ANZ RESEARCH

AGRI FOCUS

FEBRUARY 2022

HEATING UP

This is not personal advice nor financial advice about any product or service. It does not take into account your financial situation or goals. Please refer to the Important Notice.

INSIDE

CONTRIBUTORS

Susan Kilsby
Agriculture Economist
Telephone: +64 21 633 469
Susan.Kilsby@anz.com

Sharon Zollner
Chief Economist NZ
Telephone: +64 27 664 3554
Sharon.Zollner@anz.com

Publication date: 3 February 2022

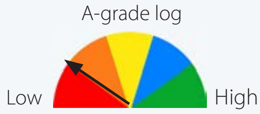
Commodity prices for dairy produce and most meat cuts are currently very strong, which, combined with a slightly weaker NZ dollar, is delivering exceptionally strong prices at the farmgate level. Unfortunately production is constrained in many areas, as soils have dried out rapidly. On-farm costs are also rising exceptionally quickly, and labour – or rather the lack of it – is becoming a major constraint for most primary industries.

The unemployment rate is now the lowest it has been since the early 1980s. This is making it exceptionally hard to find short-term labour. The labour shortage means it is very unlikely that all of the fruit will be harvested this autumn and there could be significant delays at meat processors. If labour availability falls further due to surge in COVID-19 cases then the situation will only worsen.

Interest rates are on the rise here in NZ and globally. Central banks are now starting to tighten monetary policy in an attempt to rein in inflation.

Inflation is not only being driven by temporary pandemic related issues such as logistics, but is also evident in more slower-evolving costs such as wages. We are now in an upward spiral where wages need to rise to keep pace with inflation, but is also one of the factors driving inflation.

Another cost line that will soon be added is greenhouse gas emissions. The debate as to whether the agriculture sector should pay or not has long been settled – it will be paying. The question now is simply how this will be calculated. No matter whether it is calculated at the farm or processor level, farms that are able to demonstrate they are reducing emissions will be better off than others. So please take the time to understand what the options are.

Prices at farm/orchard level relative to 10yr average		
Dairy	Dairy prices are trending higher and our farmgate milk price forecast has been revised up again to $9.30/kg MS for this season, and $8.40 for next season.	
Sheep	Lamb returns have remained high as meat processors try to procure enough lambs to fill lucrative overseas orders.	
Beef	Beef prices continue to be supported by tight global supply and solid demand.	
Forestry	Log returns have fallen sharply over the past six months. Demand and pricing may improve post the Chinese New Year holiday break.	

ECONOMIC OVERVIEW

INFLATION AND LABOUR SHORTAGES

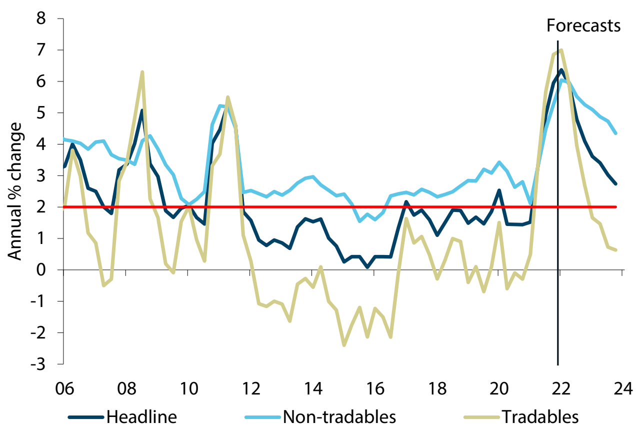
Inflation and labour shortages are key issues for New Zealand's economy. Inflation is rampant both locally and across the globe – a result of a little too much fiscal and monetary stimulus in the context of highly constrained supply chains.

Labour shortages are the most pressing concern for most of the primary sector. To put it frankly, there just aren't going to be enough people to pick the fruit and operate the meat-processing plants this summer and autumn – and the situation may well worsen as Omicron spreads though our communities.

The bright spot is high global prices for New Zealand's export commodities, which just continue to soar as tighter supplies and supply chain complications limit the amount of product available globally.

Rampant inflation is a key economic issue that the Reserve Bank needs to tackle urgently. Inflation is not only being driven by both shorter-term pandemic related issues; it is also becoming much more entrenched as labour shortage drive wages higher.

INFLATION FORECASTS



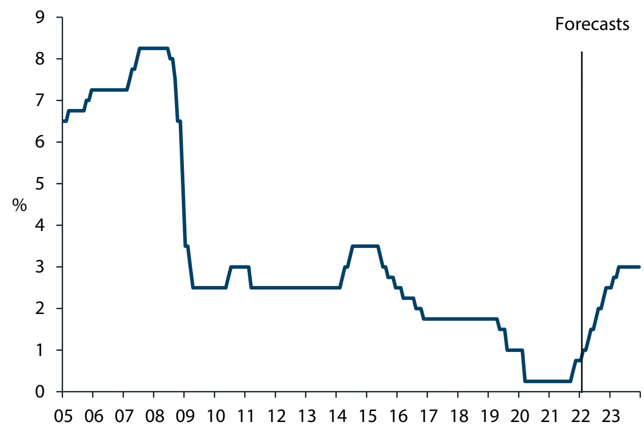
Source: Statistics NZ, ANZ Research

The Consumer Price Index (CPI) lifted to an annual rate of 5.9% in the final quarter of 2021, and shows little sign of easing. The biggest drivers of inflation were construction costs (up 15.7% y/y) and petrol (up 30.5% y/y).

Inflation is running at a pace that will be difficult for wages to keep up with, resulting in real wages falling in the shorter term, putting pressure on households. We are now in an upward spiral where wages need to rise to keep pace with inflation, but the wage growth in itself is contributing to upward pressure on inflation.

There is absolutely no doubt that the Reserve Bank needs to tightening monetary conditions to get inflation under control. We expect a series of 25bps increases to the Official Cash Rate (OCR) at every opportunity available, taking the OCR to 3.0% by the middle of 2023 (from 0.75% today).

OFFICIAL CASH RATE FORECAST



Source: RBNZ, Bloomberg, ANZ Research

While there is definitely a lot of heavy lifting for the OCR to do, we expect orderly 25bps lifts will be the preferred method to tighten monetary policy, rather than moving up in larger chunks. Through credibly forecasting their future intentions, the Reserve Bank can essentially front-load future tightening into retail interest rates today, with

ECONOMIC OVERVIEW

more optionality than actual front-loading of hikes would entail. That's worth quite a lot in an uncertain world.

Globally, most of the developed markets that stimulated their economies though loosening monetary policy and quantitative easing are now looking to start unwinding this stimulus.

It is expected the Federal Reserve (the US central bank) will commence lifting its cash rate in March and flip from quantitative easing to quantitative tightening at a similar time, reducing liquidity.

UNEMPLOYMENT UNSUSTAINABLY LOW

Economic growth remains mixed globally. Labour shortages are a key issue – particularly here in New Zealand where border restrictions are limiting the inflow of migrant labour. The New Zealand unemployment rate is now at the lowest level recorded since the early 1980s.

This means there are very few people to call on to fill seasonal labour requirements. The labour shortage is already impacting productivity, and labour shortages will worsen should workers have to stay at home due to being exposed to COVID-19, or elect to stay home to reduce the risk of catching it.

GLOBAL DEMAND ROBUST

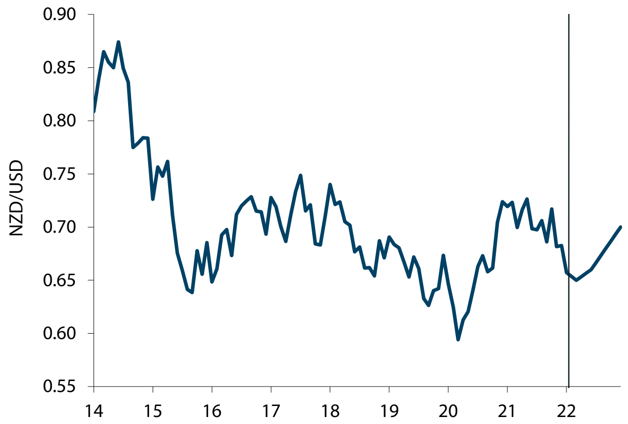
Throughout the pandemic, developed countries generally kept their economies pumping through both fiscal and monetary stimulus. But the economic shocks associated with the pandemic were much less 'sugar-coated' in developing nations.

Despite the health challenges many countries are facing, their appetite for commodities has not waned. The pandemic has delivered persistent supply-side shocks (eg to labour supply and transport costs) but demand-shocks have been periodic and well offset by fiscal policy. This mix has resulted in very strong inflationary pressures and massive rises in commodity prices.

NEW ZEALAND DOLLAR HAS SOFTENED

The NZD has softened further as global risk appetite starts to wane and recently, expectations for US interest rates have risen. The NZD has steadily trended down this year, resulting in a larger portion of overseas returns making its way back to the farmgate.

