Ministry for Primary Industries
Manatū Ahu Matua

Economic Update
for the Primary Industries

June 2020

New Zealand Government

Acknowledgements

Natasha Abram, Paul Berentson, Kara Brown, Matt Dilly, Corvin Idler, Jaspreet Kaur Claudia Riley, Wido van Lijf.

Notes

Annual figures are for the year ended June unless otherwise noted. Currency figures are in New Zealand dollars unless otherwise noted. Some totals may not add due to rounding.

MPI welcomes feedback on this publication at **SOPI@mpi.govt.nz.**

Publisher

Ministry for Primary Industries
Economic Intelligence Unit
Charles Fergusson Building, 34-38 Bowen Street
PO Box 2526, Wellington 6140, New Zealand
Tel: 0800 00 83 33

This publication is available on the Ministry for Primary Industries website at **www.mpi.govt.nz**

Further copies may be requested from **SOPI@mpi.govt.nz**

ISBN No. 978-1-99-002534-1 (online)

About this report

At this time of year, the Ministry for Primary Industries (MPI)'s Economic Intelligence Unit (EIU) would ordinarily be preparing the June 2020 edition of the Situation and Outlook for Primary Industries (SOPI) for release at Fieldays in Mystery Creek. Due to the COVID-19 pandemic, we decided to delay our usual forecasting document, as the situation changes on an almost daily basis and the outlook for our sectors is more uncertain than ever before.

Instead, the EIU presents the *Economic Update for the Primary Industries* in lieu of our traditional forecasting document. This report presents the latest information available on how COVID-19 has disrupted New Zealand's primary industry exports, and how the primary sector could fare in the wake of the largest economic shock in generations.

This report comes at a time of transition from crisis to recovery, where we are starting to get a picture of the impacts of COVID-19 and are beginning to plan our road to recovery. There remains much to learn about what happened and much uncertainty about what lies ahead, so we expect to include further analysis on the economic impacts of COVID-19 in future EIU publications.

COVID-19 has led to unprecedented disruption to trade and production systems across the world. Despite most of New Zealand's primary sectors continuing to operate throughout the crisis, COVID-19 highlighted a number of dependencies and risks across the primary sector supply chain. As we enter a period of difficult global economic conditions, we are planning for our primary sectors to drive New Zealand's economic recovery.

Pre-COVID-19, the primary sector was already on a path to transformation. Given the impact of COVID-19 on other export sectors (like tourism), we now need to accelerate this transformation. The Government is looking to release a roadmap for accelerating the economic potential of the primary sector in the coming weeks. The roadmap brings together opportunities and actions spanning the primary sectors, which will operate in concert to achieve significant gains within a decade.

Contents

Overview

New Zealand's food and beverage producing sector was able to continue operating and exporting despite COVID-19 causing considerable logistics challenges and reducing processing capacity. On the other hand, the fibre sectors (primarily forestry and wool) were not allowed to operate under Level 4, but have since resumed operations. Many logistics-related issues remain both in New Zealand and overseas, but we expect these to gradually improve in the coming months.

As mostly essential services, the primary industries have fared better than other parts of the New Zealand economy through the lockdown. MPI worked with industry leaders to support the development of safe work practices, and registered 18,682 businesses, of which 11,652 were considered essential. Overall, the collaboration between MPI and industry enabled essential businesses to continue operating without a single outbreak of COVID-19 at any of our facilities.

Despite this, the primary industries have faced significant challenges over the past few months, and it will be some time before the full impact of the world's response to COVID-19 on producer and processor incomes will be known. In addition to challenges posed by COVID-19, our pastoral sectors also faced severe drought conditions across large areas of the country. This placed significant pressure on farmers at a time when processing facility capacity was reduced as those businesses adhered to safe operating procedures.

Looking ahead to the post-lockdown world, the most pressing concerns shift from supply chain disruptions to the size and shape of future consumer demand. Lockdowns across the world have led to a sharp and steep fall in economic activity, and it is increasingly apparent that the recovery will take years, not months. On top of this, COVID-19 may create lasting shifts in consumer behaviour.

The resulting outlook over the next year is quite uncertain, but it is probable that New Zealand's food and fibre exporters will be operating in global markets that are much diminished from their pre-COVID-19 potential. New Zealand's primary industries can reasonably expect lower demand and prices for their exports, although some products will fare better than others, for example food perceived as healthy, such as fresh fruits and mānuka honey.

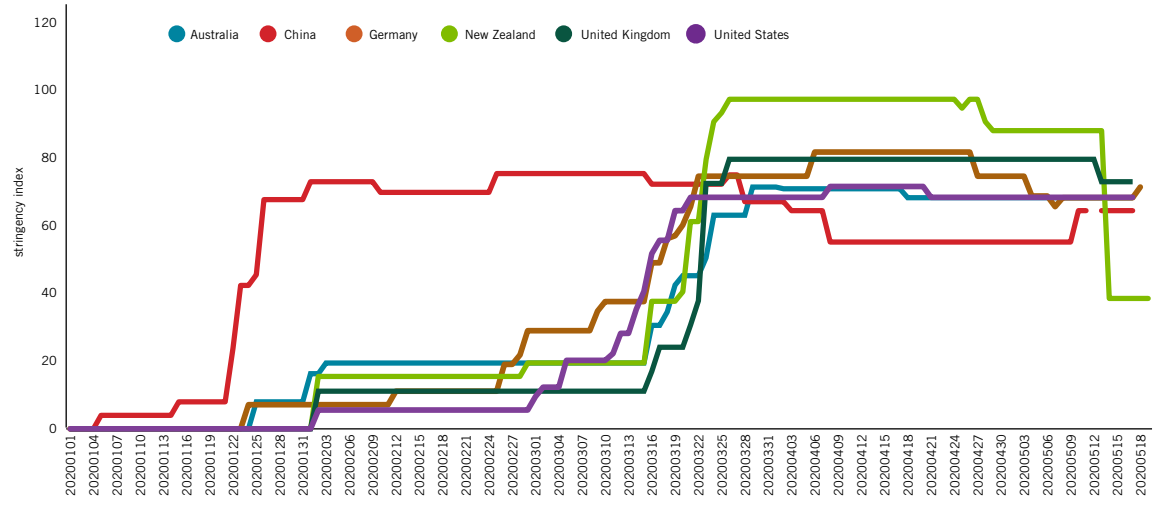
The emerging picture: lockdown

The impacts of COVID-19 on New Zealand's primary sector has two distinct phases so far, illustrated by Oxford University's government response Stringency Index (Figure 1)[1]. The first impacts were felt from late-January to late-March, driven by China's lockdown. The second set of impacts, from late-March to late-April, lines up with the rapid escalation of New Zealand's response as well as responses in many other parts of the world. These phases also align with the impacts seen in New Zealand's production and trade data.

Overall, primary sector export revenue for the year ending June 2020 remains on track to exceed revenue from the previous 12 months across all sectors except forestry and seafood. Year-to-date (July 2019 to April 2020), primary sector export revenue is tracking 4.5 percent higher than the previous year. However, these gains are exaggerated by the falling New Zealand dollar (NZD). If the NZD had not fallen, export revenue would have fallen 1.2 percent year-to-date from the previous year (see page 7 for a discussion on the buffering effects of the NZD).

1 For more information, see https://covidtracker.bsg.ox.ac.uk/

Figure 1: COVID-19 response stringency index, selected countries



Source: University of Oxford Blavatnik School of Government.

Figure 2: Monthly export revenue, year ending June 2019 and 2020

Source: Stats NZ.

February/March impacts seen in official trade data

During February and March, New Zealand's primary industry exports showed little sign of a slowdown, even as the effects of COVID-19 disrupted global supply chains and reduced demand. The two sectors that were most significantly impacted during this period were forestry, which suffered further from a slowdown in demand as China's ports struggled to clear freight, and seafood, mainly live rock lobster exports to China, as the food service industry closed there.

The most heavily affected products during the February and March period were logs, down 43 percent ($308.4 million) on the same 2 months in 2019, rock lobster, down 87 percent ($37.8 million), butter down 21 percent ($82.9 million), and onions down 29 percent ($22.8 million).

These falls were largely offset by gains due to good prices in dairy (excluding butter) (up 12.9 percent overall, $412.8 million), increased gold kiwifruit production (up 128 percent, $104.8 million), and strong demand for beef outside of China (up 9 percent, $62.1 million).

