for these commodities over the course of this year, including for use in the production of steel, has been accompanied by a decline in their domestic production. In addition, there have been some temporary disruptions affecting the distribution of coal both within China and elsewhere that have contributed to sharp increases in prices, particularly for coking coal.

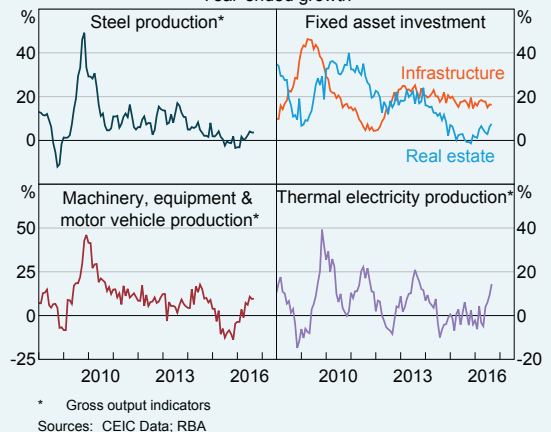
Bulk commodities account for around one-quarter of the value of Australia's total exports. Since late 2015, iron ore prices have increased by 77 per cent (Graph A1). The rise in coal prices from around that time has been even more pronounced. Thermal coal prices have risen by 111 per cent since the low point in early 2016 and coking coal prices by more than 200 per cent over a similar period.

In China, demand for both steel (which uses iron ore and coking coal) and electricity generated by thermal coal has picked up recently (Graph A2). For steel, this improvement reflects a rebound in Chinese property investment in the first half of 2016 combined with strong growth in infrastructure investment, which have underpinned demand for construction- and transport-related steel products. There has also been a pick-up in the production of machinery & equipment and motor vehicles, which all use steel intensively. The noticeable pick-up in coal-fired power generation in recent months is consistent with a rise in demand for electricity from the range of manufacturing industries experiencing stronger conditions of late.

**Graph A1**  
**Bulk Commodity Prices**  
Free on board

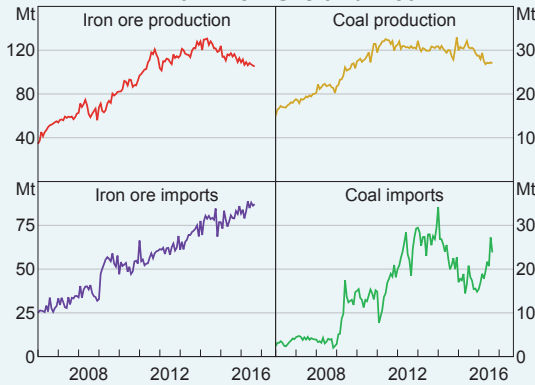


**Graph A2**  
**China – Demand for Iron Ore and Coal**  
Year-ended growth



At the same time, there has been a further noticeable decline in Chinese production of iron ore and coal (Graph A3). The decline in part reflects a response to earlier large falls in their prices and the high cost of much of China's production

**Graph A3**  
**China – Iron Ore and Coal**



Sources: CEIC Data; RBA

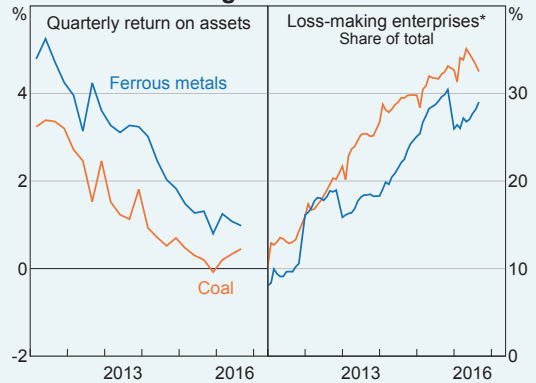
(compared with production in other parts of the world, including Australia). The net result of lower domestic supply of bulk commodities and stronger demand has been an increase in imports.

Despite these reductions in domestic supply, some mines in China have operated longer than would have been expected given their falling profitability (Graph A4). The proportion of firms producing iron ore and coal that are loss-making has risen noticeably.

Government policy changes have also affected the domestic output of bulk commodities in 2016, particularly with respect to coal production. The Chinese Government has long sought to close down inefficient, unsafe and polluting mining facilities. In February, the State Council (China's premier legislative body) issued plans to reduce coal production capacity by around 1 billion tonnes over the next 3–5 years.<sup>1</sup> Government officials have indicated that most of the capacity reductions targeted for 2016 have already been completed. The State Council also issued a direction that the number of working days for coal mines be reduced from 330 days to 276 days per year. However, following the sharp rise in coal prices, the National

<sup>1</sup> Consistent with this, the National Development and Reform Commission is targeting capacity reductions of 250 million tonnes of coal by the end of 2016 alone.

**Graph A4**  
**China – Mining Financial Indicators**



\* December observations removed  
Sources: CEIC Data; RBA

Development and Reform Commission signalled that the 276 working day policy would be amended for selected coal producers to allow them to increase their days of operation temporarily as a means of relieving supply shortages.

Although Chinese domestic demand and supply trends have had a significant effect on bulk commodity prices, reductions in supply from coal-exporting countries have also played a role. In August and September, the Australian coal industry experienced a number of temporary disruptions related to a train derailment in Queensland, roof collapses at some mines and industrial action at a Queensland mine. However, the overall effect on global supply is likely to have been minor. Weather-related disruptions and production cuts in Indonesia (the world's largest supplier of seaborne thermal coal) have also delayed deliveries in recent months, and coking coal exports from the United States have continued their trend decline. A consequence of disrupted supply and resilient demand is that inventories of both thermal and coking coal at ports (and inventories of coking coal at steel mills) fell to relatively low levels in August. Major buyers of thermal coal have started to rebuild stocks, but coking coal inventories remain low. ❖

