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Impacts of COVID-19 on Australian agriculture, forestry and fisheries trade

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Summary

As the COVID-19 pandemic spreads, so will the impacts on Australia's agriculture, forestry and fisheries sectors. Initially the impact was due to slowing demand in China, however the subsequent global spread of the virus is now impacting on global markets, making the short-term outlook for Australian agriculture increasingly uncertain.

The International Monetary Fund (IMF) is currently forecasting a 3% contraction in global economic activity in 2020—worse than the global financial crisis (IMF, 2020). However, because agricultural exports principally relate to food, the key impact on global agricultural markets is likely to be softer prices rather than significantly reduced consumption. This is because food is always an essential commodity, even during a crisis.

Initially, Australian agriculture's exposure to China was a risk. The most exposed products were those typically associated with restaurants and cafés, and, for the forestry sector, those feeding into manufacturing processes. China's success in controlling the spread of the virus has allowed it to loosen restrictions and put its economy on a path to recovery. Provided the recovery is sustained, the negative impacts on Australia's trade with China may be limited.

However, with the virus now spreading well beyond China, second and third waves of impacts on Australia's agricultural, forestry and fisheries sectors are likely. In the immediate future supply chain and logistics disruptions are expected to be the most significant risk to the three sectors and hence to producer incomes. Those disruptions may impact on the supply of imported inputs, and the performance of export supply chains. Although the risk is significant, early indications are that many issues are being resolved—including with support of the Australian Government—such that supply chains within Australia, and to a number of major markets, are still functioning. For those sectors that rely on manufacturing in other countries (for example, forestry and wool) the potential for further disruption to production and logistics outside Australia could constrain demand for Australian products.

Domestic measures to limit the spread of COVID-19 could affect labour availability in some industries or disrupt their ability to export due to impacts on logistics networks. Horticultural and intensive production enterprises are particularly concerned about access to migrant labour needed to get products from the farm to consumers. The Australian Government has taken steps to reduce these risks through recent changes to visa arrangements for seasonal workers.

Despite the pandemic, it is the recent difficult seasonal conditions that will continue to dominate industry fortunes over the short term. The biggest impact on the agricultural sector over the past three years has been and remains the drought conditions that have affected national production. And while recent improvements in seasonal conditions will ease pressures on primary producers, the impact of this summer's bushfires and COVID-19 will likely compound those of the drought in the short term.

There is considerable uncertainty in the outlook for the agricultural, forestry and fisheries sectors with the spread of COVID-19. Key aspects that will drive the economic impacts from the pandemic relate to the length of time over which it continues and the measures put in place by governments around the world to limit its spread. However, the underlying medium-term prospects for the sector remain strong.

Economic impacts of COVID-19 are uncertain

The COVID-19 outbreak was initially concentrated in China. However it has since spread globally, devastating the lives of a significant number of people and resulting in significant downturns in global financial markets. Measures introduced to limit the spread of the virus have significantly changed people's behaviour, which is flowing through to reduced economic activity and growth. The International Monetary Fund (IMF) is currently forecasting a 3% contraction in global economic activity in 2020—worse than the global financial crisis (IMF 2020).

The downturn in economic activity created by COVID-19 is unlikely to have a significant impact on demand for essential food products. This persistence of demand was seen during the Global Financial Crisis in 2007–08, when agricultural trade remained steady despite the economic turmoil the crisis created (Figure 1).

Figure 1 Global trade in agricultural products during the Global Financial Crisis



Notes: Trade data discounted by IMF food price index.

Source: Greenville et al. (2019), IMF.

However, as economic activity falls so do incomes and the ability of consumers to pay for food. Weakening incomes will likely create softer price conditions, reducing returns to Australian producers. However, Australia's exchange rate has also fallen during the pandemic, making Australian product more competitive in world markets. This movement should help offset some of the downturn in world prices.

Not all products from the agricultural, forestry and fisheries sectors are essential items. For agriculture, products consumed through more discretionary spending are likely to be significantly affected. These include high quality foods for cafés and restaurants. For seafood alone, the outbreak in China is forecast to lead to a drop in export earnings of around \$200 million in 2019–20 (Mobsby et al. 2020).

For products which feed exclusively into manufacturing supply chains, such as cotton, wool and wood products, the impacts will depend on the extent and length of closures of manufacturing businesses and any disruption to the construction sector. The impact on these industries from falling consumer incomes will be more significant as consumers delay purchases of new clothes and other durable goods.

Domestic food security is not at risk

The 1996 World Food Summit defined food security as the situation “when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life” (FAO 1996). More technically, the United Nations Food and Agriculture Organisation outlines four key requirements of food security as availability, access, utilization and stability of supply (FAO 2006). The multifaceted nature of food security means a country does not need to be self-sufficient in food production to be food secure and the two should not be confused.

Australia has the 12th best food security rating in the world (The Economist Intelligence Unit 2019) because we are a significant net exporter of food. In 2018–19 Australia’s food exports exceeded \$42 billion, more than two times the value of our food imports of just under \$20 billion (ABARES 2019). Beyond food availability—achieved principally from domestic production but also imports—Australia is a high-income country with an effective social security system. This means that the majority of Australian households have incomes that provide stable access to food.

Disruptions in international markets may mean that Australian food imports will be disrupted. While this may affect the choice and the cost of some items, it will not have a material impact on overall food availability. These effects will vary across commodity types since some consumption is more reliant on imported products than others. For example, around 50% of domestic pork consumption is of imported products while almost all fresh fruit and vegetables consumed in Australia are domestically sourced.

In general there are currently ample supplies of food worldwide. The world’s staple cereal crops—wheat, rice, soybeans and corn—are in ample supply. The Agricultural Market Information System (AMIS), set up by the G20 during the food price crisis that occurred after the Global Financial Crisis, noted in April that “[d]espite much uncertainty caused by the rapid spread of COVID-19, global food markets remain well balanced: cereal stocks are expected to reach their third highest level on record this season and export availabilities for all AMIS crops are more than adequate to meet the anticipated demand” (AMIS 2020).

In terms of domestic agricultural production, in the short run supply is relatively fixed due to growing seasons and past production decisions. There may be disruptions to some industries (discussed in detail below), but the sheer volume of Australia’s food production relative to the needs of the domestic population mean domestic food supplies will not fall short. Calls to divert water or other inputs to the production of crops such as rice would only create additional costs for other agricultural producers or to the environment, while doing nothing to increase the supply in the short run since the growing season for rice has past (ABARES 2020b).

For Australia the main issue facing food producers is maintaining access to international markets and sourcing necessary imported inputs.

Australian exports to continue

Exports of Australian agriculture, forestry and fisheries products are not uniform over the year. There is a clear seasonality in the export cycles of our major exported products, largely related to the harvest and production cycles of the industries involved.