Figure 3: Export revenue during Level 4 restrictions vs same period last year (26 March – 27 April)

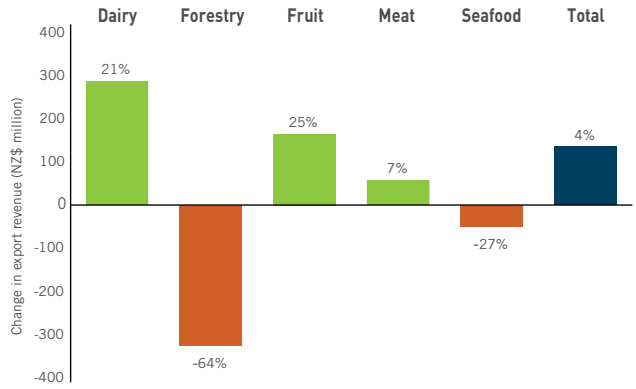
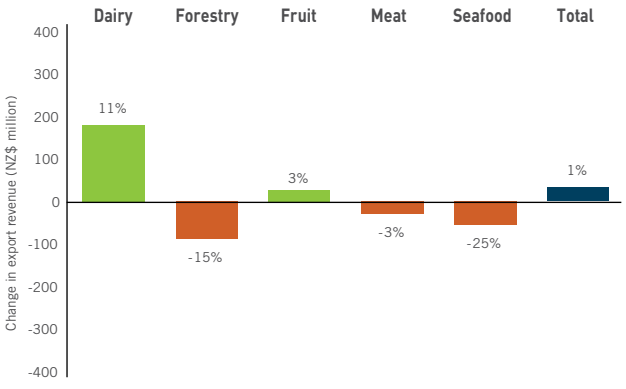


Figure 4: Export revenue since Level 4 restrictions ended vs same period last year (28 April – 3 June)



Source: Stats NZ.

Overview

Level 4 impacts seen in provisional trade data

During New Zealand's Level 4 lockdown and escalating interventions overseas, the impacts on the primary sector became more widespread. To get a more up-to-date snapshot of trade for the period since the beginning of Level 4 on 25 March, provisional daily export data has been provided by Stats NZ. This data is aggregated to higher level sector groups, which account for 82 percent of dairy trade, 75 percent of forestry, 39 percent of horticulture (fresh fruit), 92 percent of seafood and 81 percent of meat and wool.

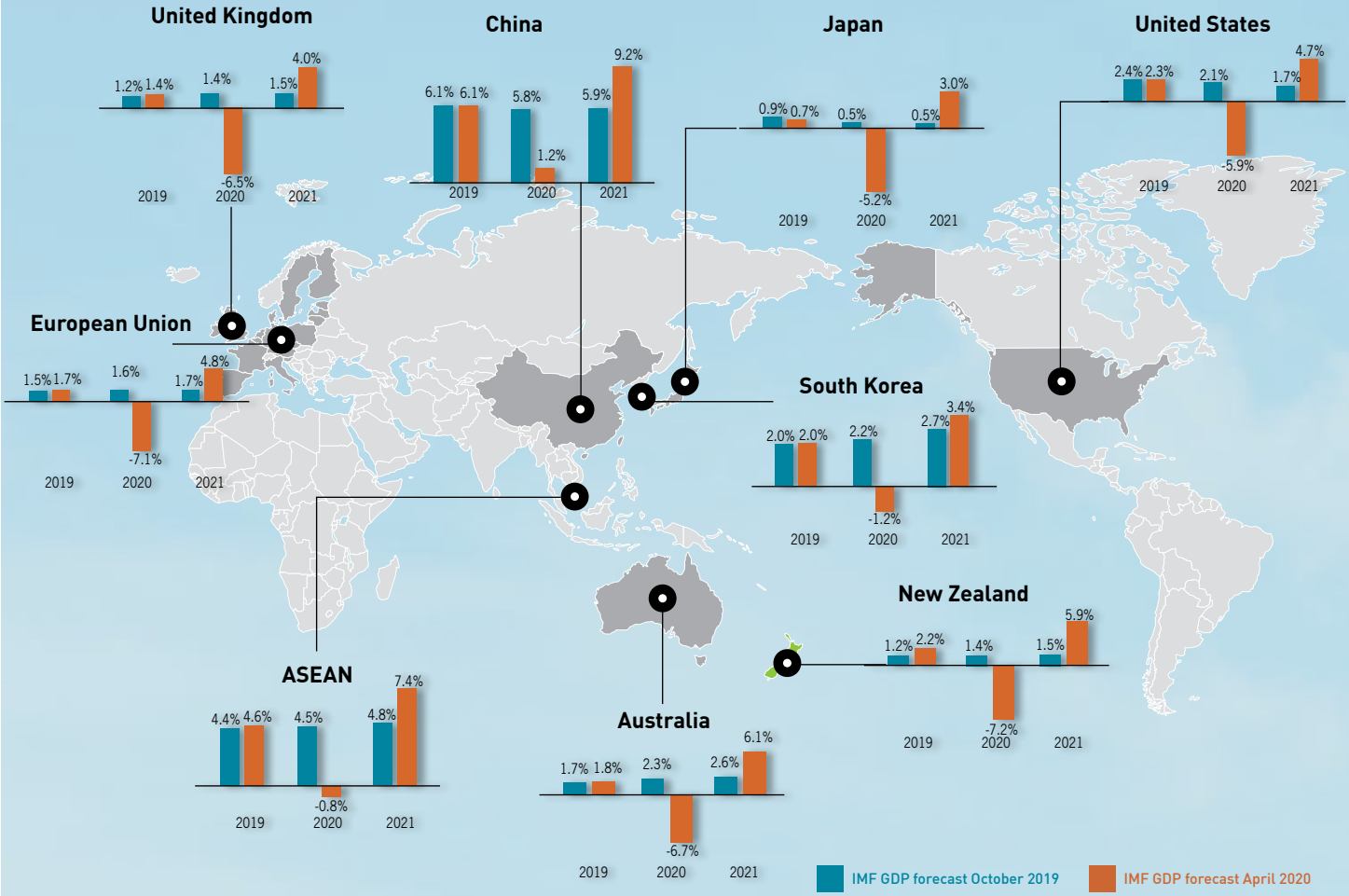
During Alert Level 4, export revenue from the five primary sectors included in this analysis remained 4 percent up on the same period last year, due to strong dairy and fruit exports and a weaker NZD.

Similar to the trends shown in monthly trade data, during Alert Level 4 the two most heavily impacted sectors were forestry and seafood, down 64 percent and 27 percent, respectively on the same period in 2019. Seafood continued to be negatively affected by reduced demand from the food service industry, logistical challenges, and social distancing requirements that made it difficult to operate fishing vessels.

The beginnings of recovery after Alert Level 4 restrictions ended

Weekly provisional trade data also show how these sectors have fared following New Zealand's move to Level 3 and Level 2 (Figure 4). Forestry export revenue remains down in this period, but as shown on page 15, the sector has ramped up exports each week to approach pre-crisis levels. Meat revenue is down 3 percent during this time as the effects of social distancing constraints continue to impact processor capacity. Overall export revenue remains 1 percent up across the five sectors due to the continued strong performance of dairy and fruit, supported by the weaker NZD.

Figure 5: Inflation adjusted GDP forecasts for selected countries 2019-2021



Source: IMF.

The emerging export outlook

KEY POINTS:

The global economic outlook has rapidly deteriorated so far in 2020, and it will take some years for economies to recover. This will impact New Zealand's primary industry export performance, but there is a high degree of uncertainty because of the unprecedented nature of this recession and a range of complex variables including:

- Some countries such as China and other parts of Asia are expected to recover faster than Europe and North America. This may benefit export sectors more reliant on Asian markets.
- Overall, our export revenue growth in US dollars has a strong relationship with global GDP growth because commodity prices fall in recessions, but historically this has been partially buffered by a weaker NZD.
- Consumer price sensitivity varies by market and product, so some export products are more exposed to a decline in consumer spending than others.
- COVID-19 introduced or reinforced some new consumer behaviours, and it remains to be seen how persistent these new habits become (see page 19).
- Sector-specific supply and demand drivers remain relevant, even though all sectors face additional headwinds to some degree.

Global economic outlook has rapidly weakened

COVID-19 is impacting virtually all economies around the world on a scale far beyond the damage the Global Financial Crisis inflicted a decade ago. Yet, not all countries and economies are expected to be affected equally. When comparing the inflation adjusted GDP forecasts from the IMF before (October 2019) and after the outbreak (April 2020), these differences become apparent.

New Zealand, Australia, the UK, the US, and the EU are all expected to experience a GDP drop of eight or more percentage points in 2020 compared to pre-pandemic expectations. In contrast, the economies of South Korea, Japan, China and the ASEAN region, are expected to be less affected and the drop in GDP is less pronounced.

While some level of recovery is expected in 2021, for most countries GDP will remain below where it would have been without COVID-19 for at least two years, which could have flow-on impacts for consumer demand for our exports.