NZD BUYS USD



Source: Bloomberg, ANZ Research

SUPPLY DISRUPTIONS ACROSS THE BOARD

Most food products we export are now at, or near, record-high prices. It's primarily supply shortages that have driven dairy, lamb, and beef products to such highs. It is difficult to see a massive increase in the global supply of any of these categories in the short term. But over the medium term the high prices on offer will stimulate a supply response.

There is, however, a very real risk that demand for these products will erode as current prices put these goods out of reach for many poorer consumers – particularly those in developing nations, which have accounted for much of the growth in protein consumption in the past decade.

The supply of goods is being restricted by a number of factors. Some of these are logistics-related, eg slower and less reliable transport, which is resulting in the need for buyers to have more product on hand.

Sharp increases in the cost of producing goods, due to inputs such as fertiliser, combined with labour shortages, is reducing the incentive to expand production to meet demand despite the high prices on offer.

The need to improve sustainability is also weighing on the minds of some producers of agricultural goods. Water is becoming scarce in many parts of the world; nutrient emissions are being more closely monitored; and there is an increased awareness of greenhouse gas (GHG) emissions from primary goods.

These factors are all having an impact on economic returns and confidence to invest in primary production. As the global population grows so too does demand for food, but food producers are not keeping up.

ECONOMIC OVERVIEW

EMISSIONS PRICING

He Waka Eke Noa (HWEN) are due to release more information about the alternative solutions they have developed to price agricultural emissions. If an agreement can't be reached on implementing one of these solutions, then the back-stop position is that agriculture will join the Emissions Trading Scheme (ETS). If that occurs, then the price paid for methane emissions will be directly linked to the carbon price.

A split-gas approach is used in the HWEN proposed solutions – likely to be considerably more stable, and therefore predictable, than the price of CO_2.

HWEN has put forward two solutions – one which accounts for emissions at the farm level and one at the processor level. The processor-level solution probably has some appeal for those administrating the scheme, as they are far fewer processors than farmers. But this solution would then transfer the onus of calculating emissions for individual farms to the processors.

For the dairy industry this may be a relative simple solution. Dairy companies already hold most of the information they would require to calculate on-farm emissions, and are well set up to tweak farmer payments to account for emissions. But it would be much more complicated, and probably costly, for a meat processor to calculate the emissions costs of the animals supplied to them. The lack of contractual arrangements between farmers and meat processors would also make this process much more difficult.

If the processor-level solution is opted for, there is also potentially a risk that price signals will become watered down and averaged across suppliers, as there may not be enough individual farm data to fine-tune this solution.

As primary sector producers we must be prepared to pay for our emissions and also calculate these ourselves. If we are able to do this, then we stand in a good shape to position more of our primary produce towards discerning customers who are willing to pay a premium.

Click here to access our latest forecasts.

DAIRY

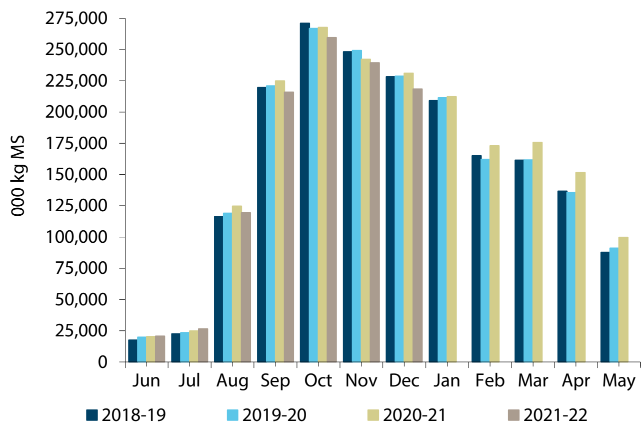
TIGHT SUPPLY SUPPORTS PRICES

Global dairy prices have climbed to lofty levels, bolstered by tight supply. It is debatable how long these prices will last, but milk supplies are not likely to expand quickly any time soon. This will continue to support returns at the farmgate level this season, as will the slightly weaker NZD.

Dairy commodity prices continue to be supported by a lack of supply. New Zealand milk production is running significantly behind last season and this situation will only worsen during the latter months of the season. Last year favourable autumn conditions bolstered pasture growth and milk production, but a repeat can't be counted upon.

For the season from June to December milk production across NZ was down 3.2% versus the previous year. December intakes were 5.5% below last season.

NZ MILK PRODUCTION



Source: DCANZ

A combination of factors appears to be at play at present, in terms of what's driving lower production. Firstly, the overall size of New Zealand's dairy herd is shrinking as land is converted to alternative uses and stocking rates are gradually easing.

Short-term measures to plug feed shortages are also expensive. Fertiliser prices have skyrocketed, which is making farmers think twice about urea application, and tighter regulations designed to limit the quantity of nitrogen entering waterways is also having an impact. More scrutiny of nitrogen applications has long been needed but this product does have its place, and despite the massive price increases can still be an effective and economically viable tool when used strategically.

Dairy production is also relatively weak in the other major dairy-exporting countries. Milk production in Australia from July to November was trailing last season by 2.4%.

Production in the Northern Hemisphere is seasonally low during their winter months.

Milk output in the US was down on last season during the months of November and December. Over the full 2021 calendar year milk supplies in the US expanded by just 1.4%. Growth of less than 2% is typically readily absorbed by the domestic market, implying this level of growth won't result in additional amounts of dairy products being exported from the US.

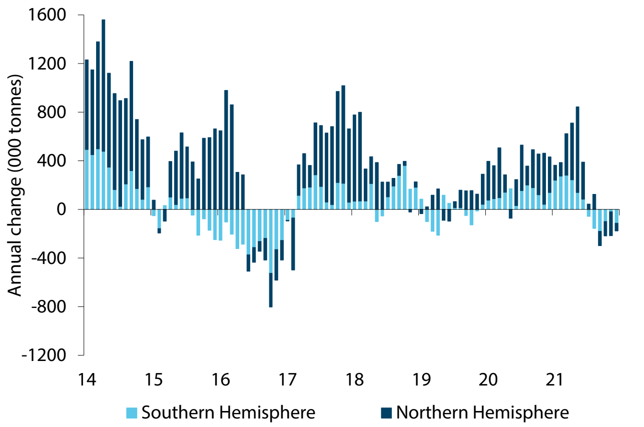
Production across the EU was marginally lower in 2021 than 2020. There was a lot of variation in output between countries. Output was well down in the largest three dairy-producing countries: Germany (-1.8%), France (-1.4%) and the Netherlands (-2.8%). But this was largely offset by gains from Italy (+3.2%), Poland (+0.4%) and Ireland (+5.9%).

Milk production has also slowed in the UK with output trailing year-ago levels for the final four months of 2021 to put output for the 2021 calendar year 0.1% behind 2020.

In South America there has been a little more production from Argentina, but this has been offset by reduced output in Brazil, Uruguay and Chile, meaning the region as a whole is currently tracking behind last season.

DAIRY

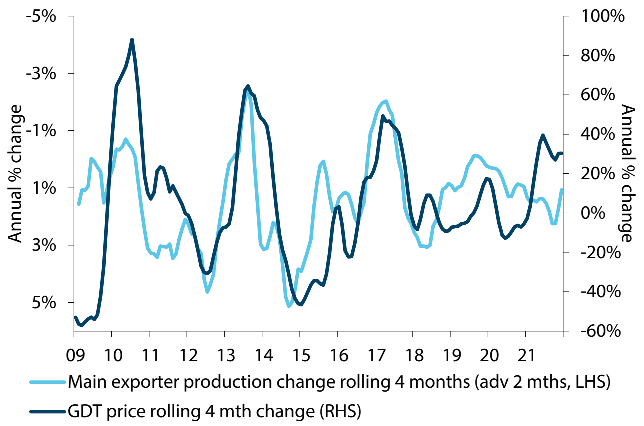
MILK PRODUCTION – MAJOR DAIRY-EXPORTING COUNTRIES



Source: DCANZ, Dairy Australia, USDA, Eurostat, CLAL, ANZ Research

This lack of growth in milk supply is what is supporting dairy commodity prices. Dairy commodity prices shot up in January and are expected to hold at elevated levels in the short term. Prices are not likely to recede sharply until more dairy production becomes available when output in the Northern Hemisphere expands again in their spring.

CHANGES IN GLOBAL MILK PRODUCTION AND DAIRY PRICES



Source: DCANZ, Dairy Australia, USDA, Datum, CLAL, ANZ Research

Dairy commodity prices tend to be very reactive to changes in global supply. However, the graph above indicates that the recent price increase might be driven by supply chain complications as well as the underlying reduction in global milk production.