The coincidence of these cycles and the COVID-19 pandemic will play a large part in the potential effect on Australia's exports, along with the impact of the pandemic in the countries to which we export. For some seafood species, such as lobster and abalone, and a number of horticultural products, exports peak in summer and drop away (Table 1) quickly. The largest market for these products is China. Because COVID-19 originated in China, the largest impacts on these industries stemming from the fall in export demand are likely to have already been realised. However, not all of the reduced export revenues will be lost, since there is some potential for catch-up exports in 2020–21, either as a result of delaying production to the next financial year or through an agreement to extend fishing seasons. For example, the [Western Australian State government](#) extended the current rock lobster season from 12 months to 18 months (ending 30 June 2021) and increased the quota to 9,000 tonnes, allowing quota to be shifted between seasons.

Table 1 Seasonality in exports will play a role in determining the impacts on the sector

Commodity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Dairy products												
Grains												
Horticulture												
Industrial crops												
Meat and live animals												
Other livestock & livestock products												
Wool												
Oilseeds												
Other crops and crop products												
Pulses												
Fisheries (edible)												
Fisheries (in-edible)												
Forestry												

	Peak (10 per cent or more of total trade in a month)
	Shoulder (at least 8 per cent of total trade in a month)
	Low (less than 8 per cent of total trade in a month)

Note: ABARES analysis, based on Australian export statistics 2014–15 to 2018–19.

Source: ABARES

For some products the export peak is still to come. Cotton, for example, usually records peak exports after harvest around April. However, production this season has been significantly reduced due to ongoing drought conditions and Australia is likely to record its smallest cotton crop since 2006–07 (ABARES 2020a). Producers also have the ability to store cotton. China is the largest export market, and with initial signs of recovery in its manufacturing sectors, there is

potential for demand to pick-up post-harvest. These factors should limit the potential risk of COVID-19 disrupting producer incomes.

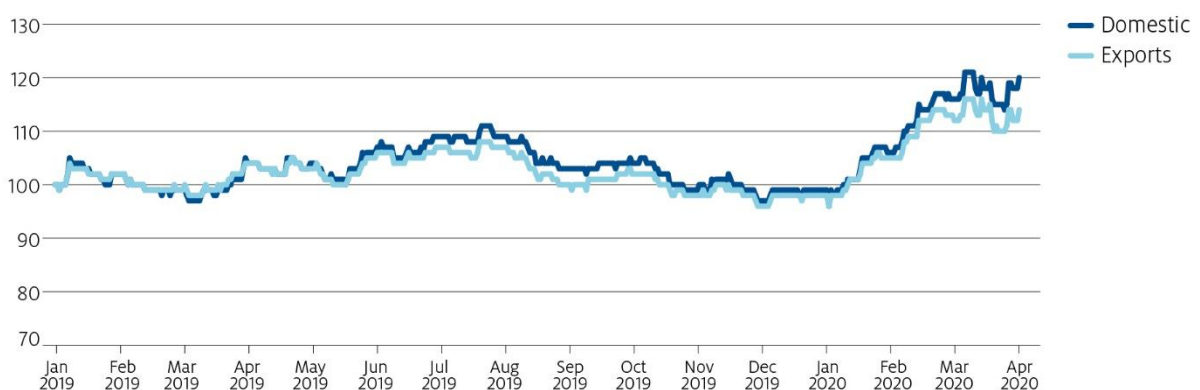
Other products which are perishable are yet to record their export peak for the 2020-21. Citrus and berries experience peaks in production and exports towards the end of the winter and into spring. These products are shipped principally to China, South-East Asia and New Zealand. While still some months away, the extent and spread of COVID-19 may affect the ability of producers to harvest these products or get them to end consumers.

Outside of China, our major trading partners are in east and South-East Asia, and the United States. COVID-19 is continuing to spread in many of these markets, with the United States now ranking first in the number of infections globally (as at mid-April 2020). However, the extent of disruption to Australia's exports is yet to be seen. Trade in some markets may be more exposed and at greater risk to demand shocks. Live cattle trade into Indonesia is an example. With the high cost of meat in Indonesia, the potential for both reduced incomes due to a downturn in economic activity and supply chain disruptions, along with limited alternative markets, could be a significant disruption.

Downside risks exist for prices

People will continue to need food throughout the COVID-19 pandemic. The significant number of people practicing social distancing in large towns and cities is forcing supply chains to adapt to the change in demand dynamics. Consumption at restaurants has fallen but home consumption has risen. Overall, food consumption is likely to be relatively stable. For most sectors the disruption is likely to be limited to a reduction in processing resulting from the shift in the way food is being consumed. Since the pandemic began, past price growth has moderated in line with this expectation (Figure 2).

Figure 2 Growth in prices has softened for agricultural goods since early 2019, January 2019 to April 2020



Source: ABARES

If the pandemic continues to spread, the basic need for food will likely sustain demand as long as supply chains function. However, the duration of the pandemic and the resulting downturn in economic activity would have a negative impact on household incomes. This would translate into a fall in export prices for a number of products. The downturn in prices will be partially offset by a falling Australian dollar as global markets react to the more significant impacts that are likely to occur in other sectors of the Australian economy, such as education and tourism.

In many countries, grocery supply chains are being stretched due to spikes in demand as people try to store enough food to get themselves through potential periods of isolation. This will most likely be temporary. To manage demand, some major retailers are already instituting rationing of purchases and dedicated shopping times for vulnerable people. Community awareness about the lack of need for food stockpiling should improve over time.

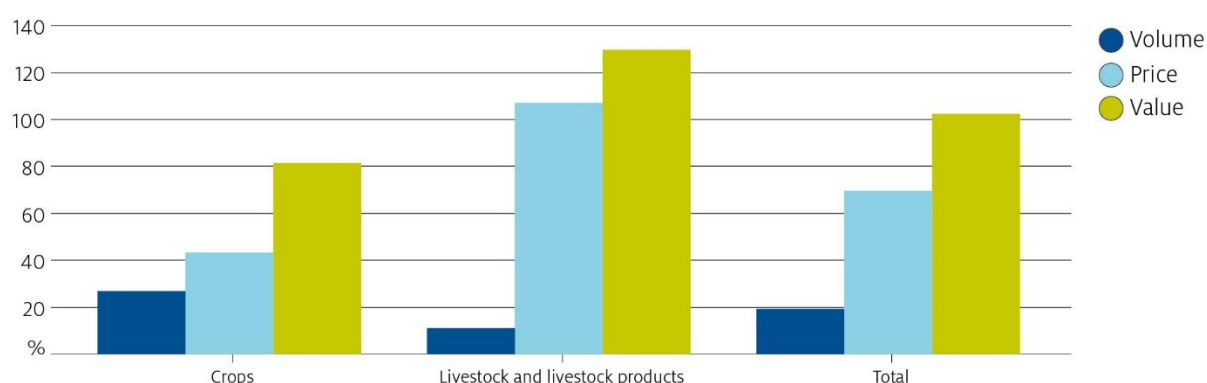
The outlook for agricultural prices still depends on the global supply and demand balance. ABARES' March 2020 global outlook assumed COVID-19 would be isolated to China. When assessed in combination with changes in world supply, the forecast was for a general softening of export prices for Australian producers. Global meat prices have been boosted by African swine fever-induced shortages—a situation that will continue during the pandemic. So, while the pandemic is likely to place downward pressure on prices, the expectation is that they will continue to remain high by historical standards. World grain prices are forecast to remain low, and for Australian producers, recent high domestic prices resulting from drought-constrained supplies are expected to ease. The pandemic is likely to reinforce these trends. However, some

countries have recently introduced trade barriers for staple grains in response to fears about COVID-19, which may put upward pressure on world prices (discussed in the final section of this report).