Table 1: Export market concentration of selected export products

Baseline real GDP growth forecast		Impact of GFC	New real GDP growth forecast			Percent share of selected NZ exports year ended June 2019 (NZ$ million)											
	2020 IMF	2009 IMF	2020 FITCH	2020 IMF	2020 IMF Difference to Baseline	Whole Milk Powder	Infant Formula	Skim Milk & Butter Milk Powder	Beef and Veal	Mutton	Venison	Logs	Panels	Kiwifruit	Wine	Aqua-culture (e.g. mussels & salmon)	Inshore Shellfish (e.g. rock lobster)
	(Oct 2019)		(24 April)	(14 April)	(14 April)	$6,675	$1,641	$1,323	$3,324	$576	$189	$3,806	$514	$2,302	$1,807	$454	$391
Global	3.4%	-0.1%	-3.9%	-3.0%	-6.4%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
South Korea	2.2%	0.8%	-1.2%	-1.2%	-3.4%	0%	2%	0%	3%	0%	0%	9%	0%	7%	0%	5%	0%
China & HK	5.8%	9.4%	0.7%	1.2%	-4.6%	40%	64%	33%	37%	72%	6%	82%	4%	24%	3%	13%	93%
ASEAN	4.5%	2.2%	N/A	-0.8%	-5.4%	17%	4%	42%	4%	3%	1%	0%	21%	3%	2%	9%	4%
Japan	0.5%	-5.4%	-5.0%	-5.2%	-5.7%	0%	0%	2%	6%	1%	0%	2%	42%	26%	1%	5%	0%
Taiwan	1.9%	-1.6%	0.3%	-4.0%	-5.9%	2%	2%	4%	5%	8%	0%	1%	2%	6%	0%	2%	0%
UK	1.4%	-4.2%	-6.3%	-6.5%	-7.9%	0%	0%	0%	0%	3%	3%	0%	0%	0%	25%	2%	0%
US	2.1%	-2.5%	-5.6%	-5.9%	-8.0%	0%	0%	0%	31%	2%	28%	0%	5%	4%	31%	34%	1%
Canada	1.8%	-2.9%	-5.5%	-6.2%	-8.0%	0%	0%	0%	3%	1%	2%	0%	2%	1%	7%	4%	0%
EU	1.6%	-4.2%	-7.0%	-7.1%	-8.7%	1%	0%	0%	3%	7%	51%	0%	0%	24%	10%	9%	0%
Australia	2.3%	1.9%	-5.0%	-6.7%	-9.0%	2%	25%	2%	0%	0%	0%	0%	21%	2%	20%	9%	1%
Middle East	2.8%	-0.4%	N/A	-3.4%	-6.2%	11%	1%	6%	3%	1%	1%	0%	1%	1%	0%	2%	0%
Other	N/A	N/A	N/A	N/A	N/A	26%	1%	10%	3%	2%	5%	7%	3%	2%	1%	6%	0%

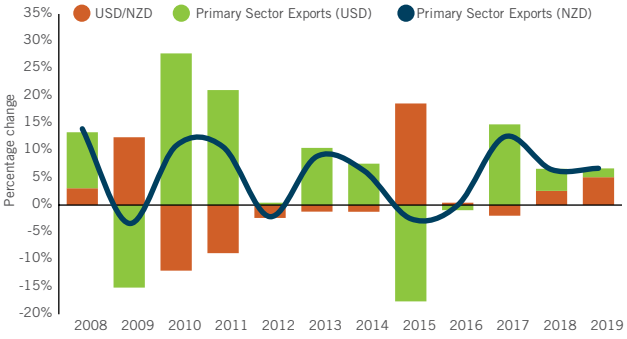
Source: IMF, FITCH, Stats NZ.

Overview

Figure 6: New Zealand export revenue growth (in USD) relative to global GDP 2008 to present

Source: IMF, RBNZ, Stats NZ.

Figure 7: Exchange rate fluctuations



Source: Stats NZ and RBNZ.

The GDP forecasts shown in shown in Figure 5, as well as in Table 1, indicate New Zealand's primary industry exports to Asia may outperform those to Australian, North American and European markets over the next year or two. Different market concentrations for different products may determine how well our exports products perform. For example, mutton and infant formula exports are more reliant on Asian markets, which are expected to see stronger economic performance than Western markets in the short-term.

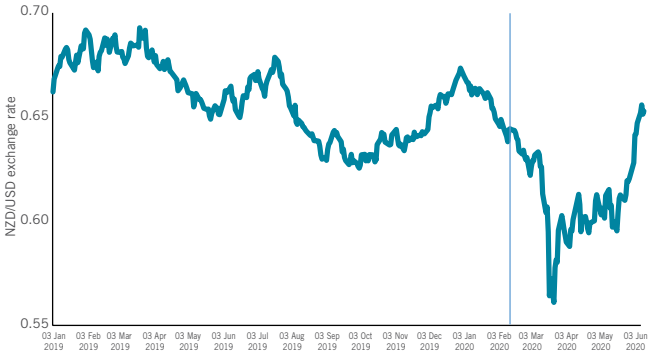
The dependence of New Zealand's primary industry export revenue on trading partner GDP growth is not straightforward. Our exports measured in US dollars have historically shown a strong correlation with nominal world GDP (Figure 6). Given this correlation we expect primary sector exports (in US dollars) to fall in line with projected falls for global GDP and consumer demand. This is largely because in the short run most primary sector commodities' production can't be easily scaled down in response to a sudden drop in demand, so prices will need to fall to rebalance supply and demand.

Some of the expected volatility in US dollar denominated commodity prices is compensated for by USD/NZD exchange rate movements (Figure 7). Historically, the NZD tends to weaken against the USD during global economic downturns, which allows New Zealand's export revenue to be more stable despite falling commodity prices denominated in US dollars. The NZD has weakened considerably since January (Figure 8), which has meant that despite primary sector exports falling by 5.4 percent in USD terms from February to April, in NZD terms they have increased 4.8 percent.

Trading partner or world GDP is not the only factor that influences our expected export performance. Consumer behaviour, price sensitivity and disposable income can be quite different across countries and products. An example of different consumer responses to price changes is shown in Figure 9. Data suggests that consumers in China and Australia seem to be highly price sensitive for honey, while those in China and Singapore seem to be rather price insensitive for milk formula.

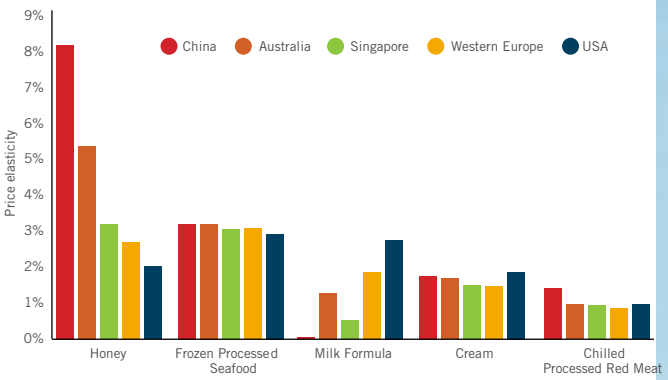
On top of well-established patterns in consumer behaviour, COVID-19 also introduced shifts to existing behaviours.

Figure 8: NZD/USD 2018 to present



Source: RBNZ.

Figure 9: Estimated change in retail sales volumes for 1 percent drop in prices



Source: Euromonitor.

A focus on products with health benefit claims is one example of these shifts, with Zespri responding by refocusing marketing to promote kiwifruit's high Vitamin C content as a result. The speed and magnitude of expected changes in all of the above makes it challenging to reliably forecast our export performance in the months and years to come.

International trading environment

During COVID-19, the primary sector has faced very few additional regulatory or economic barriers from foreign governments, though disruptions to supply chains have been significant. Countries have prioritised trade in food products, declaring them essential alongside medical equipment and pharmaceuticals. However, the global drop in food service demand, with restaurants and other hospitality outlets largely closed, has led to significant oversupply in retail channels in a number of countries. Many foreign governments are now intervening, including by increasing subsidies and private storage aid, to support income for their primary producers. New Zealand's producers risk being disproportionately affected if these policies become permanent.

Sector-specific fundamentals remain relevant

While the COVID-19 lockdowns and resulting economic impacts are major drivers for the emerging outlook for the primary industries, fundamental sector-specific drivers will remain important. These are discussed in the sector-specific sections starting on page 12. In short, we believe the underlying market factors are:

- Positive for fresh fruit, with strong harvests boosting volumes and consumer demand holding up through the early period of trade disruption.
- Complex for red meat, as strong import demand from China and reduced global supply due to herd rebuilding in Australia may combine to maintain higher prices. However this may be offset by drought in New Zealand and an uncertain demand outlook for food service oriented cuts.
- Uncertain for forestry with European spruce providing increased competition for market share of China's log imports and lack of clarity around expected Chinese construction activity.
- Unfavourable for dairy, with markets signalling an expected 14 percent fall in farmgate prices for the upcoming season.

Air freight challenges

KEY POINTS:
Around 5 percent of primary sector exports are sent by airfreight, the majority of which is carried on passenger flights, meaning global travel restrictions have significantly impacted New Zealand's ability to export some products since February. The government has stepped in with support to ensure freight can continue on key routes.

Air freight is a crucial part of New Zealand's trade

Air freight is a small, but important part of the global freight system. Between 2015 and 2019, around 5 percent ($2.04 billion in 2019) of primary sector exports by value were sent by air annually.

The importance of airfreight varies between sectors (Figure 10). For example, over 30 percent ($593 million) of seafood exports and 22 percent ($638 million) of the value of other agriculture exports[2] were airfreighted in the year to June 2019. Other significant air freighted products include blood products ($88 million), lamb ($112 million), cherries ($67 million), and blueberries ($38 million).