While we are optimistic that dairy commodity prices will remain well supported throughout the remainder of the 2021-22 dairy season, we are less confident that prices will hold at these levels next season.

Therefore we have recently revised up our milk price forecast for the 2021-22 season to $9.30/kg MS (from $8.80), while our forecast for next season has been revised up more modestly to $8.40/kg MS.

LAMB & WOOL

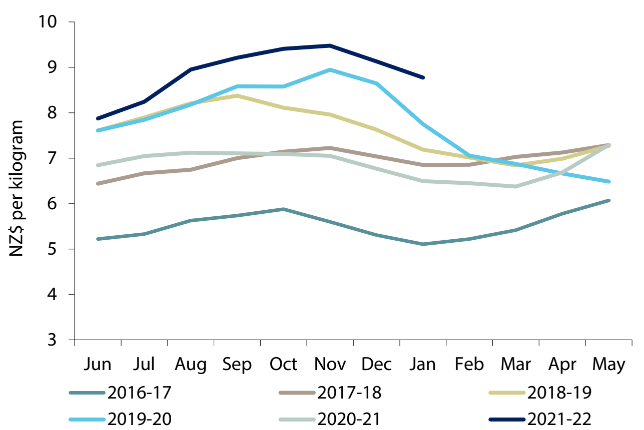
PROCESSING DELAYS

Exceptionally strong international prices for lamb are bolstering the returns farmers are receiving for finished lamb. Farmgate prices are retreating but much more slowly than the seasonal norm. Mutton returns are also elevated, but wool prices still have a way to go before a meaningful return is achieved.

Farmgate returns for lambs typically drop sharply after Christmas when more new-season lambs become available. This season, a combination of high international prices, a softer NZ dollar, and fewer lambs available for processing is keeping prices higher for longer.

The farmgate price for lamb only recently dropped below $9 in the North Island, while South Island prices are nearer $8.50/kg CW. Prices typically fall about $1 from November to January as more lambs become available. This year the fall in schedule price has been significantly less than this, despite being at such elevated levels earlier in the season.

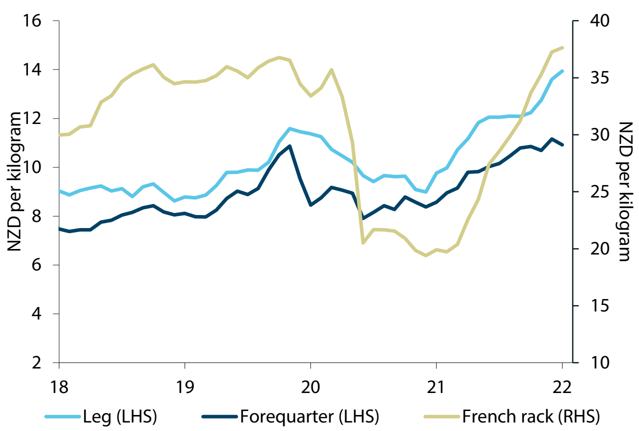
LAMB FARMGATE RETURNS (19 KG LAMB)



Source: AgriHQ

The prices being achieved in international markets for lamb cuts are staggering, although other meats and dairy proteins are also priced at very high levels.

LAMB CUT PRICES



Source: AgriHQ

Lamb cuts such as leg and racks are achieving record levels, while forequarter pricing is also very strong. Overseas prices have lifted about 50% in the past year.

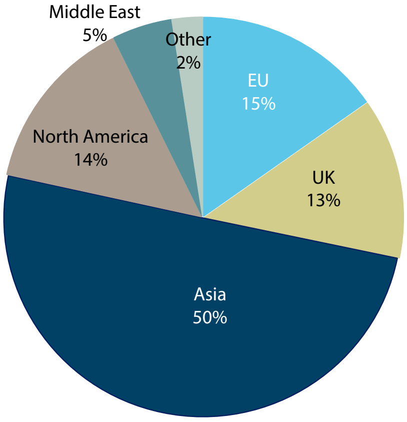
The high prices are being driven by a lack of global supply. Australia has exported lower-than-normal volumes of lamb for the past couple of years due to a larger portion of stock being retained to rebuild flocks. Sheep numbers dropped to an all-time low in 2020 following several droughts and bushfires and the industry is now in a rebuilding phase. An extra 10 million sheep are expected to be added to the flock by 2023, which is reducing the number currently available for processing.

During 2021 Australia concentrated on growing sales to the US, and this is now its largest export market for lamb. China, however, remains Australia's largest overall market for sheep meat as it buys a lot of mutton. Exports of sheep meat and live sheep from Australia to the Middle East have fallen sharply in the past couple of years.

LAMB & WOOL

Meanwhile NZ continues to focus on sales to Asia – mainly China. This season 46% of lamb exported has headed to China. A further 14% went to North America, 13% to the UK, and 15% to the EU.

LAMB EXPORT MARKET – Q4 2021 BY VOLUME



Source: Statistics NZ

In value terms the portion exported to Europe and North America is slightly higher as these markets tend to buy more of the expensive cuts while the cheaper cuts tend to head to China.

Nearly 90% of our mutton exports go to North Asia. Twenty years ago most of our mutton headed either to the Pacific Islands or to the Middle East. The development of China has greatly increased the returns for mutton and that is reflected in both the schedule price for mutton and the value of ewes.

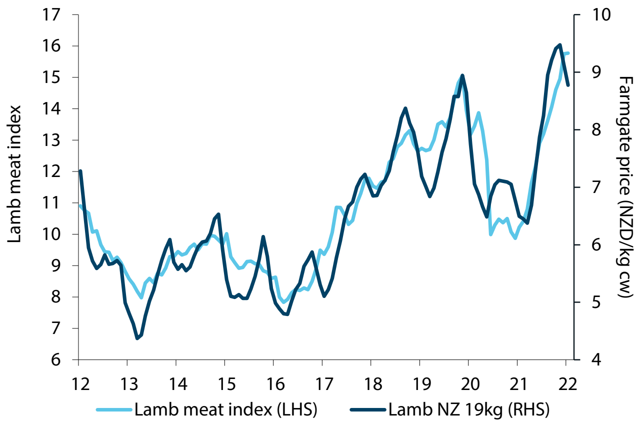
The mutton schedule remains above $6/kg CW, having broken through this price barrier mid-2021. It is solely the ongoing strong demand from China for mutton that is responsible for these attractive returns for cull ewes.

The high price for culls is also underpinning the price of older replacement ewes. Good-quality young ewes are trading near $250 per head and even five year ewes are fetching in the vicinity of $175.

In some cases the bottom end of the replacement ewe market isn't being supported by the schedule prices due to a lack of available killing space. Processors are concentrating on lambs as they try to fill and ship chilled orders in time for the Easter trade. In some areas their procurement teams are having to work hard and pay premiums to source lambs.

The graph below indicates international prices are certainly strong enough for premiums to be paid, particularly if higher returns are being generated from chilled market contracts.

FARMGATE PRICES VS INTERNATIONAL MARKET PRICES



Source: AgriHQ, ANZ Research

Processors are finding it challenging to source lambs as they just aren't growing quite so quickly this year. This is reflected in average killing weights, which are back a little on last season. In the North Island the lamb kill is running about 6% behind the same time last season, and average kill weights have been about 0.5kg lighter in recent weeks. In the South Island the differential is less pronounced.

With much of the North Island now rapidly drying off it will continue to be a challenge to finish lambs. We therefore may see more lambs being processed at slightly lower weights.

WOOL MARKET STILL CHALLENGING

Coarse wool prices continue to be stuck in the doldrums. Prices are bouncing around but are yet to show a strong upward trend. Wool offered via the regular auctions is moving, albeit at relatively low prices.

Demand from European buyers has improved, but demand from China remains inconsistent. China's battle to keep COVID-19 at bay is expected to result in ongoing disruptions in both shipping and processing for some time yet. Chinese New Year and the Beijing Winter Olympics will cause ongoing disruptions for the next month or so.

BEEF

STRONG RETURNS AT FARMGATE

Beef markets have started 2022 in a positive manner as tight global supplies continue to support prices both internationally and locally.

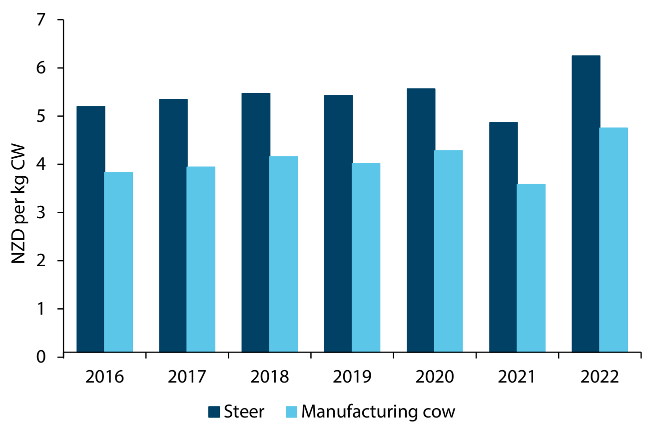
Farmgate prices for all grades of beef for January were the highest ever recorded for this time of the season.