For other industries, the impact of COVID-19 on global economic growth was assessed by ABARES as a significant downside price risk (Howden & Zammit 2020). This was particularly the case for those products which accounted for more discretionary purchases or were exposed to the hospitality sector—products such as wine and seafood, in particular. For seafood, the outbreak in China occurred during the peak export season for Australian rock lobster and is expected to lead to a fall in exports of around \$200 million in 2019–20 (Mobsby et al. 2020).

Price growth has been important for Australia's agricultural sector over the past 20 years. Since 1999–2000 agricultural prices have increased around 43%. This price growth has contributed to sectoral income growth and, when seasonal conditions have been unfavourable, to income maintenance (Figure 3). Moderating prices will therefore slow the growth of Australian agricultural gross value of production and make the achievement of the 2030 \$100 billion target more difficult.

Figure 3 Price growth a key contributor to industry performance over the past 20 years



Notes: Values represent the growth in each variable over the past 20 years (not the proportion of growth that can be attributed to each factor), values are smoothed using a 5-year moving average.

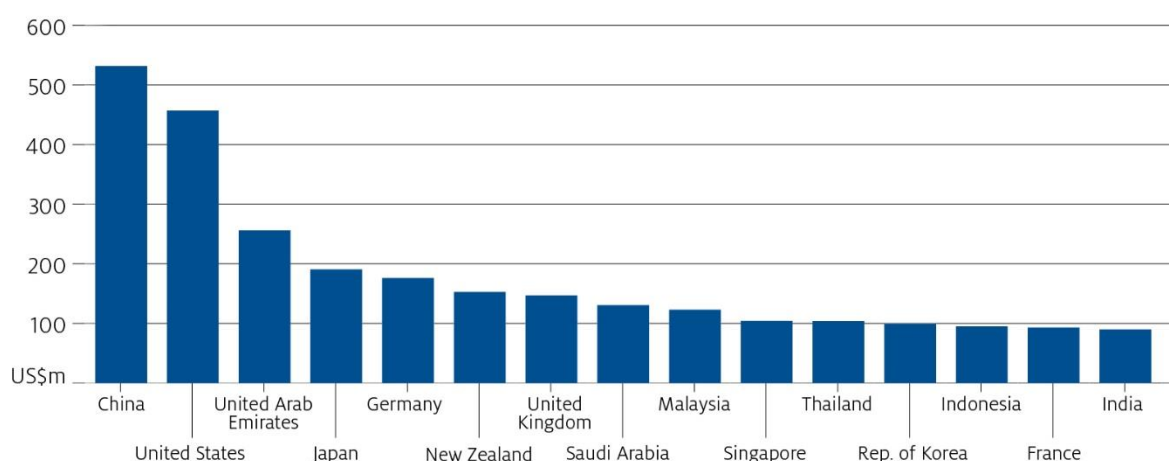
Source: ABARES

For many non-food products, demand is more susceptible to general domestic global economic conditions. A number of these products feed into the manufacturing and construction sectors where they are transformed into new houses, clothes and other household items. These products, including forestry outputs, wool and cotton, are more vulnerable to downturns in economic activity. This is already being seen with building approvals, which are down 4% compared to this time last year and could therefore affect demand for wood products (ABS 2020a).

Disruptions to imported inputs and supply chains present a risk

Australian agriculture is both downstream and upstream of various international industries in global supply networks. Australia's agricultural exports are underpinned by imports, with around 10% of total gross value of trade made up of foreign value added. In 2014, foreign value added amounted to around US\$4 billion. China is our largest supplier of inputs into agricultural production, supplying around US\$530 million, or 1.4%, of Australia's gross value of agricultural and food exports in 2014 (Figure 4), followed by the United States, which supplied 1.2% (Greenville 2019).

Figure 4 Most supplies of imported inputs come from China and the United States, but Asia and Europe are also important



Notes: Includes forestry but not manufactured wood products.

Source: Greenville (2019)

The Australian agriculture, forestry and fisheries sectors rely most heavily on imports of products from the oil and gas, chemicals and fertilisers, machinery and equipment and business services sectors. Both domestic processing and farming businesses are vulnerable to disruptions caused by a lack of imported inputs.

For processors, these often relate to packaging and other component inputs (such as some milk products from New Zealand for dairy processors). For producers, these imported inputs are principally chemicals, fertilisers and machinery. Despite the COVID-19 pandemic, Australia's agricultural sector is not yet compromised by the lack of imported inputs.

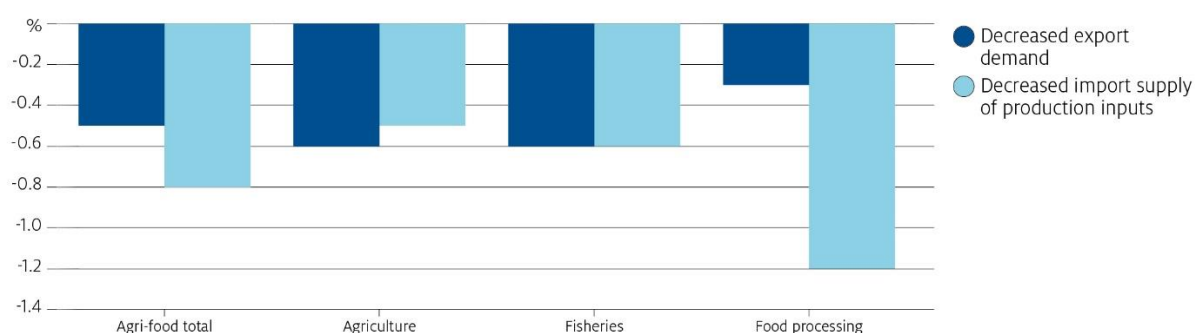
ABS monthly import statistics up to February 2020 indicate that foreign input supplies have kept flowing into Australia (ABS 2020b). However, a number of industries have flagged the risk related to potential disruptions to input supplies. For example, the dairy industry has highlighted potential supply issues for items such as tins for milk powder and the berry industry is highlighting potential disruptions to the supply of imported packaging (punnets). For these industries, it is likely domestic workarounds will be found, meaning products will still find their

way to consumers. However, any workaround will likely come at a higher cost, and partially erode margins and increase consumer prices.