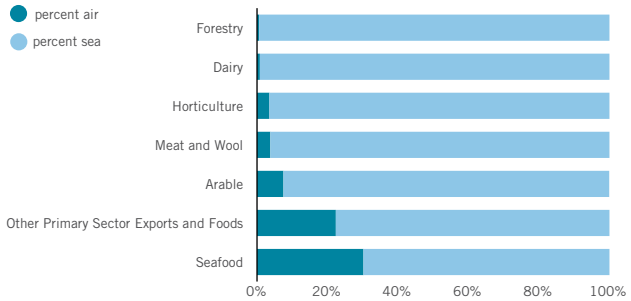
Air freight usage for exporting primary sector products is also highly seasonal. Exports are at their lowest during the winter months from June to August, and peak from January to May. This timing is driven by harvest periods and demand considerations such as Easter (when lamb is air-freighted to the UK) or Chinese New Year (when cherries are airfreighted for purchase as gifts during these celebrations).

Worldwide lockdowns have limited flights

The majority of exports by airfreight in New Zealand are carried by commercial passenger aircraft rather than cargo-only freight services. If there are fewer passenger flights leaving New Zealand, then freight capacity will reduce in direct proportion. International flights leaving Auckland airport have declined significantly since February (Figure 11).

Worldwide flights have also reduced significantly. In January 2020 worldwide, flight numbers were up one percent on a year earlier: by March worldwide flight numbers were down 15 percent with much higher drops in some countries. The numbers of domestic and international flights departing from key airfreight partners have also dropped significantly: 40-50 percent lower from China since February, 78 percent lower from Australia in April, and 45 percent lower from the US since early April.

Figure 10: Proportion of exports sent by airfreight by sector for 2019



Source: Stats NZ.

Products exported by airfreight are primarily high value products such as rock lobster, salmon, and live animals.

CHINA $678 MILLION 33%
rock lobster, innovative foods, infant formula, live poultry

AUSTRALIA $360 MILLION 18%
horses, blueberries, snapper, blood products

UNITED STATES $193 MILLION 9%
salmon, blood products, mussels, snapper

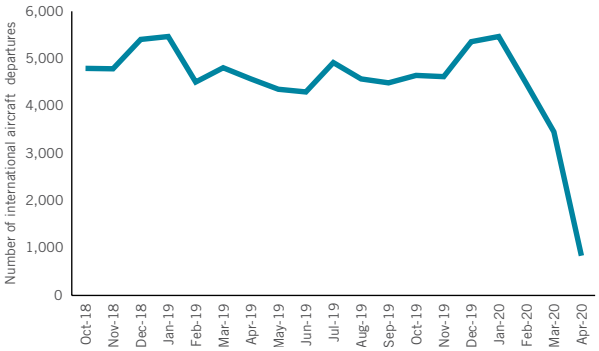
Source: Stats NZ.

Effects of decreased airfreight capacity

The effect of airfreight disruptions is multifaceted. Reductions in passenger flight capacity, and aircraft type and frequency has the ability to drive up airfreight costs and restrict access to particular markets. Air freight prices from Europe to China peaked in February at over three times normal prices, reducing gradually over March and April to close to normal prices. Prices from China to Europe and the US started surging in March, and by the middle of May were over three times normal prices.

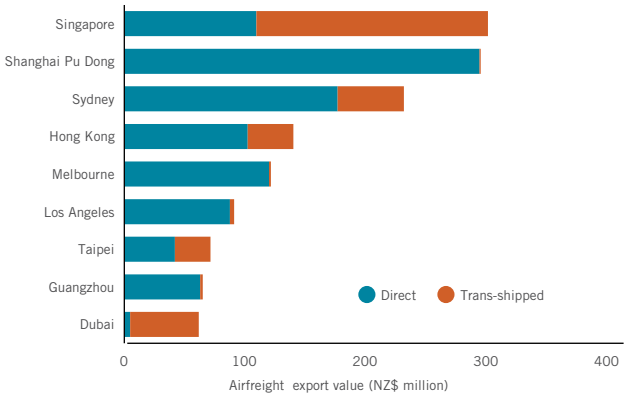
2 Includes a section of products that cannot be neatly categorised within dairy, meat and wool, seafood, forestry, horticulture, or arable, like liquid infant formula, processed foods, condiments, live animals, and honey.

Figure 11: Number of flights leaving Auckland airport by month



Source: Auckland Airport.

Figure 12: New Zealand primary sector airfreight exports by port of first discharge (2019)



Source: Stats NZ.

There are also many highly perishable or live products where trade is significantly enhanced by airfreight. Re-routing live or perishable goods via third party countries has the potential to reduce the shelf life and value of products, or to require items to be shipped in frozen rather than fresh form at a reduced value.

Reductions in flights going through airports where a lot of products are trans-shipped on to other destinations also reduces air freight capacity. Key airports for trans-shipping for New Zealand are Singapore, Sydney and Dubai. Singapore is a fundamental hub airport as 64 percent of the airfreight that went through Singapore from New Zealand in the year to June 2019 was shipped on to China (Figure 12).

Effects of COVID-19 on New Zealand's airfreight in the March 2020 quarter

New Zealand's exports by airfreight for the March 2020 quarter were worth $532 million, down 5 percent compared to the March 2019 quarter. Exports to China and Australia each fell 9 percent, while the value of air freight to the United States rose 13 percent.

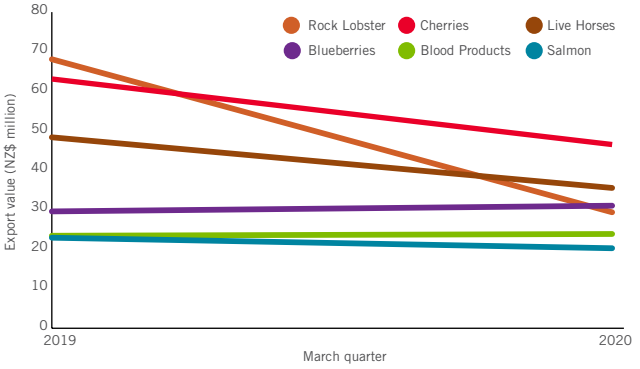
Key impacts in March 2020 quarter trade data:

- Rock lobster exports were down from $68 million in the March 2019 quarter, to only $29 million in March 2020 quarter as demand dried up in China due to measures introduced to limit the spread of COVID-19.
- Live horse exports were down from $33 million in the March 2019 quarter to $28 million in the March 2020 quarter. No horses were able to be exported to Australia in the second half of March due to restrictions to control COVID-19 in Australia meaning grooms were unable to accompany horses. Exports to other markets were at normal levels.
- A fall in cherry exports in the March 2020 quarter compared to the March 2019 quarter was due to a poor harvest rather than air freight disruptions.

Government support

To ensure the continued ability to import and export critical products such as essential medical supplies, the New Zealand government has stepped in temporarily with support to ensure two-way air transportation of critical products can continue on key routes. This funding has enabled an additional 56 flights per week, with more to come.

Figure 13: Mixed results for key airfreight products in March quarter 2020



Source: Stats NZ.

Imported feed availability

KEY POINTS:

New Zealand dairy, sheep, and beef farming operates on a primarily grass-fed system, but imported supplemental feed is an important source of animal nutrition when there is insufficient grass growth and domestically-grown supplemental feed, such as during drought conditions.

The COVID-19 pandemic has highlighted the impact of New Zealand's dependency on a small number of countries to meet such supplementary feed requirements. Palm kernel expeller (PKE) spot prices skyrocketed by 29 percent to $380/tonne in the last three weeks of March, illustrating our susceptibility to shortages and price volatility.

New Zealand's grass-based systems

New Zealand's pastoral sector operates on a primarily grass-fed system, with pasture accounting for 81 percent of dairy feed and 93 percent of sheep and beef feed. Most supplemental feed is used during droughts and over winter to maintain stock numbers for the following production season.

Most sheep and beef and over two-thirds of the dairy industry's supplemental feed is grown domestically, including maize, swedes, turnips, and kale. Imported feed makes up one-third of dairy's supplemental feed, as shown in Figure 14 below. However this imported fed has become more important this year because of the drought across many key pastoral areas and poor weather in the South Island impacted domestically grown feed supplies.

COVID-19 highlighted the impact of having limited sources of key imported feeds

During the COVID-19 response, MPI worked with industry and MPI's offshore network to identify and monitor critical imports essential to farms and the wider New Zealand food production system (e.g. supplementary feed, packaging materials, farm machinery, and fertiliser).

Overall, there were limited disruptions to imports used in the agricultural industry. However, for some sectors COVID-19 highlighted the impact of having limited sources of key inputs used during peak maintenance or growing seasons.

New Zealand is dependent on a small number of countries to meet its supplementary feed requirements (Figure 14). Prior to COVID-19, demand for internationally sourced feed was already high due to the drought. During the pandemic, farmers held excess stock due to processing constraints which further increased supplementary feed demand, and some international feed suppliers stopped or reduced harvesting and processing of feed as a result of lockdowns. Recent domestic cereal harvests went some way to meet increased demand, with overall production up 10 percent from the previous year.