Demand for store cattle has waned as dry conditions start to prevail and wait times for processing cattle grow.

RECORD FARMGATE PRICES FOR JANUARY

Farmgate prices for all grades of beef reached record levels for January. This season's prices are about 30% higher than they were last January and nearly 20% higher than the 5-year average for the month of January.

FARMGATE BEEF PRICE – JANUARY AVERAGE



Source: AgriHQ, ANZ Research

Farmgate prices are retreating slightly (as is typical at this time of the season) but the rate of decline is modest. High global prices and the lower NZ dollar are keeping farmgate returns elevated for now.

Most of the eastern regions are rapidly drying out. While many farmers still have feed reserves, as many remain understocked, we are nonetheless starting to see some urgency to unload stock. This has resulted in increased wait times to get stock to meat processes. So far this is more of an issue in the northern regions, but there is a risk that delays will grow as the season progresses.

The number of cattle processed typically increases from now on, as the annual culling season for dairy stock commences, and beef cows start to be culled post weaning. There is also a growing risk that processing capacity could be compromised due to labour shortages.

RISK OF REDUCED PROCESSING CAPACITY

Meat processors have struggled throughout the pandemic to recruit sufficient staff and this is expected to be a bigger problem this year. The border restrictions are limiting the flow of migrant workers and has resulted in a severe shortage of halal-certified workers.

The shortage of local workers could well be amplified now that the Omicron variant of COVID-19 is present in our communities. A rise in infections, isolations due to exposure, and an increased reluctance to participate in the workforce, amount to a major threat to meat-processing capacity this autumn.

Dairy cow numbers are steadily reducing, resulting in more stock for processing. The cow kill is running well ahead of last season, so it appears farmers are already being very proactive in moving stock on.

Prices for store stock are under pressure as farmers are reluctant to increase stock numbers until more rain falls. Most of the North Island is much drier than normal and soils are now very dry in the eastern and northern parts of both the North Island and South Island. Most of the North Island has received less than 10mm of rain in January.

BEEF

There is generally sufficient feed reserves on farm to sustain cattle for the moment, but farmers are very reluctant to buy younger stock until they are able to off-load what they already have. Store prices are still higher than they were at this time last season but are trending down rapidly.

Internationally prices are still exceptionally strong but a smaller-than-normal portion of returns is being passed along the supply chain. Processors are not having to work hard to source stock and are still paying a higher than normal price. But based solely on international prices they could be paying more.

Like most parts of the supply chain, meat processors are facing higher costs. The international freight disruptions associated with the pandemic show little sign of easing up in 2022. Labour shortages and rising wage costs are major concerns for processors. So it isn't surprising that a smaller portion of the overseas price is available for purchasing livestock.

A similar issue has occurred in the US, which has resulted in President Biden claiming that meat processors were exploiting both consumers and farmers. The US solution is to reduce the power of the large processing companies by subsidising the development of new independent plants owned by farmer cooperatives. Only time will tell if this makes a meaningful difference to the processing landscape in the US.

INTERNATIONAL MARKETS VERY STRONG

Demand from overseas markets for NZ beef remains very strong, but this is primarily due to the lack of beef being supplied by our competitors.

Beef supplies from Australia have dwindled in recent years as farms look to rebuild herds. More recently, supply from the market has been compromised by reduced processing capacity as outbreaks of Omicron limit the number of workers available to process meat. It is estimated that the number of cattle being processed at present is only about half the normal level for this time of the year.

As the volume of beef available from Australia has dwindled, their exporters have focused more on their high-value Asian markets – primarily Japan and South Korea. This has meant a lot less Australian beef is heading to China and the US – New Zealand's main beef markets, as it happens.

Brazil is again exporting beef to China. In December China advised it would allow imports of Brazilian beef providing it is boneless and from cattle less than 30 months old. Most of the beef exported from Brazil should fit these requirements. Prior to the ban, Brazil was supplying about half the beef imported by China.

Ironically, just as China allowed Brazilian beef back in, it banned Canadian beef, also due to a case of BSE. South Korea has previously banned beef sourced from Canada, as has the Philippines.

Beef exports from Argentina are constrained by government regulations designed to increase the supply of beef in its domestic market, in order to keep prices low. This has resulted in a sharp decline in the volume of beef that China is able to source from Argentina.

While these bans are in place China has become increasingly reliant on US and NZ beef. China is also sourcing more beef from Uruguay.

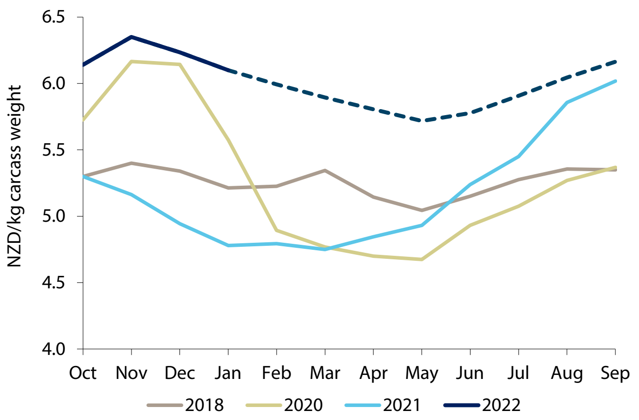
STRONG INTERNATIONAL PRICES

The price of US imported bull beef is currently over NZD10/kg and cow meat is worth about NZD9.50/kg. These extremely high prices have been supported by a weaker NZD, but it is primarily the underlying shortage of beef supply in the global market that is keeping prices high.

International beef prices are expected to remain relatively firm throughout 2022, which will be supportive of prices at the farmgate level. Farmgate prices for all grades of cattle are expected to be at record levels this season.

The quantity of beef available to be traded globally is expected to take some time to increase, and while supplies are restrained prices will remain elevated. There is some risk that demand for beef will erode but relatively tight supply of pork is also supporting beef prices at the moment.

FARMGATE BULL BEEF PRICE TREND AND FORECAST



Source: AgriHQ, ANZ Research

DEER

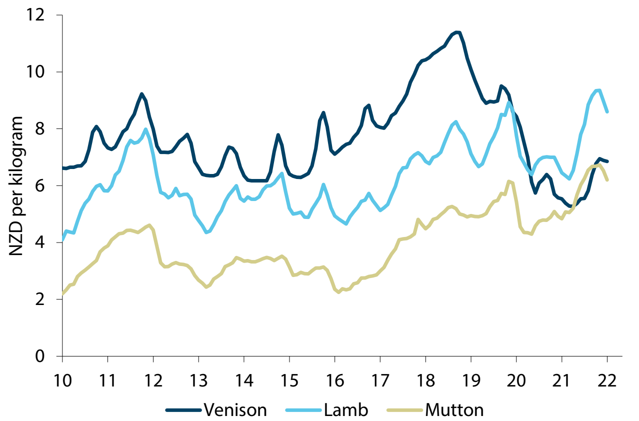
SLOW RECOVERY FOR VENISON

Venison returns rebounded somewhat in 2021 and are now holding near $6/kg. That's a similar amount to mutton.

Velvet returns remain strong but there are logistical challenges getting product to market. But overall returns have strengthened again this season.

The farmgate price for venison has lifted during the chilled season and has broadly maintained these levels as the season has progressed. But compared to other meat the price of venison is low. Even the schedule price of mutton was higher than venison at one point last year.

FARMGATE PRICES: VENISON, LAMB & MUTTON



Source: AgriHQ, ANZ Research

Given many farmers run mixed sheep, beef and deer operations it is not surprising that some of them have opted to lift sheep stocking units and ease back on deer.

STOCKS CLEARED IN OVERSEAS MARKETS

Inventories of venison that built up in-market in the past couple of year have now cleared. This occurred while restaurants were either closed or running at low capacity during the pandemic. Now that restaurants in many countries are back into full swing and most countries are opting for vaccinations over lockdowns, the restaurant trade has picked up again.

The reduction of in-market stocks paves the way for a gradual improvement in returns. The industry has also repositioned itself to now be less reliant on the European restaurant trade. Unfortunately, economic conditions in Europe remain subdued, with markets such as Germany still struggling.

Increasing sales to the US market and developing retail channels have been a key marketing strategy. A lot of work is also going into developing a market for venison in China, as venison is not traditionally eaten in this country. Overall the market development work is progressing but it is taking time for this to be reflected in farmgate prices.

CHALLENGES AND OPPORTUNITIES

Overall velvet returns are expected to remain robust this year.

Stocks of velvet in NZ are now seasonally high as the new-season velvet has recently been removed from the stags.