Illustrative modelling shows that the impact on production from the agriculture, forestry and fishing sectors (in aggregate) from disruptions to imported inputs are likely to be more significant than the impact from demand shocks. To garner insight on this, a hypothetical proportional reduction in demand for exports and in supply of imported inputs was analysed.

The impact on production from disruptions to the supply of imported inputs was around 1.7 times greater than a demand shock (Figure 5). This is because a demand shock (that is, a sudden fall in demand) generally reduces prices but not production, and the products typically still find a market. In contrast, a sudden decline in the availability of inputs limit the ability to produce, so there is less to sell. Across the sectors the modelling results vary, with incomes for producers in agriculture and fisheries more susceptible to prices softening from demand shocks rather than disruptions to input supplies due to the availability of locally sourced inputs.

Figure 5 Imported input supply disruptions pose greater risks than a fall in demand

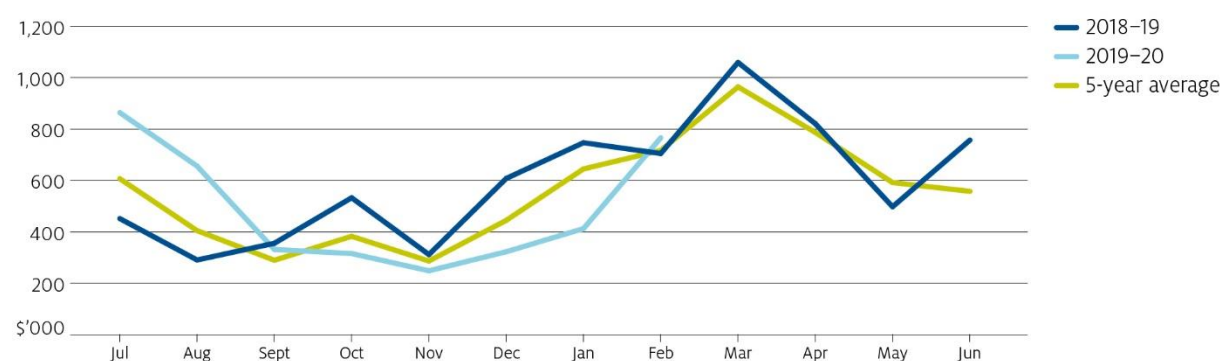


Notes: Results show the percentage decline in sector gross value of production from a 30% reduction in export demand and a 30% fall in supplies of imported inputs.

Source: ABARES

Up to April 2020 there has been no apparent sign of any significant disruption to imported inputs. ABS trade data for February 2020 reported that foreign input supplies continue to flow (ABS 2020b). Whilst ABS trade data for March 2020 was unavailable at time of publishing, confidential import clearances data suggests that imports of key inputs have continued over recent weeks without significant problems.

Imports of stock feed remain well above the 5-year average, reflecting the effect of drought on domestic stocks. Fertiliser imports have been below the 5-year average, again reflecting the effect of the drought that significantly reduced demand during the summer cropping season (Figure 6). Fertiliser imports picked up significantly in February—a trend that appears to have continued into March. A similar pattern has emerged for agricultural chemicals, suggesting that supply chains are responding to increased demand despite the COVID-19 crisis. Imports of agricultural machinery remain largely in line with average levels.

Figure 6 Imports of key fertiliser inputs continue to arrive in Australia

Source: ABS (2020b).

Given ABARES' outlook for the winter season (ABARES 2020a), the use of chemicals such as herbicides and fertiliser will increase. Well-functioning import supply chains will be therefore important.

For Australian exports, our first market is not our last. In 2014, 21% of Australian agriculture and food exports (in domestic value-added terms) were re-exported by our trading partners. The largest re-exporter was China, using 4% of total Australian agriculture and food exports as inputs into their own exports (Greenville 2019).

Keeping these supply chains functioning will be an important determinant of the impacts on the agricultural, forestry and fisheries sectors. For products that feed into manufacturing processes internationally, such as wool and cotton, reported disruptions have been minimal so far. However, until recently the outbreak was largely limited to China, so disruptions may yet materialise.

Freight and logistics channels are becoming constrained

Access to, and affordability of, air freight is a significant trade concern. Transport costs account for an average of around 7% of the final price of Australia's food and fibre products consumed at home and abroad (Greenville et al. 2019). But producers' reliance on transport for getting goods to market makes their incomes particularly vulnerable to changes in freight rates. Estimates of prolonged disruptions to international logistics networks suggest the impacts could be large for the sector. A 150% increase in international air freight costs sustained over a three-month period combined with a 20% increase in sea and land freight costs could lower the gross value of agriculture, forestry and fisheries production by around 2%.

Whilst some air freight is carried in dedicated cargo freighters, over 80% of airfreighted exports are carried in the cargo hold of passenger aircraft (Infrastructure Partnerships Australia 2019). Those aircraft movements have been heavily or completely constrained by international travel bans. As a result, demand for air freight capacity is now exceeding supply, causing costs to rise sharply. Anecdotal industry advice is that costs have increased to prohibitive levels, from around \$0.50–\$1 per kilogram in 2019 to \$6.50 per kilogram during March 2020. There is also reduced flexibility in relation routes and timing of air freight.

Not all agricultural exports will be affected by this situation. For example, between 2014 and 2019, less than 3% of Australia's agricultural exports (by value) left the country by air freight; the majority was exported by sea. However, air freight is proportionally more important for certain commodities, ranging between 76% of the value of seafood exports to 8% of meat exports (Figure 7). Seafood, manufactured items (including infant formula, which is important for dairy) and meat exports each accounted for around 26% of the total value of air-freighted exports between 2014 and 2019 (Figure 8).