The majority of imported feed is sourced from five countries

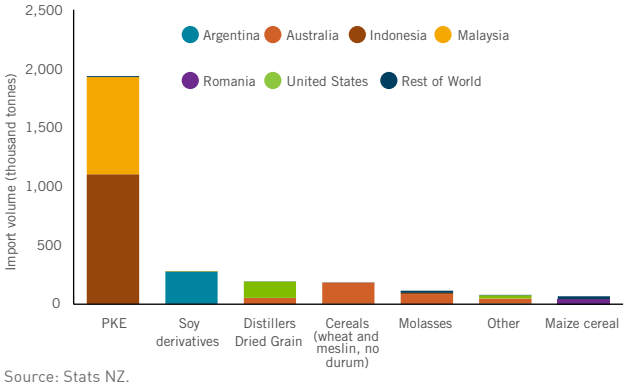
Annually, New Zealand imports an average of 2.9 million tonnes of animal feed (worth $734 million). This constitutes approximately 63 percent of New Zealand's total supplementary feed supply each year (excludes pasture, silage and hay). Feed imports are lowest in June (4 percent), and highest in November, January and March (10 percent each month).

Ninety-six percent of imported feed is sourced from five countries: Indonesia (39 percent), Malaysia (29 percent), Australia (13 percent), Argentina (10 percent) and the United States (6 percent).

PKE prices increased during the COVID-19 response

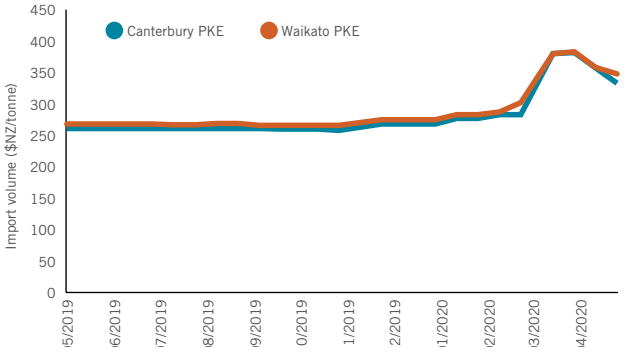
PKE spot prices increased by 29 percent to $380/tonne in the last three weeks of March (Figure 15) due to a temporary stoppage in palm oil plantation and mill activity in South East Asia, increased demand from New Zealand, and an effort to ship PKE to New Zealand in short

Figure 14: Average animal feed imports by country (2015-19)



Source: Stats NZ.

Figure 15: PKE spot price (May 2019 – April 2020)



Source: NZX.

timeframes. This price increase was short-lived, and PKE prices have returned to normal levels in May.

The PKE price spike was exacerbated by PKE being New Zealand's largest animal feed import, constituting 68 percent of total animal feed imports by volume, and the vast majority (99.6 percent) of PKE imports coming from Indonesia and Malaysia.

New Zealand's susceptibility to the PKE spot price jump highlights the potential impact of single market dependency, especially for inputs the agricultural industry relies on and have limited affordable substitutes for. Based on our single (or limited) market dependency for a number of other key agricultural imports, our susceptibility to shortages and/or price volatility is likely to impact the agricultural sector when future crises happen.

Other major animal feed imports are also dependent on one or two key countries

Soy derivatives are New Zealand's second biggest animal feed import category, constituting 9 percent of imported feed. Soy derivatives have an even higher dependency on a single country than PKE, with 98 percent of imports being sourced from Argentina. Wheat and molasses are in a similar situation, with 98 percent and 76 percent being sourced from Australia, respectively. (Note that some wheat is for milling rather than animal consumption).

Continued Government work

During lockdown, MPI worked to ensure that critical inputs and services could be provided to the New Zealand food sector by ensuring these products could be cleared through ports and critical services could be performed. MPI continues to support industry in this way.

In response to the large scale drought a Feed Working Group was established in mid-March and made up of representatives from MPI, DairyNZ, Beef+LambNZ, Federated Farmers, and AgFirst. Since then, the Feed Working Group has established a fortnightly nationwide feed survey, a feed budgeting service for farmers, and four Feed Coordinator roles. The Feed Coordinators identify feed sources and match these with farmers needing feed, including moving feed from the South Island to the North Island.

Sector briefs

Dairy

KEY POINTS:

While there have been few immediate impacts on the dairy industry as a result of the lockdowns in New Zealand and overseas, the deteriorating supply and demand outlook has pushed the upcoming season's price outlook significantly lower since January, with flow on effects to farm level profitability.

Drought conditions have also affected some key dairying regions and contributed to feed shortages. This has been compounded by the limited processing capacity at meat works.

Situation

The provisional trade data published by Stats NZ show dairy exports were particularly strong from 25 March to 3 June, up $519 million compared to the same time last year due to strong prices supported by the falling NZD.

Although activity from Chinese buyers (particularly for WMP and SMP) did weaken temporarily in early March, followed by a dip in Middle Eastern activity in late April, demand from both regions had since returned.

Despite recent commodity price falls, dairy companies had contracted a high percentage of the 2019/20 season's milk supply and will be able to maintain current season milk prices at historically high levels (Figure 17), which will support on-farm profitability in the short term.

Outlook

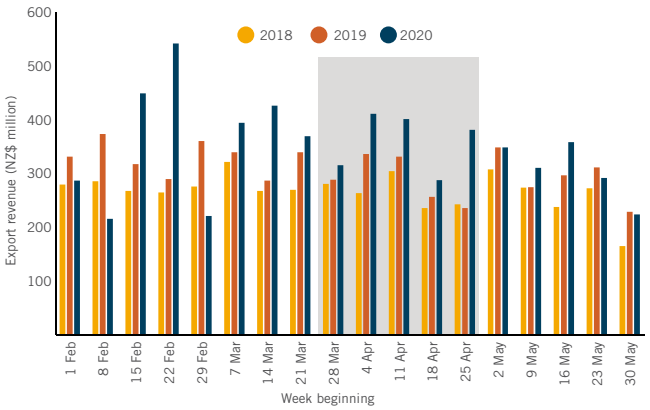
Looking ahead to the 2020/21 season, the impact of declining dairy export commodity prices and weakness in dairy foodservice and consumer markets globally, will ultimately weaken processor profitability and therefore flow on to farmgate returns.

Weighted average prices on the Global Dairy Trade platform have fallen 15 percent (in USD terms) since the end of January, and are now 13 percent lower than at the same time last year (Figure 18).

Over the same period, NZX farmgate milk price futures for the 2020/21 season have fallen 14 percent from NZ$7.30 per kg milk solid to $6.30 (Figure 17). This is consistent with various bank forecasts for the 2020/21 season, which currently fall in a range between $5.60 and $6.50 per kg of milk solids. This will be close to (and in many cases below) farms' break-even levels for profitability, and has the potential to undermine the financial viability of some marginal and highly indebted farm businesses.

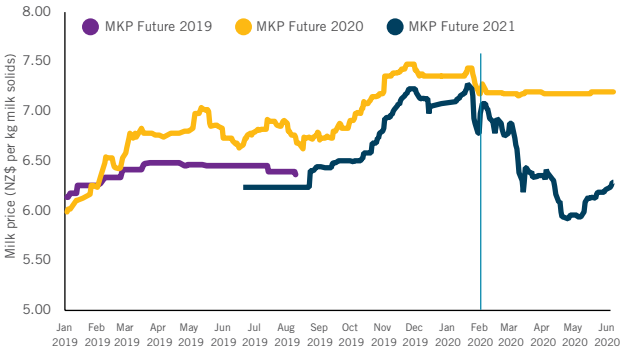
Recovery for dairy may also be affected by the impact of increased subsidies in the US and EU. While the purpose of these subsidies is to provide economic stability, support rural communities and protect food supplies, there is risk that in the longer-term they may compound the negative economic impact of COVID-19 and increase volatility in markets by encouraging increased global production.

Figure 16: Total weekly dairy exports 2018-2020



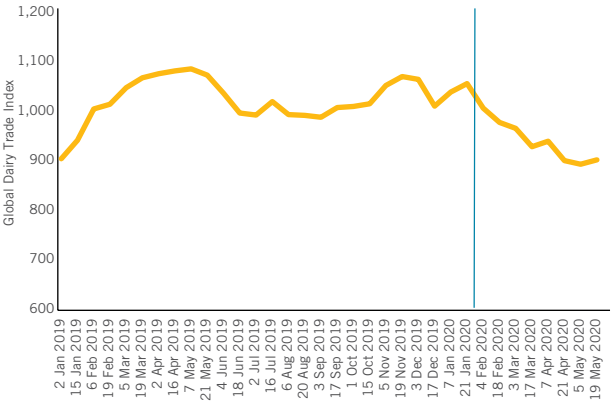
Source: Stats NZ and MPI.

Figure 17: Weekly milk futures prices July 2019 to May 2020



Source: NZX.

Figure 18: Global dairy trade index January 2019 to June 2020



Source: Global Dairy Trade.

Meat

KEY POINTS:

While COVID-19 social distancing measures allowed processing facilities to stay open and operate safely, they did significantly impact processing throughput. This occurred at a time of high seasonal demand made worse by drought conditions across most of the North Island and the top of the South Island. This caused stock to remain on farm for longer than desired, which has put further strain on limited feed supplies.