China remains the largest export market for our velvet, although much of it eventually finds its way to South Korea, where it is highly valued as a health food.

Demand for velvet from both South Korea and China has been solid. Prices being paid for velvet at the farmgate level are about 15% stronger than last season, which is delivering good returns to producers.

But the industry still has plenty of challenges, including the logistics of getting product to market. The temporary closure of Dalian port, one of China's largest, has caused some challenges for velvet heading to China. The port was closed due to an outbreak of COVID-19. Chinese authorities are desperately trying to keep the pandemic under control so that it does not impact the running of the Winter Olympics in Beijing. Unfortunately Dalian is the only port through which velvet is allowed to be imported. Dalian is located in Liaoning province north-east of Beijing and is also in close proximity to Korea.

GRAIN

HIGHER PRICES

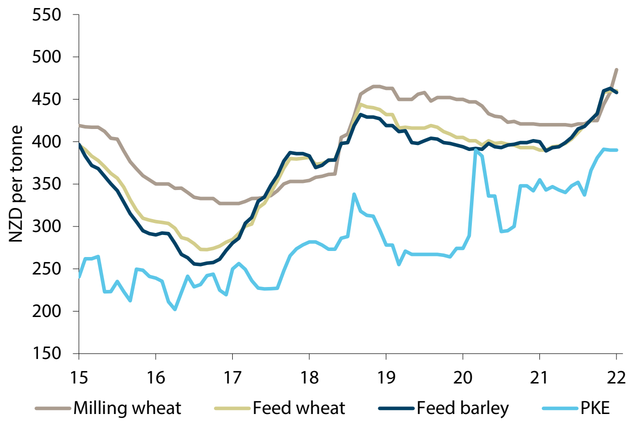
Grain prices are rising both in our local market and internationally. Supply uncertainties have pushed global prices higher. Unfortunately, the gains made by arable farmers locally are being gobbled up by huge increases in operating costs.

LOCAL GRAIN PRICES FIRM

Grain prices continue to push higher as the season progresses. Local crops generally got off to a strong start with favourable planting conditions. Since this time the main grain-growing regions have dried out and the condition of crops varies considerably.

Prices for both milling and feed wheat continue to firm. Wheat and barley prices are now about 10% higher than the 3-year average, while maize grain is over 20% stronger.

NEW ZEALAND GRAIN PRICES



Source: NZX

Unfortunately costs for arable farmers are also rising very rapidly. Fertiliser, fuel and labour costs have jumped substantially, effectively wiping out any positive financial impact of the higher grain prices.

Labour remains challenging to source and further wage inflation looks inevitable. Fuel costs are on the rise again too, with oil prices topping USD90 per barrel to reach their highest level in seven years.

Strong fertiliser prices are impacting food and fibre producers across the world, but are particularly impacting arable farmers due to the relatively high fertiliser requirements for many of the crops grown.

INTERNATIONAL TENSIONS

International grain prices have firmed further on the expectation that supply could tighten should the political tensions between Russia and the Ukraine escalate further. International grain markets could be severely undersupplied if Ukraine is unable to export, as they supply about 30% of the wheat and barley traded globally.

However, Ukraine is near the end of a larger-than-normal exporting season; Argentina has exported more grain than usual; and there is also surplus grain in India. Australia has had a bumper crop to sell and China appears to have already stocked up.

These factors will help insulate global wheat markets from the potential disruptions, as least over the short term, should Russian troops invade Ukraine. At present the risk of an invasion is priced in, so if war doesn't eventuate international grain prices could ease.

FORESTRY

LULL IN HARVESTING AND SHIPPING

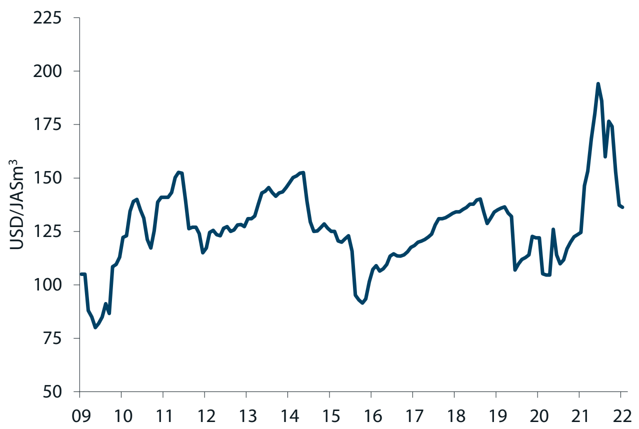
Felling of trees slowed late last year as lower export returns reduced the incentive to harvest. Felling crews were generally given extended leave over the Christmas period, so the quantity of timber available to export has also slowed. Demand from local mills remains robust.

China's demand for logs may improve after Chinese New Year as stocks on wharves are expected to ease.

PRICES EASE

Prices for logs have continued to ease. Despite the sharp fall in prices, in-market prices are still just above their long-run average. Prices have dropped about 30% since the middle of the year, catching some exporters by surprise.

UNPRUNED A-GRADE IN-MARKET PRICE



Source: AgriHQ

Couple the sharp decline with high freight prices and it is easy to see why wharf-gate prices have fallen so sharply. This has reduced the competition the local mills face when they are looking to source logs.

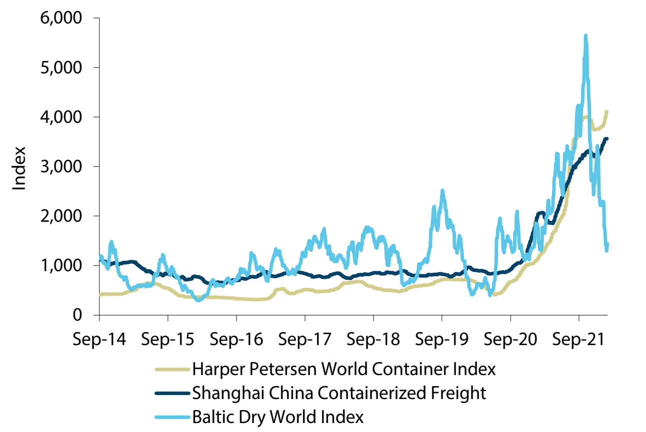
But it has also induced a slowdown in the rate of felling of forests as well. This was also partially brought about by the current labour shortage. The forestry industry has invested heavily in machinery to help reduce labour requirements and eliminate or mitigate some of the riskier jobs. But it still needs a lot of labour, including skilled machinery operators and truck drivers, with both in short supply.

FREIGHT COSTS EXPECTED TO REMAIN HIGH

Freight costs did look to be starting to ease but this was off-railed by fresh waves of Omicron circumnavigating the globe which has resulted in further labour shortages and some port closures.

China was particularly vigilant with protocols at their ports leading up to the Beijing Winter Olympics as they desperately tried to avoid major disruptions. This ended up resulting in temporary shutdowns at some ports which caused further backlogs of ships.

FREIGHT INDICES



Source: Harper Petersen & Co., Shanghai Shipping Exchange, Baltic Exchange, Bloomberg, Macrobond, ANZ Research

FORESTRY

There is typically a lull in log exports to China at this time of the season due to the Chinese New Year holiday. The whole country virtually comes to a standstill for a week or so as everyone heads back to visit family. So it will be a wee while before we see how demand and supply balance out. There could be a shortage of logs available once building projects are back running as there have been far fewer logs exported to China, from both New Zealand and elsewhere, so far this year.

MILLS STILL BUSY

The flurry of construction activity in New Zealand is keeping demand high for timber for housing projects. There is still a long pipeline of work ahead, but there are some tentative signs the housing market may be starting to ease.

Houses are taking a little longer to sell, indicating the demand for houses may be easing now that interest rates are rising and mortgages applications are being more closely scrutinised.

There have also been more houses built in the past couple of years, so the imbalance between supply and demand may be starting to ease.

But in the immediate term, demand for building materials remains very high in New Zealand. Builders have also learnt to plan further ahead and store materials in order to avoid construction delays.

CARBON PRICE ENCOURAGING PLANTING

Strong returns continue to drive planting of new land for carbon forests. Some of these forests are being planted with dual income streams, those being carbon and timber, in mind. But many are also being planted solely for carbon.

The carbon price has risen rapidly over the past year. Our latest insight paper: Carbon 102: what drives the carbon price looks at the factors that influence the price of carbon.

HORTICULTURE

LABOUR SHORTAGES WORSEN

Labour shortages this year are expected to be the worst yet due to very limited available labour and more fruit to pick.

There is no doubt that some fruit will not be able to be picked and processed this season.

Unemployment levels are now exceptionally low in New Zealand so the pool of labour available for temporary and seasonal work has shrunk considerably. It is still difficult to get overseas workers into the country. Despite additional visas being issued, quarantine requirements remain a bottleneck.