Figure 7 Average share of total exports shipped by air, 2014 to 2019

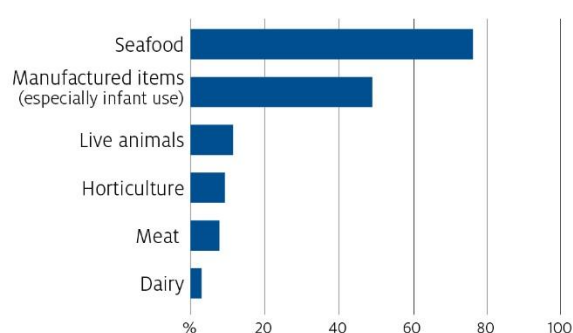
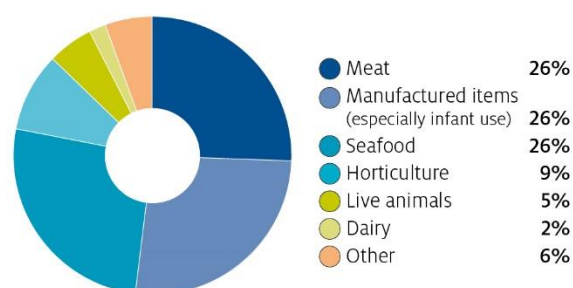


Figure 8 Average share of air freight trade, 2014 to 2019

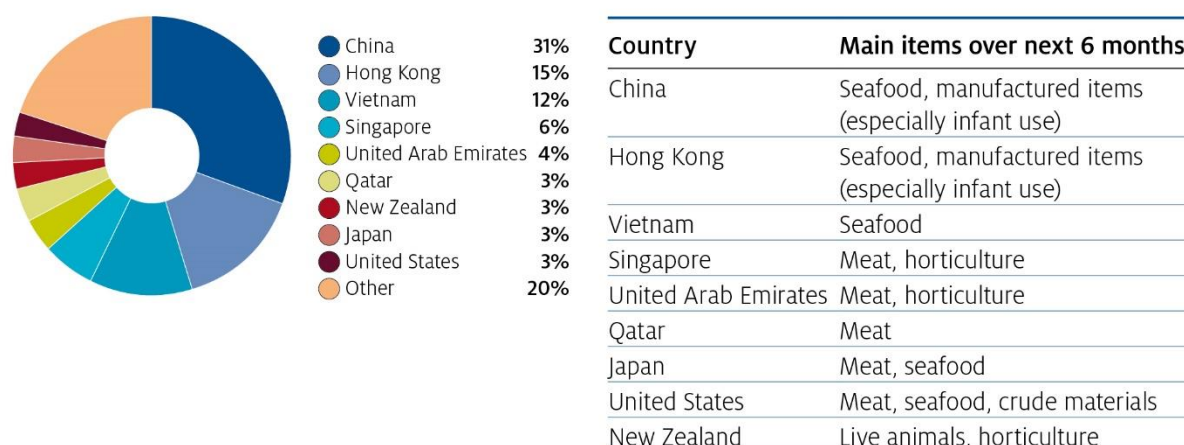


Source: BITRE

The most significant markets for Australian air freight are China, Hong Kong, Japan, the Middle East, New Zealand, Singapore, the United States and Vietnam. Air freighted beef exports represent close to 40% of the total export value of beef to the United States.

Most exporters use air freight throughout the year. But for horticulture, the peak period occurs over the summer, from October to March (Figure 9). For seafood, exports occur throughout the year but there are peaks associated with the export of crustaceans (January to March), and between April and September for salmon and tuna. For those exporters with an approaching and limited export window, continued disruptions are particularly concerning. To help overcome these risks, the Australian Government has provided \$110 million through the International Freight Assistance Mechanism.

Figure 9 Important markets and products for air freight, April to September

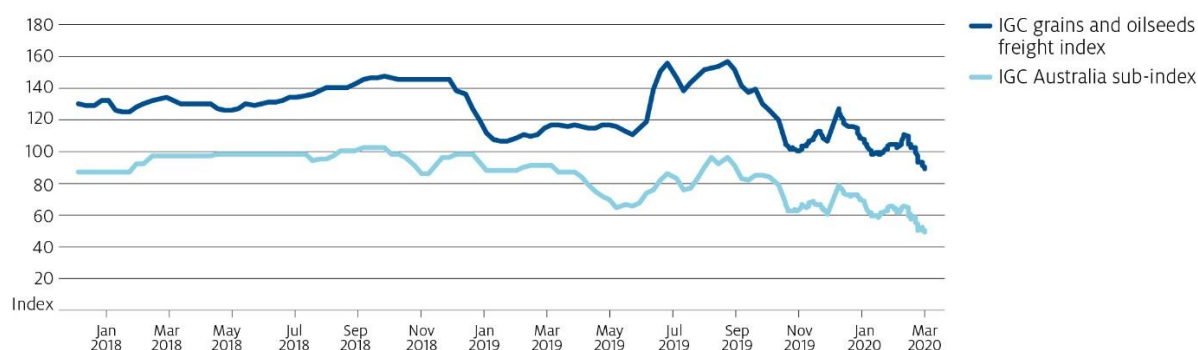


Source: BITRE

Sea freight appears to be moving more smoothly to date

Up to April 2020, exports by sea appeared to have been proceeding relatively smoothly. Bulk sea cargo freight costs for grain out of Fremantle have fallen by 35% since the beginning of the year, due to falling oil prices (Figure 10). Lower freight costs are a positive for exporters.

Figure 10 Bulk shipping costs are falling, a positive for grain exports



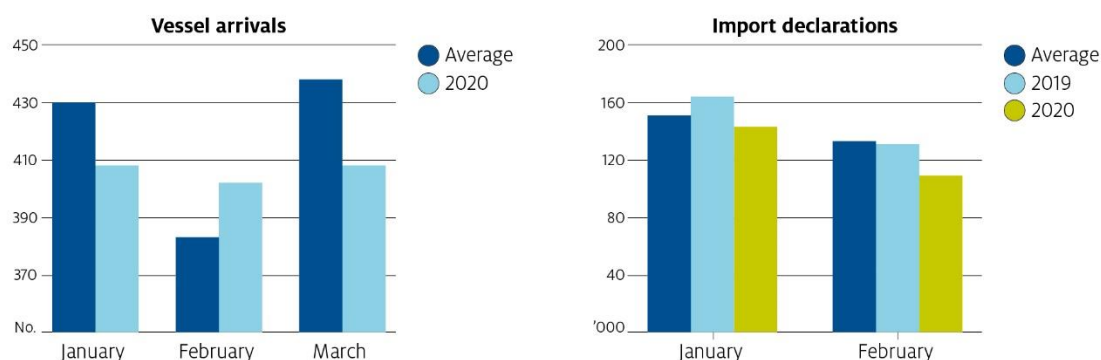
Notes: January 2013=100.

Source: International Grains Council Australian Freight Rates Sub-index, 2 Jan 2020 to 26 Mar 2020.

Some concerns have been raised regarding the availability of containers. Data to March 2020 on shipping arrivals indicate that, after the typical slowdown in February, March arrivals have remained low, potentially restricting the supply of containers (Figure 11). Similarly, the number

of import declarations for January and February 2020 from sea freight is below last year and the 5-year average.

Figure 11 Vessel arrivals and import clearances have slowed, decreasing supply of containers



Source: Department of Agriculture, Water and the Environment.