Global red meat prices have an uncertain outlook with a number of contradictory signals. Strong Chinese import demand is expected to remain a significant feature of the global meat trade, but elsewhere the looming recession and the impact on food service-grade cuts will limit demand.

Situation

New Zealand Food Safety worked closely with the meat sector in advising on safety measures to be able to operate safely. The physical distancing requirements under COVID-19 meat processing protocols reduced the industry's processing capacity under Level 4, with capacity gradually improving since then. The requirements enabled processors to remain open, while reducing the risk of an outbreak that could cause the entire facility to close as was observed in competitor markets such as the US. The initial reduction in processing capacity was approximately 30 percent for cattle and 50 percent for sheep.

As a result, between March 22 and 25 April adult cattle processing was down 10 percent and sheep processing was down 13 percent from the same period last year. Recent market reports indicate as of late May, backlogs have resolved in the North Island, but some wait times remain in the South Island.

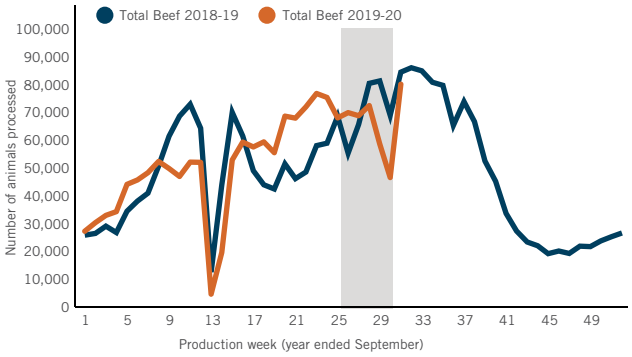
According to provisional trade data released by Stats NZ, the restricted processing capacity only became apparent from the second half of April. In February reduced meat exports to China were largely offset by exports to other countries such as the US. Since the start of lockdown however, the Chinese market has recovered and overall meat exports are tracking at similar levels to last year.

Outlook

Prior to the outbreak, Chinese meat imports surged in the second half of 2019, and the underlying animal protein shortage behind this demand remains a key market driver. The African swine fever (ASF) outbreak in China and throughout Eurasia has caused a large shortfall in production which cannot be addressed without large import volumes. This should help support prices over the next year.

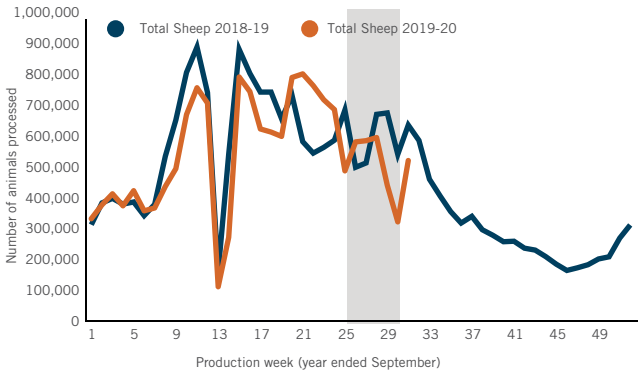
Another positive price factor is the end of the drought in Australia in the first half of 2020. This has already started to reduce Australian beef and sheep production as

Figure 19: Weekly beef production October 2018 to May 2020



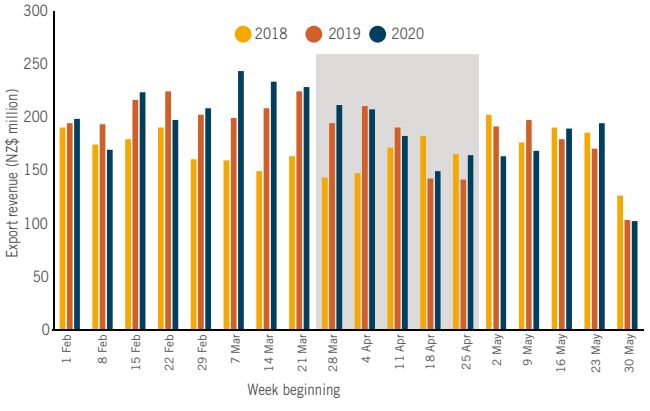
Source: NZ Meat Board.

Figure 20: Weekly lamb and mutton production October 2018 to May 2020



Source: NZ Meat Board.

Figure 21: Total weekly meat exports 2018-2020



Source: Stats NZ and MPI.

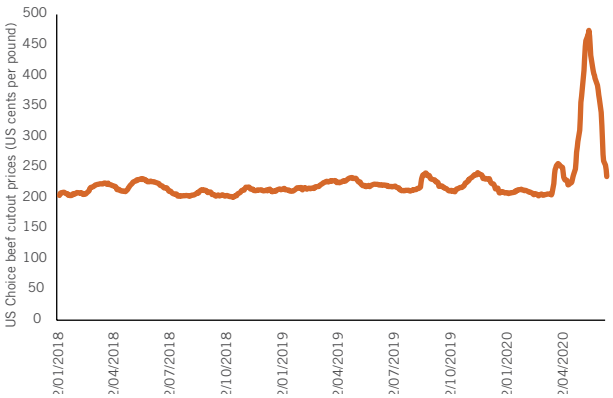
Sector briefs

farmers seek instead to rebuild stock numbers.

While these non-COVID-19 related factors should support meat prices, the global picture for red meat demand is otherwise somewhat complex. Product lines destined for food service (e.g. venison and some higher value beef and lamb cuts) are facing lower prices as a result of lockdowns globally. At the same time, cheaper retail-oriented cuts and manufacturing beef are experiencing strong demand.

The processing constraints in the US and elsewhere further muddy the market signals for consumer demand as the lockdowns subside. The US meat processing sector is operating at vastly lowered capacity as a result of positive COVID-19 cases in processing plants. This is coupled with continued disruption to US ports, also due to COVID-19 cases among port staff, leading to cold storage constraints. As a result, US beef prices have spiked but are starting to drift lower as processing capacity improves (Figure 22).

Figure 22: US wholesale meat prices 2018-2020



Source: United States Department of Agriculture.

Wool

With wool classed a non-essential business, business activity halted during the Level 4 response, except for shearing for animal welfare purposes. As a result, wool export revenue fell 85 percent in April from year ago levels, and export revenue from February to April is down 37 percent.

Due to lower demand for wool in China (a flow-on effect of a global recession), wool prices are likely to remain subdued for at least the next year. The first post-lockdown auction was held on 21 May, and the benchmark strong crossbred market indicator fell 24 percent to $1.84 per kg clean from the previous auction held in March. Elsewhere, the Australian Eastern Market Indicator (weighted towards fine wool) has fallen 29 percent from US$10.66 per kg in early February to US$7.57 per kg as at 22 May.

Pork

The domestic pork industry has been significantly impacted by Level 4 and 3 restrictions in New Zealand. Independent butchers and Asian grocers are the main customers for domestic pork producers, and they were unable to operate except for contactless delivery. In contrast, supermarket chains typically source cheaper imported pork products.

In recent weeks, a few developments have helped ease some of the more acute strains felt by the sector, and the backlog of supply is starting to be worked through. The move to Level 3 has enabled independent butchers to reopen. The New Zealand Government has agreed to purchase up to 112 thousand kilograms of pork per week at cost for distribution in food banks, which is around 10 percent of typical production volumes. In addition, improved market access to Singapore may provide some additional relief, and industry is actively looking at the opportunities this presents.

Forestry

KEY POINTS:
The forestry sector has been significantly impacted by the COVID-19 outbreak and responses, first by China's lockdown, then by New Zealand's. While the industry has since resumed operations, the main uncertainty is how strong China's demand for logs will be in the coming months.

Situation

Forestry export revenue was down 23 percent in February, 29 percent in March, and 62 percent in April from the same period in 2019. Much of the decline in February and March is due to China's lockdown, but a portion of this is also due to significantly lower prices than the previous year (Figure 25).

Forestry exports have been heavily impacted since the start of alert Level 4, with $434 million less revenue (down 39 percent) compared with the same period last year (Figure 23), and 42 percent down to China.

Since moving to Level 3 in late April, forestry export revenue has been able to ramp up, with higher export revenue in the second half of May than the same period in 2019.

Monthly harvest data from the Forest Growers Levy Trust shows the impact on harvesting. Total harvest volume in April reached just 377 thousand cubic metres, 87 percent down from the same period in 2019 (Figure 24).

The latest market reports show higher log prices in China and lower inventories at Chinese ports. Part of this is down to logs being reallocated across China's supply chains now that their manufacturing sector is operating again.

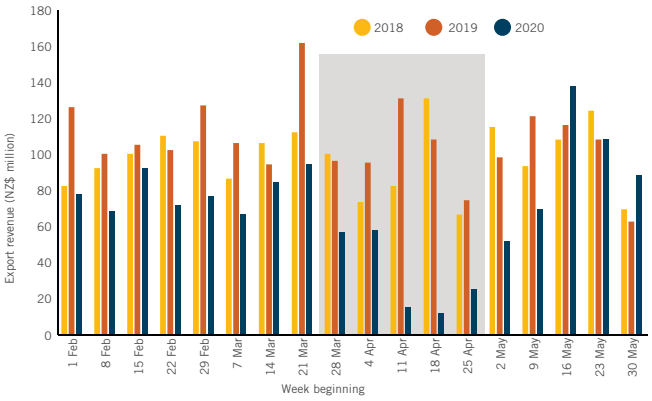
China reopened as supplies from New Zealand and Europe had slowed to a trickle. Log prices at New Zealand ports are showing an even higher bounce due to lower shipping costs and a lower NZD boosting returns.