The recent volcanic eruption in Tonga will now also limit the ability of some Tongans to come to New Zealand, while some already here are considering going home earlier to help with the massive clean-up effort required. Many horticultural businesses have strong ties with the various Tongan communities and are providing support where they can.

KIWIFRUIT: MORE INVESTMENT NEEDED IN POST-HARVEST FACILITIES

Zespri recently released its 5-year outlook, which paints a positive picture for the kiwifruit industry whilst acknowledging the challenges the industry faces.

Labour remains a key issue for the industry as it looks to expand the number of trays picked and processed each year.

The industry plans to tackle the shipping congestion issue by trying to smooth out the flow of fruit, through post-harvest facilities and into markets. Zespri plans to procure additional vessels this season to allow for shipping delays.

Zespri also acknowledges the need for additional investment in post-harvest facilities to build extra capacity. Under-investment in packhouses is not a new issue, but is becoming more critical as more land is planted in kiwifruit vines and yields continue to improve on existing orchards.

Zespri is planning for a 33% increase in the volume of kiwifruit harvested over the next five years (between the 2021-22 season and the 2026-27 season). Harvesting that much additional fruit is going to require both investment in labour-saving technology and more labour units.

In five years' time SunGold is expected to account for two-thirds of the fruit harvested compared to 55% this season. This will be achieved through licences for SunGold being issued at the rate of 350-700ha per annum, increased yields, and a reduction in the volume of green fruit. The quantity of SunGold license to be issued in 2022 is 350ha, which is half of last year's volume. Volumes will continue to be adjusted with the area of new licences expected to range from 350ha to 700 ha per annum for the next five years. This will ensure there is sufficient demand to cope with the rising supply of this variety.

Reducing the supply of green kiwifruit is a key strategy to bolster orchard gate returns (OGR's) for this variety. Unfortunately, some orchards growing green fruit that are not consistently achieving good yields are struggling to keep up with the rising costs. It is expected that some of these orchards will be grafted over to gold, or will eventually be sold.

HORTICULTURE

FORECAST ORCHARD GATE RETURNS

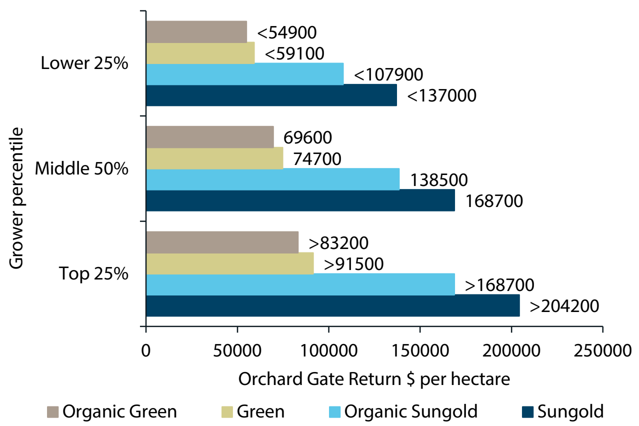
Fruit type	2021/22 per tray (Nov)	5yr forecast per tray (Jan)	5yr forecast per ha (Jan)
Green	$6.34	$6.50-$8.50	$71,000-$88,000
Organic Green	$9.54	$9.00-$11.00	$62,000-$76,000
Sungold	$11.05	$8.00-$12.00	$121,000-$198,000
Organic Sungold	$12.23	$10.00-$14.00	$112,000-$176,000
RubyRed	n/a	$10.50-$13.00	$105,000 -$130,000*

* based on full crop by 2025 yielding 10,000 trays per hectare

Source: Zespri

Returns for SunGold are considerably higher than for Green due to SunGold both yielding better and selling at a higher price point. RubyRed is expected to command an even higher price than SunGold but the lower yields mean it doesn't perform as well in terms of return per hectare.

ORCHARD GATE RETURNS 2021-22 BY CATEGORY



Source: Zespri

The data above shows there is a significant variation in the profitability of orchards, with yield being a key contributing factor. The top 25% of growers of green kiwifruit achieved OGR's of $91,500/ha or more last season. The yield achieved by the top 25% of 14,900 trays per hectare was nearly double that of the lowest quartile (7,600 trays per ha).

Similarly, the top 25% SunGold growers achieved an average yield of 19,800 trays per hectare, compared to 10,100 trays per hectare for the bottom quartile.

WINE: MORE GRAPES TO PICK

The current season is much more favourable for a larger grape harvest than last season. What last season's harvest lacked in volume, it did make up in quality, resulting in 2021 wines being highly sought after. But contract growers will be hoping for a larger harvest to help cover rising costs.

Labour, both within the orchards and in the vineyards, is expected to be problematic again this season. Last year there was just enough labour for harvest the small vintage. This season attracting sufficient staff is expected to be considerably more troublesome.

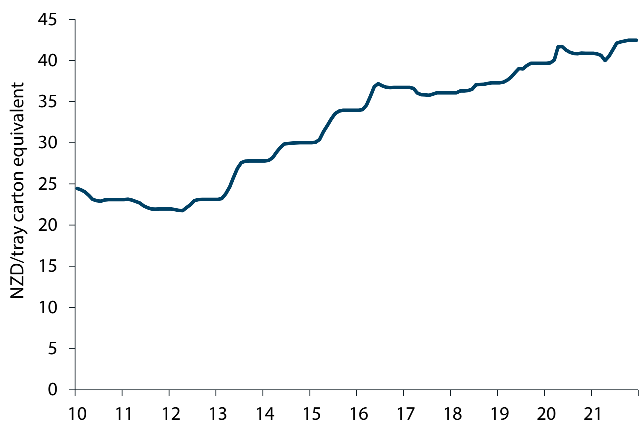
Growing conditions have generally been reasonably favourable. Wine growers will be hoping that the current spell of hot weather continues as the fruit matures.

APPLES: PICKING CHALLENGES

The pipfruit industry is bracing itself for another challenging season. Finding sufficient labour has been an ongoing issue since the pandemic commenced and only looks to be getting worse. Last year the industry tried exceptionally hard to recruit unemployed people to pick apples but the labour-intensive role didn't appeal to many. Now that the unemployment level has fallen even further it is going to be a real battle to recruit local staff.

The lack of labour is prompting more investment in labour-saving technology and orchards are being designed to accommodate more automation. For example, rowing apple trees along trellis allows for the use of platforms, which makes picking less physically intensive.

APPLE EXPORT PRICES – 12 MONTH ROLLING AVERAGE



Source: Statistics NZ

HORTICULTURE

Automating packhouse facilities is easier than automating orchard operations. Automated apple pickers are being trialled but are not expected to be commercially viable for some years yet.

Global demand for apples remains strong and returns are healthy, so it is extremely frustrating for growers if they are not able to recruit sufficient labour to pick their fruit. Last season the larger-scale operators tended to have less issues recruiting staff than some of the smaller operations. They also had more flexibility in terms of being able to move labour between orchards and roles.

SUMMER FRUITS IN FULL SWING

The summer fruit season is in full swing. Cherries are virtually finished and it is always a challenge at this time of the season to get these exported to the valuable Asian markets in time for Chinese New Year festivities. Cherry exports are well up on last season following a much more favourable growing season.

Apricots, nectarines, peaches and plums are also being harvested – primarily for the domestic market but some of these fruits will be exported.

Weather conditions have been favourable during the harvest period. The bulk of the summer fruit is likely to be harvested before any potential labour disruptions from COVID-19 outbreaks.

RURAL PROPERTY MARKET

INCREASED ACTIVITY

Activity in the rural property sector increased considerably in the past 12 months. Low interest rates, combined with high returns, have prompted action from buyers, while sellers have been motivated to exit before they encounter tighter on-farm regulations.

Approximately 29,500 rural properties (excluding lifestyle blocks) changed hands in 2021. This is about 5,000 more than typically sell in a year. A surge in sales of dairy farms and forestry blocks was responsible for driving the increased sales.

Last year 286 dairy farms changed hands, 32% more than in 2020. Strong farmgate milk prices and low interest rates are helping deals to stack up, but there is also increased urgency from some farmers to exit the industry.

Regulations are becoming more onerous, which isn't necessarily that appealing to many farm owners. Some owners who already had retirement in mind, or were thinking of changing occupation, have done this now, rather than invest time and energy in understanding the new regulations.

TIGHTER ENVIRONMENTAL REGULATIONS DRIVE SALES

At this point it also isn't clear exactly how greenhouse gas emissions decisions will impact the profitability of some farming enterprises. Therefore we are seeing some urgency to exit the industry.

There is a risk some people may be caught without the necessary consents required, which will limit land use. In many cases changes of land use, particularly to any more intensive use, will require a consent.

The extra properties available are providing more opportunities for those wanting to enter the industry. We are also starting to see more conversions of land away from dairying to less-intensive uses.