With the Chinese economy returning to a more stable state following its COVID-19 outbreak, any container shortages may resolve in the short term, as the backlog at Chinese ports ease and containers return to our shores.

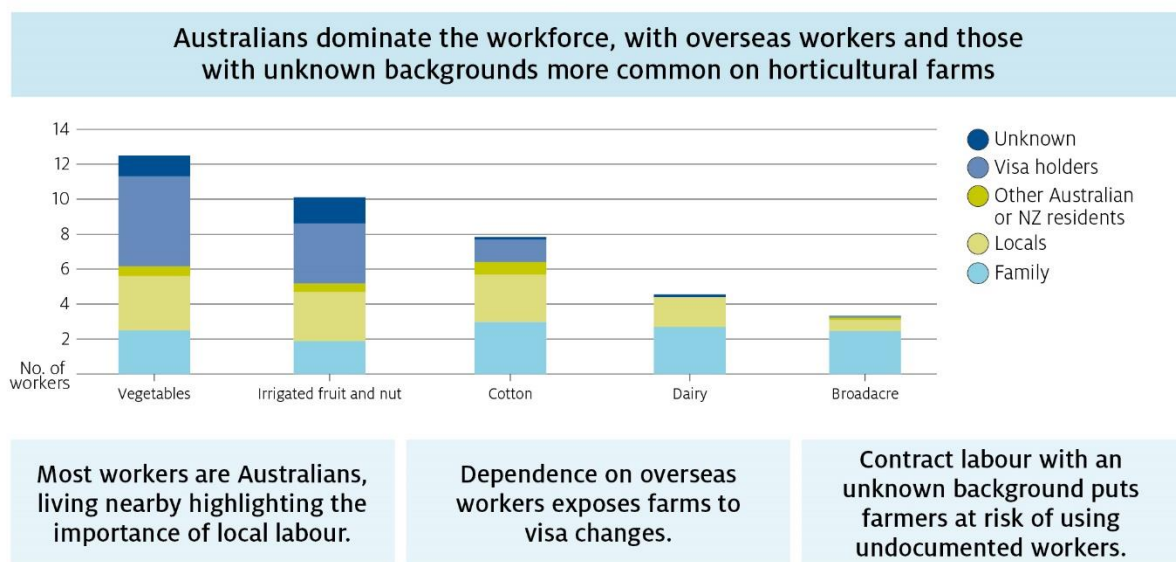
Containerised freight prices globally reflect some cause for optimism since they started to fall following increases in January. The Global Container Index that tracks weekly container prices indicates that prices rose around 1% from end December 2019 to mid January 2020 (from \$US1,446 per tonne to \$US1,581 per tonne). However, the January 2020 peak remained below a similar peak in January 2019, when the index rose to \$US1,603 per tonne. Between January 2020 and the end of March 2020, prices have fallen by 11%.

Despite recent falls in container prices, governments are enacting further measures around movements of the crews on shipping vessels, which creates uncertainty for the outlook. While keeping seaports open is a priority, many ports are already facing restrictions, with implications for the flow of products out of and into Australia (Czarnikow 2020). This may create delays in getting products to markets or extend shortages in some container supply for longer. On average, around 25% of non-grain sea freight is shipped in the period from April to June.

Maintaining availability of seasonal labour will be important

In addition to physical inputs, horticulture, some intensive production, and meat processing sectors make use of labour sourced under migrant visa arrangements. [Dufty, Martin & Zhao \(2019\)](#) found that vegetable, irrigated fruit, nut and cotton producers, in particular, were most reliant on migrant workers (limited data exists for other intensive production activities such as pork and meat processing sectors). These businesses will be most affected if travel restrictions remain in place over the coming year. The lack of available labour will likely increase the cost of production or at the extreme, limit production as producers find it difficult to harvest.

Figure 12 Average workers per farm by type, 2017–18



Source: Dufty, Martin and Zhao (2019)

The demand for labour in the broadacre and dairy sectors is relatively uniform throughout the year, whereas in the vegetable and irrigated fruit and nut sectors summer and early autumn is when the peak demand for labour occurs ([Dufty, Martin & Zhao 2019](#)). If the pandemic is under control by spring then the impacts in these sectors should be lower than if the pandemic continues into summer.

Several steps have already been taken by the Australian Government to address potential labour supply issues for agricultural producers during the COVID-19 crisis. These include:

- 1) the extension of visas for agricultural workers from overseas who are already in Australia
- 2) permission for agricultural workers to travel between regions, providing they fulfil all requirements aimed at stopping the transmission of the COVID-19 between regions, and
- 3) permission for agricultural workers to stay with one employer for a longer period.

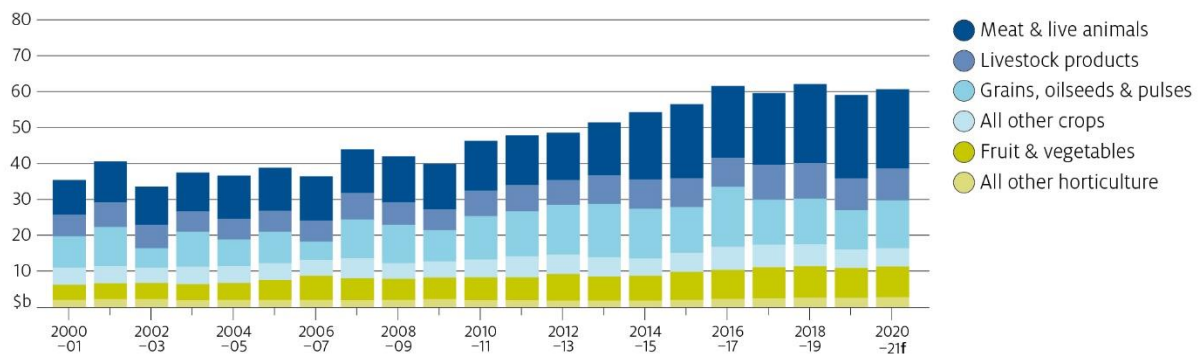
These steps help increase labour supply for sectors with a high reliance on migrant workers and will help limit any supply disruptions. However, producers are likely to experience difficulties and these pressures may increase production costs in the short-term for some products.

Recent drought conditions continue to dominate the sector's performance

For 2019-20 production, the impact on Australian production from the drought and bushfires will continue to be the main factors influencing returns to producers in the agriculture, forestry and fisheries sectors.

Drought conditions have caused the summer crop to fall by 66% in 2019-20 from the previous year. Cotton production is the lowest since 2006-07 and the winter crop is also significantly reduced (Figure 13) (ABARES 2020a). For the livestock sectors, the national cattle herd and sheep flock are at historic lows, with current production supported by high turn-off rates. The beef herd is expected to take around 5 years to rebuild to pre-drought levels, assuming more favourable climatic conditions going forward.