Outlook

The main question is what happens once China's supply chain is back up and running over the next two months. That will be determined by the strength of underlying demand in China's construction sector. And that, in turn, will depend on China's ability to weather the looming global recession.

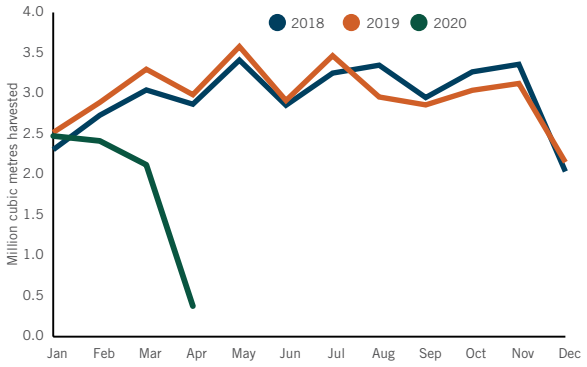
In the wider context, this uncertainty is set against a backdrop of a sharp drop in log prices in mid-2019. The main driver behind that price fall was surplus supply due to high harvest volumes in New Zealand and a surge in exports from Europe's beetle-ravaged forests. Prices were in recovery mode in the second half of 2019, but entered the current crisis in a somewhat fragile state.

Figure 23: Total weekly forestry exports 2018-2020



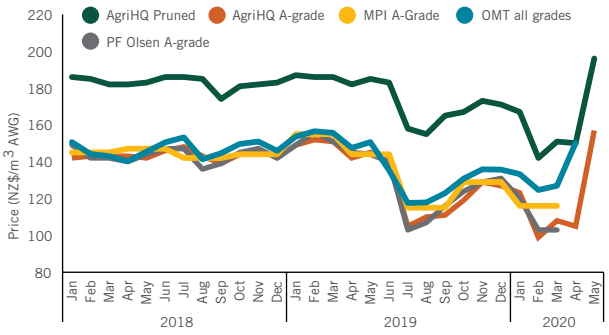
Source: Stats NZ and MPI.

Figure 24: Log harvest volume 2018 to 2020



Source: Forest Growers Levy Trust.

Figure 25: Forestry log prices 2018-2020



Source: Stats NZ, AgriHQ, PF Olsen.

Sector briefs

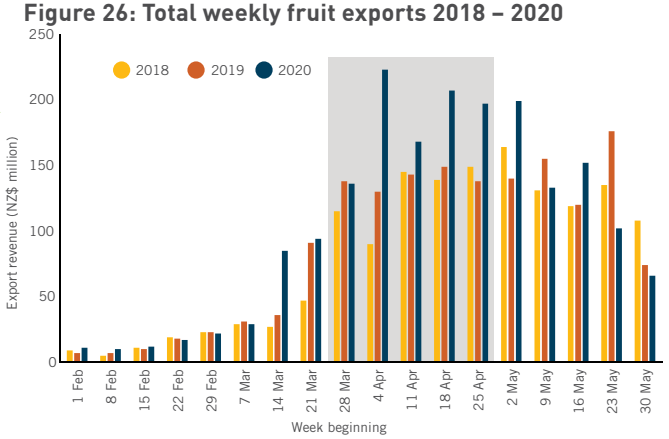
Kiwifruit, apples, and pears

KEY POINTS:
COVID-19 has so far had little impact on kiwifruit and apple exports, although there have been significant challenges with logistics and labour at harvest. Global demand for fresh fruit remains strong, particularly in Europe and North America.

Situation

The kiwifruit and apple harvests have been successfully completed despite the lockdown occurring at an inopportune time of the season. March to May is the harvesting season for our two main fruit crops, kiwifruit and apples, and the lockdown compounded the labour shortages seen in recent years. Social distancing meant that pack houses ran at 50 to 80 percent capacity during the Level 4 restrictions.

Figure 26: Total weekly fruit exports 2018 – 2020



Source: Stats NZ and MPI.

The 2020 kiwifruit harvest is estimated up 6 percent due to favourable weather and new gold plantings in recent years reaching maturity, while the apple and pear harvest is estimated up 5 percent from last year.

Provisional data from Stats NZ reflects the strong start to the season for apple and kiwifruit exporters, with revenue up $274 million (18 percent) on last year since the start of March. An early start to the kiwifruit season with increased production of the earlier gold variety has been the main contributor to the increase. Harvest and shipping schedules for kiwifruit have so far managed to work around any significant disruption from the COVID-19 outbreak and response measures.

Outlook

Global demand for fruit remains strong, as fruit typically relies more on retail and online sales rather than food service. There is also an overall increase in demand for healthy products such as fresh fruit. On that basis, New Zealand's fresh fruit exports, including apples, kiwifruit, and avocados, are expected to fare better relative to other sectors.

There are ongoing concerns about the availability of seasonal workers for next season's harvest, although early reports indicate that there is sufficient labour available for winter pruning.

Wine

KEY POINTS:

While the 2020 vintage was able to be harvested despite lockdown restrictions in New Zealand, the wine industry is facing diminished global and domestic demand which may linger throughout the recession.

Smaller wineries have been particularly impacted by the decline of hospitality and cellar door trade in New Zealand, and this is expected to continue with tourist numbers unlikely to recover in the short run.

Situation

The wine industry has largely been able to meet its labour needs for the recently completed 2020 harvest. Reports indicate that this vintage is above average for both quantity and quality thanks to favourable weather, and early estimates indicate the harvest is 8 percent higher than last year.

Global impacts on the New Zealand wine sector is not yet apparent in the trade data. New Zealand's wine export revenue was $523 million from February to April 2020. This is 11 percent higher than the same period in 2019. Any impacts of falling demand are likely to become more apparent in the second half of 2020 once the just-harvested 2020 vintage is ready for export.

Outlook

With a large 2020 vintage and lower global demand, it is likely that wineries will face further pressure over the next year. Small and medium wineries may be particularly impacted by the lack of international tourists and lower food service activity in New Zealand. Larger wineries are more likely to have access to retail distribution channels both in New Zealand and overseas, so may be in a more resilient position over the next year.

One mitigating factor is that sales of New Zealand wine have exceeded the volume harvested each of the past three years. This means there is more absorptive capacity in the supply chain than there was during the global financial crisis, when a large 2008 vintage led to rising inventories and a surge in bulk wine exports.

Vegetables

KEY POINTS:

There continues to be strong demand for vegetables, the majority of which are produced for the domestic market. The key issue for the vegetable sector during the lockdown was the inability to sell produce through non-supermarket outlets including restaurants, local green grocers, farm-gate sales and farmers markets. This had a disproportionate impact on smaller growers that typically don't have supply contracts with supermarkets.

Sales of frozen and processed potatoes, in particular French fries, were impacted by the lockdown restrictions on the hospitality and food service sectors. Around 250,000 to 300,000 tonnes of raw potatoes are processed into frozen potatoes and French fries each year, accounting for half of New Zealand's annual potato production. New Zealand exports 65,000 to 75,000 tonnes of frozen and processed potatoes worth $110 million annually, around half of the processed volume. Australia is the main export market, accounting for two thirds of exports. Exports and imports from February to April 2020 were similar to the prior year.

There is a possibility of reduced demand in the months ahead for New Zealand frozen potatoes from Australia and other markets in the Asia-Pacific region, if cheaper products become available from Europe and North America arising from falling demand within those markets.

Sector briefs

Seafood

KEY POINTS:
The COVID-19 response in New Zealand and overseas has had a significant impact on seafood exports, first with China's lockdown, then with New Zealand's. Export revenue is down 21 percent since the beginning of February. The Chinese market is recovering, but global food service demand remains low, which is important for seafood consumption.

Situation

According to the provisional trade data provided by Stats NZ, New Zealand's seafood export revenue tracked down 27 percent in February, up 7 percent in March, and down 44 percent in April relative to the prior year. Trade in February was heavily impacted by China's lockdown, and April was impacted by the capacity restrictions due to New Zealand's lockdown (Figure 27).

Exports of seafood continued to slow through Level 4, finishing 23 percent down, driven largely by the 38 percent drop in revenue from China over the period.

With 35 percent of seafood exports going to China, fresh seafood was affected by COVID-19 earlier than other industries, culminating in 68 percent lower export revenue to China in February, driven mostly by declines in airfreighted rock lobster. The Chinese market is slowly recovering and seafood markets are beginning to re-open, which should alleviate export constraints at least for live rock lobster.

