



Australian Export Grains Innovation Centre



# Novel coronavirus: potential impacts on Australia's grain producers

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[aegic.org.au](http://aegic.org.au)

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## Key messages

- The coronavirus is likely to have more serious global economic impacts than the SARS outbreak back in the early 2000s.
- For Australian barley and sorghum producers, China's reduced need for feed imports due to the African swine fever outbreak is far more serious in the short term than the onset of the coronavirus.
- Australian wheat producers could be advantaged if the Australian dollar depreciates further due to the global impacts of the coronavirus.

## Pre-ambble

In 2002, a pneumonia-like virus known as SARS emerged in China. The global cost of the SARS was an estimated \$US40 billion. The virus emerged in Guangdong province, then spread across China. Later, during 2002 and 2003, it spread around the world, and infected 8098 people with 774 deaths in at least 17 countries.

Seventeen years later, another viral infection known as coronavirus emerged in Hubei province, China. As of 10 February 2020, 40,171 confirmed cases of infection and 908 deaths were reported. The current death rate following infection is 2.3 per cent.

Infection rates to-date suggest the coronavirus outbreak is a more serious health threat than the SARS epidemic. The coronavirus outbreak has a much greater number of infections but a lower fatality rate than SARS. The SARS death rate was almost 10 per cent.

The Chinese government quarantined Wuhan and its surrounds and barred travel. To keep people in their homes and halt the spread of the virus, the government extended the Chinese New Year holiday by three days. Many major industrial areas — including Shanghai, Suzhou and Guangdong province — lengthened workers' New Year holidays to prevent travel and exposure of workers to the virus. Fear of the virus became widespread and many workers opted to remain away from factory towns. Chinese New Year celebrations were subdued. Flight restrictions came into force. Hotels and restaurants, normally busy, were empty (see photo).



Food deliverers wait in an empty restaurant in a Beijing shopping mall on 27 January 2020.

Source: *Washington Post*

## Emerging Economic Impacts

### Global

The economic losses stemming from the SARS outbreak in 2002 and 2003 were estimated globally at \$US40 billion. In 2003, China's GDP was \$US1.3 trillion. By contrast, at the end of 2019, when the coronavirus emerged, China's GDP had increased 10-fold to \$US14 trillion and China had become the world's second largest economy. China's private consumption now accounts for more than a third of the country's enlarged economic activity.

Australia's economic prospects are now tightly tied to the performance and growth of the Chinese economy. For example, China is Australia's largest two-way trading partner, export market and import source. Back in 2003, China's two-way trade with Australia represented around 8 per cent of all such Australian trade. By 2019, that share had grown to 32 percent. China's share of the value of Australian exports in 2019 reached a record 38 per cent or \$117 billion.

There are serious implications for Australia's economy of any long-lasting wider spread of the coronavirus. Already economic consequences within China are being observed, and external ramifications are emerging. Some examples include:

- General Motors, having sold more cars in China than in the United States last year, have closed their Chinese factories at the request of the government. Ford Motor has told managers in China to work from home while its factories remain idle. The Hyundai assembly line in South Korea has closed due to disruptions occurring in the supply of crucial car parts from Chinese factories.
- Many concerts and sporting events in various Chinese cities have been cancelled.
- IMAX, the large screen film company based in Toronto, postponed the release of five films it had intended to showcase in China during the New Year period.
- Apple, Starbucks and Ikea have temporarily closed stores in China.
- The first day of share trading after the Chinese New Year break saw the Chinese share index fall by 8 per cent.
- Iron ore futures in China in early February fell to their lowest in three months.
- Signalling the seriousness of the outbreak, China's government has announced economic stimulus plans. An additional \$US22 billion is being made available to shore up money markets. Borrowing terms for Chinese companies have been loosened.

China accounts for about a third of global economic growth, a larger share of global growth than from the USA, Europe and Japan combined. Any decline in China's economic growth has negative implications for world economic growth. Economic analysts predict China's annual growth rate will slump to between 3 and 4 per cent in the first quarter of 2020, while annual growth in 2020 may be limited to around 5 per cent. Global economic growth may slow to an annual rate of around 2.3 percent — the slowest pace since the global financial crisis a decade ago.

### Australia

In Australia, the emerging economic impacts that have attracted most media attention to date are the disruptions to tourism, travel and education services. China is a major source of international visitors to Australia. Travel disruption and curtailment of the influx of Chinese tourists, students and business people is adversely affecting Australia's economy. The tourism sector in eastern Australia is not only dealing with countering adverse international

publicity surrounding the bushfires, it now also needs to deal with the sudden decline in tourism from China due to the coronavirus.

Attracting less media scrutiny, but nonetheless having important consequences for government taxation revenues and foreign exchange earnings, is the sharp fall in iron ore prices that has occurred since the outbreak of the virus. In general, international commodity markets have rapidly priced in greater trade risks associated with the virus. In cases where the Chinese resource demand is a crucial proportion of global demand, then adverse price movements, at least in the short term, are being observed.

## Australia's Grain Export Industries

China is a major sales outlet for some Australian grains, especially barley and to a lesser degree, wheat and sorghum (Table 1).