Figure 13 Recent and forecast agricultural production, 2000-01 to 2020-21f



Notes: s ABARES estimate. f ABARES forecast.

Source: ABARES, ABS

The magnitude of the COVID-19 outbreak on Australian producers will likely be conditioned by current drought-affected production and expected production levels for next year.

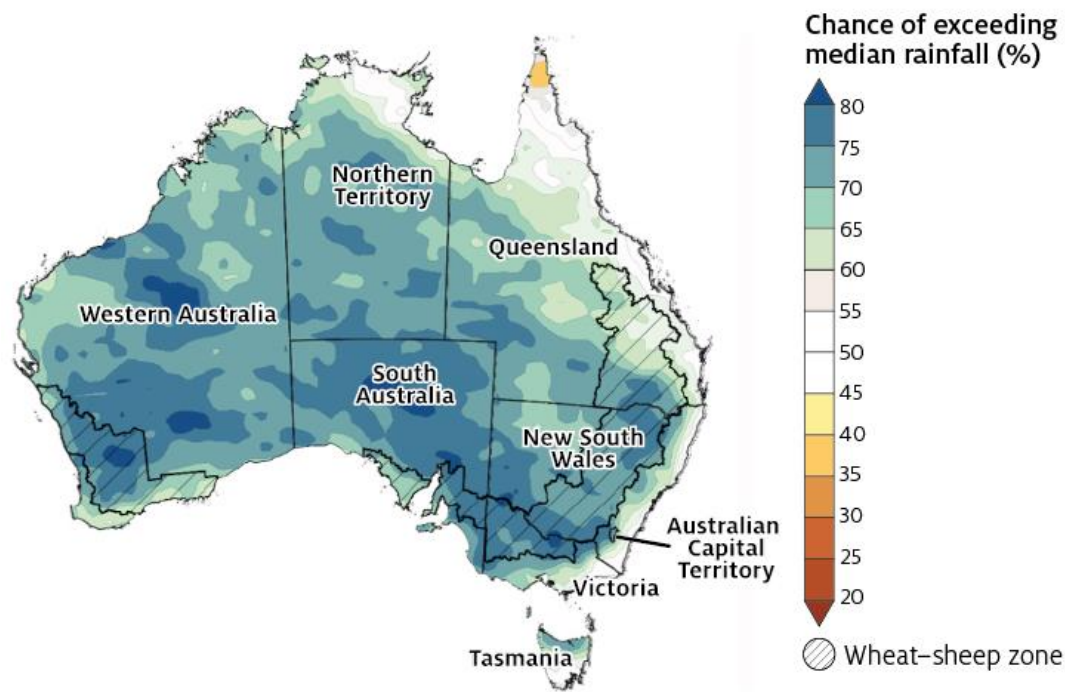
After a hot and dry 2019 and widespread drought conditions in NSW and Queensland, above-average rainfall during the first three months of 2020 has improved production conditions in some key agricultural regions across eastern Australia. For cropping, recent rainfall has also provided an early autumn break for much of the south-eastern Australian cropping belt, setting the sector up for a good start to the winter cropping season (ABARES 2020c). The latest Bureau of Meteorology seasonal forecast suggests that rainfall in coming months is likely to be higher than average across most of Australia (Map 1).

There is a high chance that rainfall during autumn and winter will be sufficient to sustain crop and pasture production in many areas where soil moisture is close to average (or higher) for this time of year following an early autumn break. In New South Wales, for example, there is a 75% chance of receiving between 25 mm in the north-west and 200mm in the east of the state between April and June.

Recent rain and a positive seasonal forecast provide the potential for the best agricultural production in several years. While current prospects for winter crops are good, more rain is

required for this to be realised. These trends will also limit production over the short term in meat sectors as herds and flocks are rebuilt, and the softening of protein prices may encourage a faster rebuild than would have otherwise occurred.

Map 1 Wetter than average conditions are likely across agricultural areas from May to July 2020



Source: Bureau of Meteorology, ABARES

In contrast, for irrigated agriculture the return to improved water storages will take longer and producers are likely to see a slower recovery should conditions continue to improve. In this context, water prices in the Murray Darling Basin (MDB) are expected to remain relatively high.

If these possibilities play out, in aggregate there could be increased crop production but lower livestock production at the beginning of 2021. The time frame may help limit the economic impact of the COVID-19 pandemic on the sector, but it will still have an impact for those who continue to produce and export in the meantime.

For forestry the spread of COVID-19 may have more immediate impacts. Bushfires that ravaged much of south-east Australia over summer significantly affected many forestry production areas. Approximately 129,200 hectares of plantation forests were in the bushfire area, representing 6.6% of the national area of plantations. A further 1.9 million hectares of 'public native forest available for timber production' in the bushfire area also burnt, representing 17% of the national area of such forest.

While the final impact on log supply will depend on factors such as fire intensity, age of trees and operational decisions on salvage harvesting and (for plantations) on replanting, it is likely that log supply from some plantations may rise in the short term as fire-affected trees are harvested. A softening of domestic and global markets, plus disruption to supply chains, may limit opportunities for the sector. This would depress producer prices or delay sale opportunities,

limiting the ability to salvage fire-damaged trees. If processing in international markets is disrupted more significantly, the lack of domestic processing alternatives may extend to limiting sales. This will depend largely on the recovery of Chinese processing.

Trade barriers are beginning to emerge that could change the price outlook

In late March, and after ABARES released its most recent price forecasts, several countries started to introduce export restrictions in response to concerns about domestic food supplies and disruptions to global transport (Table 2). These have focused on staple crops, with no reactions so far seen for livestock products.

In general, in the short term export restrictions negatively affect producers in the countries that are using them because the restrictions push down domestic prices. In the long run, they can create reputational damage for a country causing exports to trade at discounts due to the risk of restrictions being imposed again. Export restrictions also affect consumers in other countries because reduced supplies on global markets can cause world prices to rise, reducing the affordability and hence access to food for many of the world's poorest consumers.

Table 2 Export restrictions introduced late March to mid-April 2020

Country	Commodity	Restriction
Cambodia	Rice	Export ban, no end date
Eurasian Economic Union ^a	Sunflower seed, rye, soybeans	Export ban, 12 Apr-30 Jun
Kazakhstan	Wheat	Export quota, 200,000t/month, until 1 Sept
Kazakhstan	Wheat flour	Export quota, 70,000t/month, until 1 Sept
Kyrgyzstan	Pasta, rice, wheat, wheat flour	Export ban, end date unknown
Myanmar	Rice	Export quota, 100,000t/month, end date unknown
North Macedonia	Wheat, wheat flour	Export ban, until 30 Apr
Romania	Grain	Export ban outside the European Union, ended 16 April.
Russian Federation	Grain	Export quota ^b , 7Mt/month, Apr-Jun
Vietnam	Rice	Export ban ended on 10 Apr, export quota of 400,000t for Apr.

