Box B

The Recent Increase in Iron Ore Prices and Implications for the Australian Economy

Iron ore prices have increased sharply in recent months

Developments in the global iron ore market are important for Australia's economy. Australia is the largest global producer and exporter of iron ore and in 2018 exported around 830 million tonnes of iron ore worth A$63 billion. This accounted for around 15 per cent of total exports by value, and was equivalent to 3.3 per cent of nominal GDP.

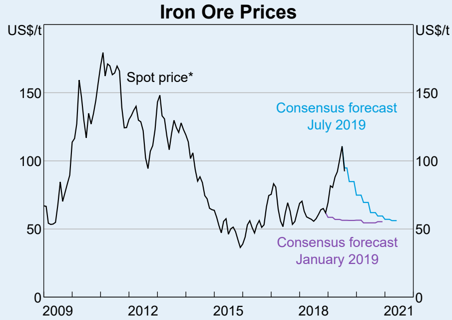
Between late January and mid July the benchmark iron ore spot price increased significantly. Although this price has declined sharply in recent days as global trade tensions have escalated, it remains around 25 per cent higher than at the start of the year, and well above the levels of recent years (Graph B1). A key driver of the recent price increase has been a significant decline in iron ore production in Brazil, following a tailings dam collapse earlier this year and the subsequent closure of several mines. Brazil is the second-largest exporter of iron ore, and these closures sidelined around 6 per cent of global seaborne supply (Graph B2). While some production has come back online recently, market reports suggest that it could take two to three years for Brazilian exports to return to their former capacity.

In recent months, shorter-term supply disruptions to Australian iron ore exports have also affected the global iron ore market. The most notable of these disruptions was Tropical Cyclone Veronica in late March, which reduced large firms' iron ore exports from Western Australian ports by close to 25 million tonnes (around 3 per cent of Australia's annual export volumes).

Meanwhile, demand for iron ore has been strong in recent months as Chinese steel production has been increasing, supported by policy measures targeted at steel-intensive infrastructure projects. Although trade tensions are creating significant uncertainty for the global economic outlook,

Graph B1

Iron Ore Prices

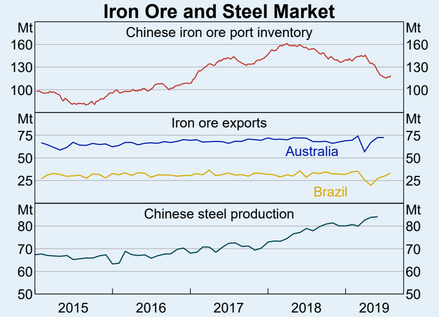


* 62% Fe Fines index; free on board basis; monthly average; actual prices received may vary based on product characteristics

Sources: Bloomberg; Consensus Economics

Graph B2

Iron Ore and Steel Market



Sources: ABS; Bloomberg; CEIC Data; RBA

Chinese policy measures are expected to continue to support demand for steel in the near term. Iron ore prices are therefore expected to remain elevated over the near term but to decline gradually over coming years as global supply increases and demand, particularly from China, slowly eases.[1]

Higher prices are unlikely to see much lift in export volumes or investment in additional capacity …

The recent strength in iron ore prices is not expected to drive much of a near-term increase in iron ore production in Australia, beyond what was already in train. Australian export volumes have recovered over the past few months as disruptions have been resolved, but production was already near full capacity before the disruptions, so volumes have little scope to increase much further in the near term (Graph B3). Some smaller producers could increase their exports, either through shipping stockpiled lower-grade ore or increasing production rates at existing operations, but available information suggests this might boost annual iron ore export volumes by only around 1 per cent.

Because Brazilian production is expected to continue recovering, market participants expect that prices will ease further (Graph B1). The recent strength in prices is therefore not expected to spur additional investment in expanding production in Australia, given that such projects take several years to plan and build. While there is renewed interest in expansionary projects for very high grade (magnetite) ore, this appears to be driven primarily by expectations of strong future demand for such products rather than a response to the recent strength in prices.

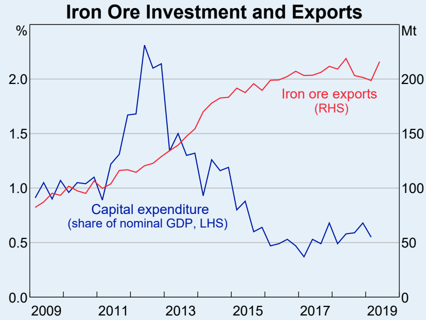
However, iron ore mining firms continue to invest to sustain production levels, as part of their long-term plans.[2] Over recent years Australian iron ore capital expenditure has averaged around 0.5 per cent of nominal GDP. Sustaining investment is expected to increase over the next few years as several large replacement iron ore mines are constructed in Western Australia. But the amount of investment expected over coming years is much lower than a decade ago, when iron ore production capacity expanded significantly in response to a large increase in global demand. During that period, investment in other parts of the resource sector also increased strongly, and there were large spillovers to the rest of the economy through employment, wages and non-mining activity more broadly.