Table 1. Grain shares of Australian grain exports to China during 2016 to 2018

Grain	Per cent of Australia's grain trade with China during 2016 to 2018
Barley & malt	69.6
Wheat	18.8
Sorghum	8.3
Canola & canola oil	1.4
Other (e.g. oats, field peas)	1.9

### *Depreciation of the Australian dollar*

By far the main overarching impact of the coronavirus will be via changes in the value of the Australian dollar. The Australian dollar is viewed as a resource-based currency, tied closely to Chinese and global economic growth. The forecast slowdown in global economic growth, when combined with the slowing of economic growth in China, will lower the value of the Australian dollar. However, this works to the advantage of Australia's agricultural export industries such as grains, livestock and wool by making Australian products more price competitive in international markets.

For Australia's main export grain, wheat, the possible ramifications of the coronavirus outbreak can be illustrated by considering the likely scenario in which the Australian dollar depreciates further. In late December 2019, before the announcement of the coronavirus, the Australian dollar traded at 69 cents against the US dollar. Since then the Australian dollar has trended downwards to 67 cents, and could devalue further to around 65 cents. In that case, Australian wheat farmers could be beneficiaries, as wheat is traded in US dollars and a depreciated Australian dollar means that Australian wheat becomes more attractive to buyers whose currencies have not depreciated as much against the US dollar. Assuming the global price for wheat falls due to the effects of the virus, from \$US230 to \$US228 FOB, and the Australian dollar depreciates from 69 to 65 cents, then the price of Australian wheat shifts from \$A333 to \$A351 per tonne FOB.

A downside for Australian grains industry that relies on imported inputs of fuel, fertilisers, chemicals, machinery and technology is that these inputs become more expensive to purchase when the Australian dollar depreciates.

### *International relations*

The key AGIC Asia conferences in Vietnam on 3 March and in China on 5 March both have been postponed due to travel restrictions and health risks caused by the coronavirus. These are major showcase events for Australia's grain export industry and inter-governmental side meetings are useful to facilitate trade expansion. AEGIC has also postponed planned in-market technical workshops with international customers.

### *Grain trade*

Grain traders are anticipating a slowdown in the physical delivery of grains into China, triggering lower international prices of grains. Shippers are already seeing a change in sea freight rates. The Baltic Index (a common benchmark for cost of moving grains and other dry commodities) continues to drop towards ten-year lows, reflecting concerns about future trade volumes and flows.

### *Barley demand*

Usually around 2mmt of malt barley is annually exported from Australia to China for beer production, with another 2.8mmt going into China's large feed grain sector. Subdued Chinese New Year celebrations lessened beer consumption and will cause a negative flow-on effect for subsequent importation of malt and malt barley used in beer production.

The far more serious issue limiting Australian barley exports to China is the aftermath and on-going management of the incidence of African Swine Fever (ASF). Before the arrival and spread of ASF, China had half the world's pigs but now have lost over a third of their pig herd due to ASF. Feed use in pig production in China is down 35 per cent in 2019 due to the decimation of its pig herd. The reduced need for feed imports into China, due to ASF, is a far more serious issue for barley producers, and sorghum exporters, in Australia than the arrival of the coronavirus.

### *Wheat consumption*

The direct effects of the coronavirus on wheat consumption are likely to be minor. Wheat is not a discretionary item of household consumption and per capita consumption of wheat in China has been increasing, in line with increasing per capita incomes. The impact of coronavirus on the demand for wheat is likely to be relatively insignificant.

### *Supply of inputs*

Factory closures and quarantining of some workers in China will disrupt the supply of some farm inputs for crop production in Australia. Australian grain production relies on inputs of some chemicals and technology components manufactured in China. At least in the short term, these inputs will become more expensive to purchase due to their greater scarcity attributable to factory closures or disruptions to manufacturing.

## **Case study**

The issue for wheat farmers becomes whether or not the depreciated Australian dollar also lifts their input costs sufficiently to erode their revenue gains attributable to currency movements. The depreciation of the Australian dollar, plus disruptions to agricultural input manufacturing (agricultural chemicals, technology components, etc.) in China, will cause prices to increase in fuel, agricultural chemicals and some farm technologies.

Using a typical wheat farm in Western Australia as a case study, the business impacts in an average year are shown in Table 2. The overall consequence for the case study farm is that its EBIT increases by 7 per cent, with most of that increase being attributable to exchange

rate movements. Supporting the possibility of firmer wheat prices in Australia's main export region, Western Australia, is the relatively low wheat production in 2019. Wheat traders do not have easy access to a large volume of local grain, so they (and farmers) have limited pressure to sell into Asia at low prices during early 2020.

Table 2. Consequences for an Australian wheat farm of protracted control of the spread of the coronavirus that causes (i) depreciation of the Australian dollar, (ii) a slight decline in the international wheat price and (iii) higher costs of farm imports supplied from China (due to factory disruptions).

	No virus		Protracted control of the infection spread	
	\$/ha	\$/t	\$/ha	\$/t
Wheat revenue	600	333	632	351
Variable costs	338	188	353	196
Machinery depreciation	48	27	51	28
<b>EBIT</b>	<b>213</b>	<b>118</b>	<b>228</b>	<b>127</b>

## Conclusion

The final magnitude of impacts of the coronavirus is yet to unfold. Suffice to note at this early stage is that Australia's main grain industry, wheat production, need not quake that economic catastrophe awaits them. Rather, the likelihood is that exchange rate movements will protect and more likely bolster the economic performance Australia's wheat producers.

## Caveat

Many assumptions surround any prognosis of economic consequences, and hindsight will reveal flaws in some of those assumptions. The coronavirus will not only generate economic impacts within and outside of China, but there will also be many social and political consequences. For many industries, the required management to limit the spread of the disease means forgone opportunities for social and business interaction and engagement. Lessened engagement will generate its own set of adverse consequences.