Note: a A trade bloc consisting of Armenia, Belarus, Kazakhstan, Kyrgyzstan and the Russian Federation. b Applies outside the Eurasian Economic Union.

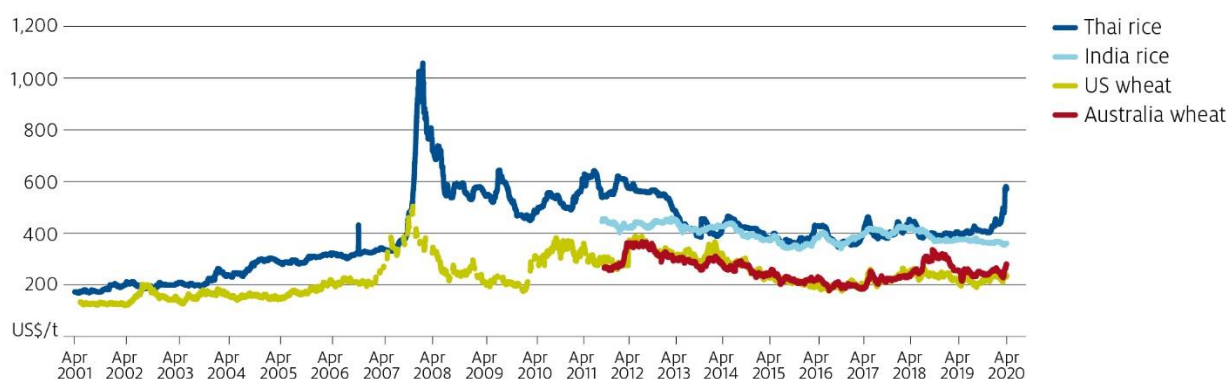
Sources: Bloomberg, International Grains Council, Prime Minister's Office of Vietnam, Reuters, WTO.

There is a risk that a number of the current interventions in export markets could influence global prices, potentially reversing the softening trend in the short run. However, they are unlikely to have a significant impact on Australian producers or consumers. In the case of wheat, Russia's export quota (due to extend from April to June 2020) is not expected to have a significant effect on world wheat prices because the quota is approximately equal to the volume forecast to be exported by Russia over the same period (Devitt 2020, IGC 2020). The export restriction therefore will not alter the supply of wheat on the world market. Kazakhstan is the world's eighth largest wheat exporter but, like Russia, its export quota is equal to volume forecast to be exported between April and June. In the event that Kazakhstan and Russia alter their wheat quotas or extend them beyond 30 June 2020, and if the altered quotas are binding

(that is, more wheat is available for export but is prevented by the quota from being sold onto the world market), the outlook for world wheat prices could be revised upward.

In the case of rice, the export restrictions currently imposed by Vietnam, Myanmar and Cambodia are also unlikely to have a significant impact on prices paid by consumers. There is currently an ample supply of rice available globally. World rice stocks are the highest they have ever been, including in major exporting countries. Although the price of rice has been rising in Thailand—a country that is currently not proposing to restrict exports—this trend is largely the result of drought and the consequent forecast fall in production. In contrast, the price of rice in India—the world's largest exporter—has been averaging around US\$400 per tonne, roughly unchanged for much of the last decade (Figure 14). Furthermore, given the significant levels of production in Vietnam—Vietnam produces around 30% more rice than it consumes—maintaining export restrictions will be difficult. Prolonged decreased sales to international markets will significantly decrease producer incomes, which will be difficult to sustain during a global economic downturn.

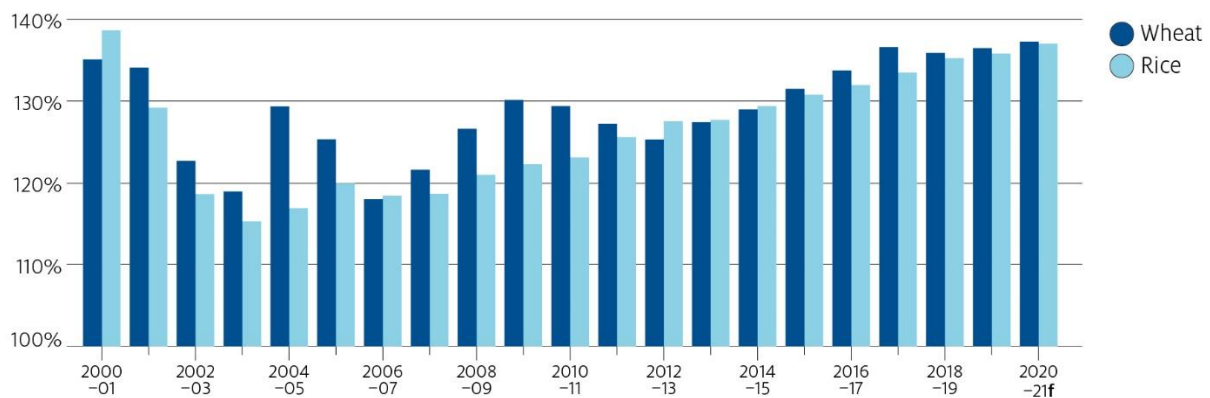
Figure 14 World wheat and rice production and stocks are strong and will likely mean little change to prices this year



Source: International Grains Council

When export restrictions were used in the past, such as during the food price crisis of 2007–08, they had a material impact on world markets. Grain prices jumped significantly. The same response to the current export restriction is not expected. That is because the global supply and demand situation for staple grains is different to what it was in 2007 and 2008. At that time, the sharp increase in prices was caused by years of contracting supply (with the exception of rice) resulting from droughts in major exporting countries.

The current restrictions have been imposed because of unfounded perceptions about the global availability of grains. Based on current information, there is no evidence for a contraction of the global supply of grains (AMIS 2020, IGC 2020). The strong global supply situation reflects generally favourable weather conditions for grain production, with some exceptions such as Thailand. In 2020–21, global wheat and rice supplies, as a share of consumption, are forecast to almost reach 20-year-highs (Figure 15).

Figure 15 World supplies (as a share of consumption) have rebuilt significantly since 2007

Sources: ABARES, International Grains Council, USDA

Another reason markets are also unlikely to respond significantly to the current export restrictions is because of improved availability and access to market information and data than in 2007 and 2008. This has improved market transparency, allowing for better-informed decision making.

Overall, the positive global supply balance for grains is likely to limit the impacts of the trade policy responses announced to date to limited short-term price impacts. For Australian producers and consumers, these and further policy measures are likely to have limited consequences. However, for other countries, further restrictions to global agricultural trade could be significant, particularly for net food importing countries. Australia has a role to play in maintaining international pressure to keep world agricultural markets functioning during the COVID-19 pandemic, including ensuring our exports reach consumers in international markets.

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