… and the boost to incomes is likely to increase GDP growth only a little

While higher iron ore prices are therefore unlikely to have much *direct* effect on domestic mining sector activity, mining firms' profits could be significantly higher, which will have some *indirect* effects on the broader economy.

Graph B3

Iron Ore Investment and Exports



Sources: ABS; RBA

In the first instance, recent higher prices will boost state and federal government revenues, through mining royalties and company income tax payments, although these will be received with lags (ranging from a few months to over a year). Iron ore prices have followed a higher path than was expected at the time the 2019/20 state and federal budgets were prepared. The iron ore price was around US$90 per tonne in May, and the federal budget assumed prices would decline to US$65 per tonne by March quarter 2020. Since then, the iron ore price reached as high as US$120 and, despite recent declines, is still around levels prevailing in early May. A period of higher-than-expected prices is likely to mean significantly more revenue being realised than was factored into the budget outlooks.[3] Should the public sector spend some of this higher income on consumption or investment, or if it is distributed to and then spent by other sectors in the economy, this will boost GDP growth.

Stronger mining firm profits will also boost household sector incomes via shareholdings. Estimates suggest between a fifth and a quarter of the Australian iron ore mining industry is owned by the Australian household sector (either through direct holdings or via intermediaries such as superannuation funds), with most of the remainder owned by foreign investors.[4] Market expectations and guidance from mining firms suggest that much of the increase in profits could be returned to shareholders. The distribution of higher profits will increase household income, which in turn could be used for household consumption. A lift in household wealth because of higher mining company share prices may further support household consumption.

Higher iron ore prices are therefore likely to increase nominal incomes in the Australian economy for a period. Given the recent strength in prices, and assuming prices gradually decrease in line with the path suggested by market expectations, nominal household disposable income and government revenue combined could be around A$5–10 billion higher each year on average over the next few years, relative to a scenario where prices had evolved as was expected in early 2019.

Focusing just on this flowthrough of higher prices to the household and public sectors, the effect on the economy could be fairly small.[5] The effect would be a little larger if households or the public sector spent more of the extra income or if iron ore prices stayed higher for longer than currently expected, but smaller if the exchange rate appreciated in response to higher commodity prices. However, the ultimate effect on the economy is difficult to predict, given the uncertain outlook for iron ore prices and that, as other episodes of commodity price strength have demonstrated, higher prices and incomes could affect the economy through other channels.

Endnotes

[1] See also RBA (2017), 'Box A: The Chinese Steel Market and Demand for Bulk Commodities', *Statement on Monetary Policy*, November, viewed 7 August 2019. Available at <https://www.rba.gov.au/publications/smp/2017/nov/box-a-the-chinese-steel-market-and-demand-for-bulk-commodities.html>.

[2] For more discussion of sustaining investment in the mining sector, see Jenner K, A Walker, C Close and T Saunders (2018), 'Mining Investment Beyond the Boom', RBA *Bulletin*, March, viewed 7 August 2019. Available at <https://www.rba.gov.au/publications/bulletin/2018/mar/mining-investment-beyond-the-boom.html>.

[3] As an indication of the sensitivity of government revenue to the iron ore price, a US$10 per tonne increase in prices would increase Western Australian Government royalty revenue by around $0.8 billion per year, and would see Australian Government tax receipts grow to be around $3.7 billion larger in 2020/21. See Western Australian Government Budget 2019/20 (Budget Paper 3, Chapter 3, Table 13) and Australian Government Budget 2019/20 (Budget Paper 1, Statement 7, Box 1).

[4] Estimates of institutional sector and domicile are based on ABS financial accounts information and company reports. See, for instance, Arsov, I, B Shanahan and T Williams (2013), 'Funding the Australian Resources Investment Boom', RBA *Bulletin*, March, viewed 7 August 2019. Available at <https://www.rba.gov.au/publications/bulletin/2013/mar/6.html>.

[5] Using the Bank's MARTIN model to explore a range of scenarios for the path of the iron ore price and for income and spending, the boost in income might increase year-ended growth in GDP by an average of around 0.1 percentage points a year over the period to the end of 2021. For a discussion of the Bank's macroeconometric model, see Cusbert T and E Kendall (2018), 'Meet MARTIN, the RBA's New Macroeconomic Model', RBA *Bulletin*, March, viewed 7 August 2019. Available at <https://www.rba.gov.au/publications/bulletin/2018/mar/meet-martin-the-rbas-new-macroeconomic-model.html>.