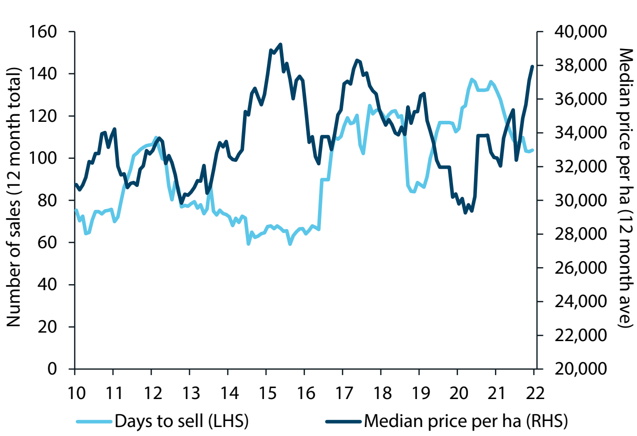
We are now seeing more land use change than we have for some time. The most visible change has been sheep and beef farms sold for planting in trees – primarily for carbon revenue opportunities.

Carbon prices have risen rapidly over the past year as a cap on the quantity of units supplied to the market came into effect.

Farmgate returns are currently very high for most sectors – particularly dairy, sheep and beef. While there is nothing obvious on the horizon that will derail returns, it is worth noting that the high prices are mainly being driven by limited supply rather than massive demand.

As supply shortages ease, prices are likely to ease too. Unfortunately, input costs tend not to fall so readily. There has been a massive increase in many on-farm costs and this will severely dent the profitability of some operations. Keeping costs under control and managing higher interest rates will be key to running a profitable operation.

DAIRY FARM SALES (12 MONTH ROLLING AVERAGE)



Source: REINZ

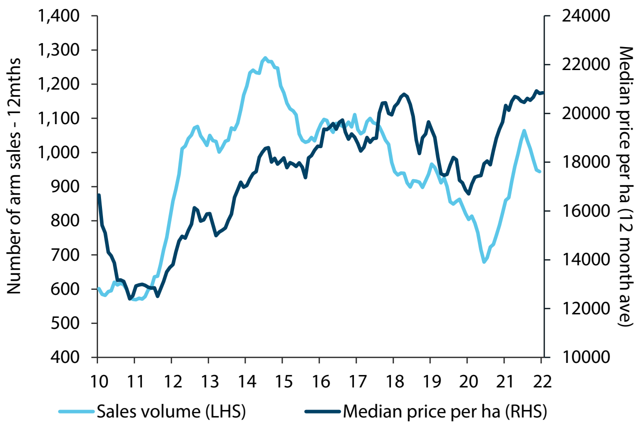
RURAL PROPERTY MARKET

Exceptionally strong farmgate milk prices have helped bolster farm sales. However, rapidly changing environmental regulations are making it increasingly difficult to attain consents, and when these are issued the consenting period tends to be relatively short. This is making it increasingly challenging to gain certainty that consents will be renewed.

CARBON DEMAND DRIVES FARM PRICES

The value of livestock farms trading has been bolstered by properties sold for carbon farming. Under current rules this land use is outperforming most others. This is particularly the case if you think the price of carbon is going to continue to rise. In our recent carbon paper we looked at the factors which are impacting the carbon price. The carbon price is highly dependent on legislative changes and will potentially be subjected to high levels of volatility – partially due to the high degree of speculative activity that is currently occurring.

LIVESTOCK FARM SALES (12 MONTH ROLLING AVERAGE)



Source: REINZ

In the past year 918 livestock properties were traded at a median price of $20,850/ha, which was 14% above the 10-yr average for this land use.

FARM SALES BY FARM TYPE

Annual average/total		Past 12 months	Previous 12 months	10-Year Avg.	Chg. Y/Y	Chg. P/10yr
Dairy	Number of Sales	286	157	216	↑	↑
	Median Price ($ per ha)	37,933	32,544	34,073	↑	↑
Livestock	Number of Sales	918	860	1,007	↑	↓
	Median Price ($ per ha)	20,850	20,325	18,271	↑	↑
Horticulture	Number of Sales	186	176	188	↑	↓
	Median Price ($ per ha)	302,667	235,818	201,279	↑	↑
Arable	Number of Sales	55	63	95	↓	↓
	Median Price ($ per ha)	35,350	30,183	36,301	↑	↓
Forestry	Number of Sales	61	61	51	←→	↑
	Median Price ($ per ha)	10,970	10,820	7,736	↑	↑
All Farms	Number of Sales	1,592	1,438	1,579	↑	↑
	Median Price ($ per ha)	29,592	24,625	24,525	↑	↑

Source: REINZ

IMPORTANT NOTICE

Last updated: 15 October 2021

This document is intended for ANZ's Institutional, Markets and Private Banking clients. It should not be forwarded, copied or distributed. The opinions and research contained in this document are (a) not personal advice nor financial advice about any product or service; (b) provided for information only; and (c) intended to be general in nature and does not take into account your financial situation or goals.

This document may be restricted by law in certain jurisdictions. Persons who receive this document must inform themselves about and observe all relevant restrictions.

Disclaimer for all jurisdictions: This document is prepared and distributed in your country/region by either: Australia and New Zealand Banking Group Limited (ABN11 005 357 522) (**ANZ**); or its relevant subsidiary or branch (each, an **Affiliate**), as appropriate or as set out below.

This document is distributed on the basis that it is only for the information of the specified recipient or permitted user of the relevant website (recipients).

This document is solely for informational purposes and nothing contained within is intended to be an invitation, solicitation or offer by ANZ to sell, or buy, receive or provide any product or service, or to participate in a particular trading strategy.

Distribution of this document to you is only as may be permissible by the laws of your jurisdiction, and is not directed to or intended for distribution or use by recipients resident or located in jurisdictions where its use or distribution would be contrary to those laws or regulations, or in jurisdictions where ANZ would be subject to additional licensing or registration requirements. Further, the products and services mentioned in this document may not be available in all countries.

ANZ in no way provides any financial, legal, taxation or investment advice to you in connection with any product or service discussed in this document. Before making any investment decision, recipients should seek independent financial, legal, tax and other relevant advice having regard to their particular circumstances.

Whilst care has been taken in the preparation of this document and the information contained within is believed to be accurate, ANZ does not represent or warrant the accuracy or completeness of the information Further, ANZ does not accept any responsibility to inform you of any matter that subsequently comes to its notice, which may affect the accuracy of the information in this document.

Preparation of this document and the opinions expressed in it may involve material elements of subjective judgement and analysis. Unless specifically stated otherwise: they are current on the date of this document and are subject to change without notice; and, all price information is indicative only. Any opinions expressed in this document are subject to change at any time without notice.

ANZ does not guarantee the performance of any product mentioned in this document. All investments entail a risk and may result in both profits and losses. Past performance is not necessarily an indicator of future performance. The products and services described in this document may not be suitable for all investors, and transacting in these products or services may be considered risky.

ANZ expressly disclaims any responsibility and shall not be liable for any loss, damage, claim, liability, proceedings, cost or expense (Liability) arising directly or indirectly and whether in tort (including negligence), contract, equity or otherwise out of or in connection with this document to the extent permissible under relevant law. Please note, the contents of this document have not been reviewed by any regulatory body or authority in any jurisdiction.

ANZ and its Affiliates may have an interest in the subject matter of this document. They may receive fees from customers for dealing in the products or services described in this document, and their staff and introducers of business may share in such fees or remuneration that may be influenced by total sales, at all times received and/or apportioned in accordance with local regulatory requirements. Further, they or their customers may have or have had interests or long or short positions in the products or services described in this document, and may at any time make purchases and/or sales in them as principal or agent, as well as act (or have acted) as a market maker in such products. This document is published in accordance with ANZ's policies on conflicts of interest and ANZ maintains appropriate information barriers to control the flow of information between businesses within it and its Affiliates.

Your ANZ point of contact can assist with any questions about this document including for further information on these disclosures of interest.

Country/region specific information: Unless stated otherwise, this document is distributed by Australia and New Zealand Banking Group Limited (ANZ).

Australia. ANZ holds an Australian Financial Services licence no. 234527. For a copy of ANZ's Financial Services Guide please click here or request from your ANZ point of contact.

Brazil, Brunei, India, Japan, Kuwait, Malaysia, Switzerland, Taiwan. This document is distributed in each of these jurisdictions by ANZ on a cross-border basis.

Cambodia. The information contained in this document is confidential and is provided solely for your use upon your request. This does not constitute or form part of an offer or solicitation of any offer to engage services, nor should it or any part of it form the basis of, or be relied in any connection with, any contract or commitment whatsoever. ANZ does not have a licence to undertake banking operations or securities business or similar business, in Cambodia. By requesting financial services from ANZ, you agree, represent and warrant that you are engaging our services wholly outside of Cambodia and subject to the laws of the contract governing the terms of our engagement.