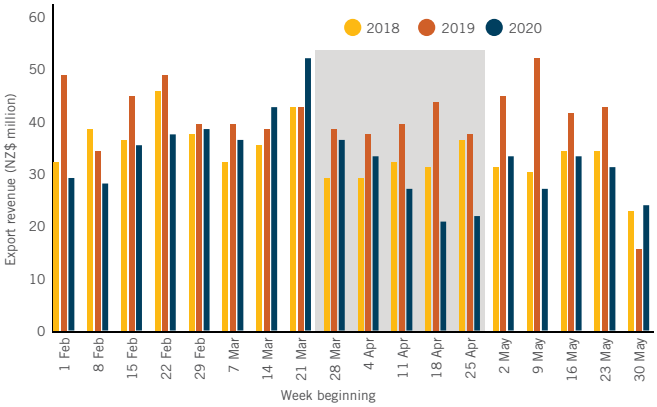
Monthly export data shows rock lobster exports have increased slightly in April, but remain well below normal. From February to April, rock lobster export revenue was down 82 percent from the same period in 2019 (Figure 28). Other species experiencing significant drops in export revenue include farmed salmon and deepwater species such as hoki.

Outlook

Overall seafood demand has been sharply reduced and prices have fallen for many species, particularly those that are important for the restaurant industry. Rock lobster fishers do, however, have the opportunity to increase catch this season (which started on 1 April 2020), with up to 10 percent of last season's rock lobster Annual Catch Entitlement (ACE) total holdings able to be carried over if uncaught (an estimated 117.6 tonnes).

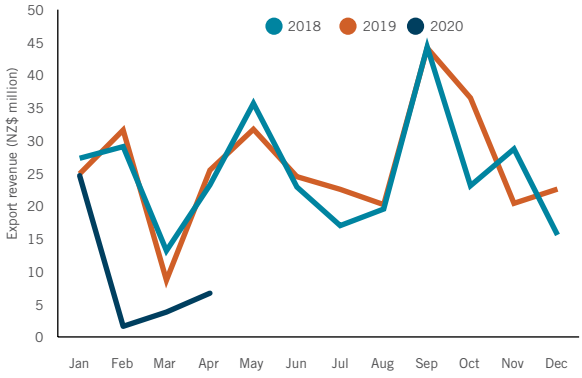
Looking beyond the next month or two, decreased demand in the food service sector, limited air freight capacity, and softening of consumer demand overall in some markets (e.g. the US, Europe and Japan) are likely to present challenges for seafood exports.

Figure 27: Total weekly seafood exports 2018-2020



Source: Stats NZ and MPI.

Figure 28: Rock lobster export revenue 2018-2020



Source: Stats NZ.

COVID-19 Consumer Insights

KEY POINTS:

COVID-19 has impacted consumer behaviour across the world. At an overall level consumers are worried about economic recovery and potential income losses. While overall spending intent remains low among all consumers, there is increased preference to spend on groceries with more cooking and eating at home. Consumers are expected to rely more on e-commerce channels and increase adoption of digital technology in trying to reduce their exposure to others.

This suggests our primary industries will need an ability to quickly change their product offerings and marketing strategies in response to the changing ways in which consumers are interacting with food and beverages. Products that are more easily cooked at home may outperform those that are traditionally sold to the food service industry over the next few months.

Background and data sources

The COVID-19 pandemic has caused a significant impact on human health and economies around the world, with many countries initiating unprecedented restrictions on businesses and consumers in an effort to stem the spread of the virus. In light of these restrictions, consumers in many markets have had to adjust to the new reality of living in a world affected by COVID-19. In order to evaluate these changes we conducted a meta-analysis of multiple, independent consumer surveys carried out by McKinsey & Company, Nielsen, Mintel, the Boston Consulting Group and Deloitte across four key New Zealand export markets: the US, China, Australia and Japan. Our approach was based on categorising individual survey questions against nine key consumer areas and then evaluating the responses against a strength-based rating system. The surveys covered in our analysis were carried out from the week beginning 23 March 2020 to week beginning 4 May 2020. During this time period different countries were at different stages of combating the virus (Figure 29).

At the time of these surveys the virus was still rapidly spreading in the US and lockdowns were only just starting to take effect. In China the virus was largely under control and restrictions were easing. In Japan, the virus was still not under control though restrictions were beginning to have an effect and in Australia the virus was under control and restrictions were curtailing the spread.

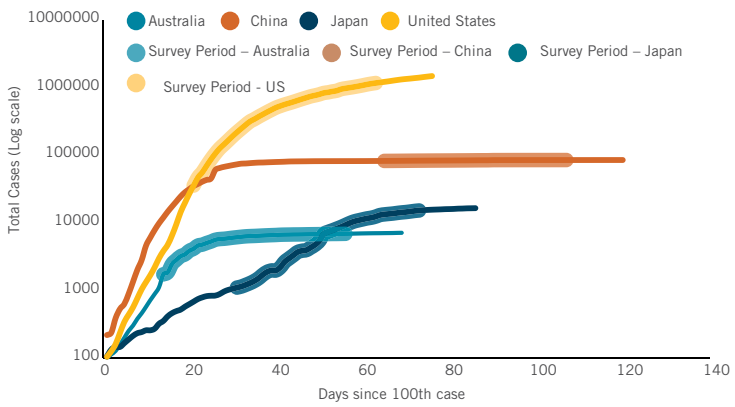
Therefore, consumer sentiments captured in these surveys vary based on the stage of the pandemic in their country.

Increased preference to spend on groceries with more cooking and eating at home

Consumers across all countries are adjusting to the new normal and in doing so, changes are evident in their purchase priorities. While no one is planning to increase their general spending (excluding a small proportion of Chinese consumers), the number of consumers intending to spend more on groceries exceeds those intending to reduce their spend across all four markets. US consumers have shown a relatively higher positive intent to spend on groceries compared to consumers from the other three markets. One of the factors contributing to this growth in grocery spend is an increasing preference to eat at home across all markets. This is a natural consequence of the lockdown restrictions put in place across each of these countries.

Chinese consumers are expecting to cook at home more often than others. This sentiment seems to be a key trend in the Chinese market with multiple consumer reports indicating key consumer cohorts, particularly in

Figure 29: Survey Period for each market relative to state of pandemic



Source: Our world in data.

the 18-35 age category, considering re-evaluating their consumption priorities, as a result of recent lockdown measures. This is particularly evident with respect to personal wellness and indulgences with fewer consumers seeking to treat themselves to eating out at restaurants. This growing interest in cooking at home is expected to shift food spend to essentials, particularly staples, cooking ingredients and fresh food.

We evaluated consumer sentiment on alcohol as a product category to compare non-essential spending in food and beverage category. Overall, the number of consumers intending to spend less on alcohol exceeds those intending to spend more in Australia, US and Japan. There were conflicting signals from Chinese consumers regarding their intent to spend on alcohol, leading to an overall neutral sentiment, which reflects their stage of the post-lockdown recovery.

Increase in use of digital channels to reduce exposure to others

The new normal created by the pandemic has consumers seeking to reduce their exposure to others. Consumers across all four markets are planning to rely more on e-commerce channels for buying daily necessities such as groceries. Chinese consumers' intentions to buy groceries online and getting them delivered to door are notably higher compared to other three countries.

In addition to buying more groceries online, consumers are also expected to adopt digital technology to get deliveries by restaurants. The ability to trade via e-commerce channels, with associated delivery infrastructure, has been critical over the last few months. Businesses which already had the infrastructure in place enjoyed a competitive advantage in accessing locked down consumers.

Table 2: Relative strength of consumer sentiments across selected markets

Consumer Sentiments	Australia	US	China	Japan
Increase in general spending [1]	▼	▼	▲	▼
Net intent to spend on groceries[1,4]	▲	▲	▲	▲
Expected change in cooking at home [1,2,3]	▲	▲	▲	▲
Expected change in online shopping-grocery [2,3,5]	▲	▲	▲	*
Adoption of grocery delivery [1]	▲	▲	▲	▲
Adoption of digital technology for restaurant delivery [1]	▲	▲	▲	▲
Net intent of spending on alcohol [1,4]	▼	▼	△	▼
Optimism on economic recovery [1, 4]	▼	▼	▲	▼
Worry about loss of income [1, 4, 5]	▲	▲	▲	▲

Sources: 1 Mckinsey, 2 Nielsen, 3 Mintel 4 Deloitte and 5 BCG, March-May 2020

* Data not available

Key: Relative strength rating: Neutral Low Moderate Substantial Strong

Positive △ ▲ ▲ ▲ ▲ ▲

Negative ▼ ▼ ▼ ▼ ▼

Consumers are worried about economic recovery and potential income losses

On the question of outlook, optimism about each country's economic recovery remains low across three markets examined, except China. Across multiple surveys, Chinese consumers were optimistic about their country's economic recovery from the pandemic. For example, China is the only country where a small number of consumers expect their general spending will increase compared to previous month. This likely reflects the fact that as the first country to go into an economy-wide economic lockdown, and as the first to emerge once the outbreak was controlled, Chinese consumers are further along in their COVID-19 experience than other markets which are still experiencing lockdowns. However, whilst optimistic about the general economic recovery, Chinese consumers are worried about potential loss of their personal income. This sentiment was echoed across other markets as well. This indicates there is still lingering concern about individual circumstances which will likely translate into weakness across consumer spending for some time.

New Zealand Government