Chile. You understand and agree that ANZ Banking Group Limited is not regulated by Chilean Authorities and that the provision of ANZ Research is not subject to any Chilean supervision and is not guaranteed by any regulatory or governmental agency in Chile.

European Economic Area (EEA): United Kingdom. ANZ is authorised in the United Kingdom by the Prudential Regulation Authority (**PRA**) and is subject to regulation by the Financial Conduct Authority (**FCA**) and limited regulation by the PRA. Details about the extent of our regulation by the PRA are available from us on request. This document is distributed in the United Kingdom by Australia and New Zealand Banking Group Limited ANZ solely for the information of persons who would come within the FCA definition of "eligible counterparty" or "professional client". It is not intended for and must not be distributed to any person who would come within the FCA definition of "retail client". Nothing here excludes or restricts any duty or liability to a customer which ANZ may have under the UK Financial Services and Markets Act 2000 or under the regulatory system as defined in the Rules of the Prudential Regulation Authority (PRA) and the FCA. ANZ is authorised in the United Kingdom by the PRA and is subject to regulation by the FCA and limited regulation by the PRA. Details about the extent of our regulation by the PRA are available from us on request.

Fiji. For Fiji regulatory purposes, this document and any views and recommendations are not to be deemed as investment advice. Fiji investors must seek licensed professional advice should they wish to make any investment in relation to this document.

Hong Kong. This publication is issued or distributed in Hong Kong by the Hong Kong branch of ANZ, which is registered at the Hong Kong Monetary Authority to conduct Type 1 (dealing in securities), Type 4 (advising on securities) and Type 6 (advising on corporate finance) regulated activities. The contents of this publication have not been reviewed by any regulatory authority in Hong Kong.

India. If this document is received in India, only you (the specified recipient) may print it provided that before doing so, you specify on it your name and place of printing.

Myanmar. This publication is intended to be general and part of ANZ's customer service and marketing activities when implementing its functions as a licensed bank. This publication is not Securities Investment Advice (as that term is defined in the Myanmar Securities Transaction Law 2013).

New Zealand. This material is for information purposes only and is not financial advice about any product or service. We recommend seeking financial advice about your financial situation and goals before acquiring or disposing of (or not acquiring or disposing of) a financial product.

Oman. ANZ neither has a registered business presence nor a representative office in Oman and does not undertake banking business or provide financial services in Oman. Consequently ANZ is not regulated by either the Central Bank of Oman or Oman's Capital Market Authority. The information contained in this document is for discussion purposes only and neither constitutes an offer of securities in Oman as contemplated by the Commercial Companies Law of Oman (Royal Decree 4/74) or the Capital Market Law of Oman (Royal Decree 80/98), nor does it constitute an offer to sell, or the solicitation of any offer to buy non-Omani securities in Oman as contemplated by Article 139 of the Executive Regulations to the Capital Market Law (issued vide CMA Decision 1/2009). ANZ does not solicit business in Oman and the only circumstances in which ANZ sends information or material describing financial products or financial services to recipients in Oman, is where such information or material has been requested from ANZ and the recipient understands, acknowledges and agrees that this document has not been approved by the CBO, the CMA or any other regulatory body or authority in Oman. ANZ does not market, offer, sell or distribute any financial or investment products or services in Oman and no subscription to any securities, products or financial services may or will be consummated within Oman. Nothing contained in this document is intended to constitute Omani investment, legal, tax, accounting or other professional advice.

People's Republic of China (PRC). This document may be distributed by either ANZ or Australia and New Zealand Bank (China) Company Limited (**ANZ China**). Recipients must comply with all applicable laws and regulations of PRC, including any prohibitions on speculative transactions and CNY/CNH arbitrage trading. If this document is distributed by ANZ or an Affiliate (other than ANZ China), the following statement and the text below is applicable: No action has been taken by ANZ or any affiliate which would permit a public offering of any products or services of such an entity or distribution or re-distribution of this document in the PRC. Accordingly, the products and services of such entities are not being offered or sold within the PRC by means of this document or any other document. This document may not be distributed, re-distributed or published in the PRC, except under circumstances that will result in compliance with any applicable laws and regulations. If and when the material accompanying this document relates to the products and/or services of ANZ China, the following statement and the text below is applicable: This document is distributed by ANZ China in the Mainland of the PRC.

Qatar. This document has not been, and will not be:

- lodged or registered with, or reviewed or approved by, the Qatar Central Bank (QCB), the Qatar Financial Centre (QFC) Authority, QFC Regulatory Authority or any other authority in the State of Qatar (Qatar); or
- authorised or licensed for distribution in Qatar,

and the information contained in this document does not, and is not intended to, constitute a public offer or other invitation in respect of securities in Qatar or the QFC. The financial products or services described in this document have not been, and will not be:

- registered with the QCB, QFC Authority, QFC Regulatory Authority or any other governmental authority in Qatar; or
- authorised or licensed for offering, marketing, issue or sale, directly or indirectly, in Qatar.

Accordingly, the financial products or services described in this document are not being, and will not be, offered, issued or sold in Qatar, and this document is not being, and will not be, distributed in Qatar. The offering, marketing, issue and sale of the financial products or services described in this document and distribution of this document is being made in, and is subject to the laws, regulations and rules of, jurisdictions outside of Qatar and the QFC. Recipients of this document must abide by this restriction and not distribute this document in breach of this restriction. This document is being sent/issued to a limited number of institutional and/or sophisticated investors (i) upon their request and confirmation that they understand the statements above; and (ii) on the condition that it will not be provided to any person other than the original recipient, and is not for general circulation and may not be reproduced or used for any other purpose.

Singapore. This document is distributed in Singapore by the Singapore branch of ANZ solely for the information of "accredited investors", "expert investors" or (as the case may be) "institutional investors" (each term as defined in the Securities and Futures Act Cap. 289 of Singapore). ANZ is licensed in Singapore under the Banking Act Cap. 19 of Singapore and is exempted from holding a financial adviser's licence under Section 23(1)(a) of the Financial Advisers Act Cap. 100 of Singapore. In respect of any matters arising from, or in connection with, the distribution of this publication in Singapore, please speak to your usual ANZ contact in Singapore.

United Arab Emirates (UAE). This document is distributed in the UAE or the Dubai International Financial Centre (DIFC) (as applicable) by ANZ. This document does not, and is not intended to constitute: (a) an offer of securities anywhere in the UAE; (b) the carrying on or engagement in banking, financial and/or investment consultation business in the UAE under the rules and regulations made by the Central Bank of the UAE, the Emirates Securities and Commodities Authority or the UAE Ministry of Economy; (c) an offer of securities within the meaning of the Dubai International Financial Centre Markets Law (DIFCML) No. 12 of 2004; and (d) a financial promotion, as defined under the DIFCML No. 1 of 200. ANZ DIFC Branch is regulated by the Dubai Financial Services Authority (DFSA) ANZ DIFC Branch is regulated by the Dubai Financial Services Authority (DFSA). The financial products or services described in this document are only available to persons who qualify as "Professional Clients" or "Market Counterparty" in accordance with the provisions of the DFSA rules.

United States. Except where this is a FX- related document, this document is distributed in the United States by ANZ Securities, Inc. (ANZ SI) which is a member of the Financial Regulatory Authority (FINRA) (www.finra.org) and registered with the SEC. ANZSI's address is 277 Park Avenue, 31st Floor, New York, NY 10172, USA (Tel: +1 212 801 9160 Fax: +1 212 801 9163). ANZSI accepts responsibility for its content. Information on any securities referred to in this document may be obtained from ANZSI upon request. This document or material is intended for institutional use only – not retail. If you are an institutional customer wishing to effect transactions in any securities referred to in this document you must contact ANZSI, not its affiliates. ANZSI is authorised as a broker-dealer only for institutional customers, not for US Persons (as "US person" is defined in Regulation S under the US Securities Act of 1933, as amended) who are individuals. If you have registered to use this website or have otherwise received this document and are a US Person who is an individual: to avoid loss, you should cease to use this website by unsubscribing or should notify the sender and you should not act on the contents of this document in any way. Non-U.S. analysts: Non-U.S. analysts may not be associated persons of ANZSI and therefore may not be subject to FINRA Rule 2242 restrictions on communications with the subject company, public appearances and trading securities held by the analysts. Where this is an FX-related document, it is distributed in the United States by ANZ's New York Branch, which is also located at 277 Park Avenue, 31st Floor, New York, NY 10172, USA (Tel: +1 212 801 916 0 Fax: +1 212 801 9163).

Vietnam. This document is distributed in Vietnam by ANZ or ANZ Bank (Vietnam) Limited, a subsidiary of ANZ.

This document has been prepared by ANZ Bank New Zealand Limited, Level 10, 171 Featherston Street, Wellington 6011, New Zealand, Ph 64-4-382 1992, e-mail nzeconomics@anz.com, http://www.anz.co.nz