Global Beef Quarterly Q2 2022

Climate-neutral Beef Coming to a Store Near You

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Global Outlook

Seasons drive revisions to production outlook, while Chinese lockdowns restrict imports

Seasonal conditions drive production

Cattle prices across the seven major exporting countries remained strong through Q1 (see Figure 1). Low inventory and favorable seasons in Australia continue to support cattle prices, while firm consumer demand supports US prices despite the higher-than-expected production and cattle on feed numbers in Q1 resulting from dry conditions. We have adjusted our outlook for US production accordingly and now believe production could expand through Q2 and Q3 before contracting in Q4 (see Figure 2). Limitations in Australian processing capacity have reduced our production forecast for Q2 and Q3.

Demand affected by consumer confidence and lockdowns in China

The first signs of softening consumer confidence are apparent in most markets, with wholesale prices for beef coming under pressure even though production costs are higher. A downward adjustment of cattle prices and upstream input costs will be needed to restore processor margins and to maintain beef's competitiveness with consumers. We expect ongoing adjustments of consumption and margins in all markets as we head into Q3 2022.

Lockdowns of major Chinese cities further constrain beef demand. This has restricted foodservice sales – down significantly in March and likely down further in April. E-commerce sales have also contracted due to the lack of delivery drivers. As a result, Chinese beef imports dropped in Q1, and we expect them to be down in Q2. Continuation of the lockdowns will impact China's beef imports for 2022.

Biosecurity risks increase

Official reports of lumpy skin disease (early March) and foot-and-mouth disease (late April) in Indonesia have placed authorities in trading nations – particularly Australia and New Zealand – on high alert. The highly infectious diseases not only have implications for cattle productivity, but, as notifiable diseases, they have trade implications for countries that become infected.

Figure 1: Global cattle prices remain strong*

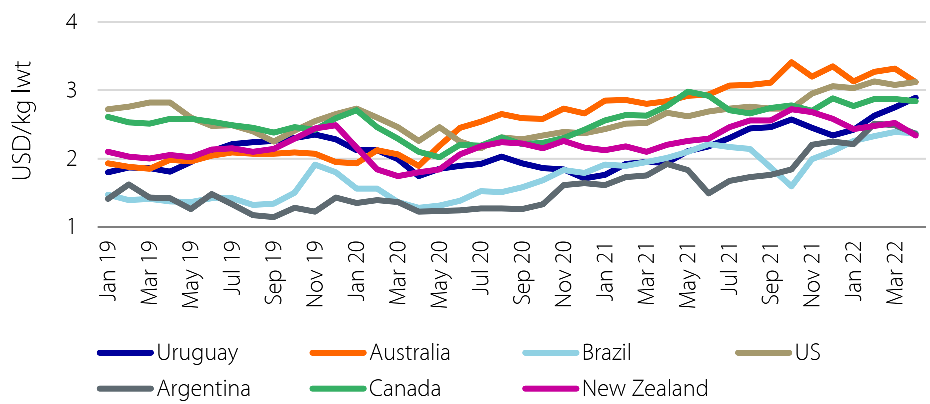
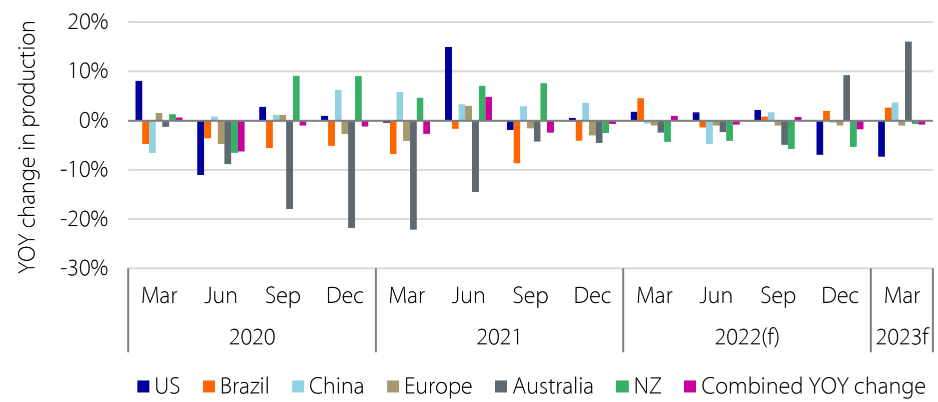
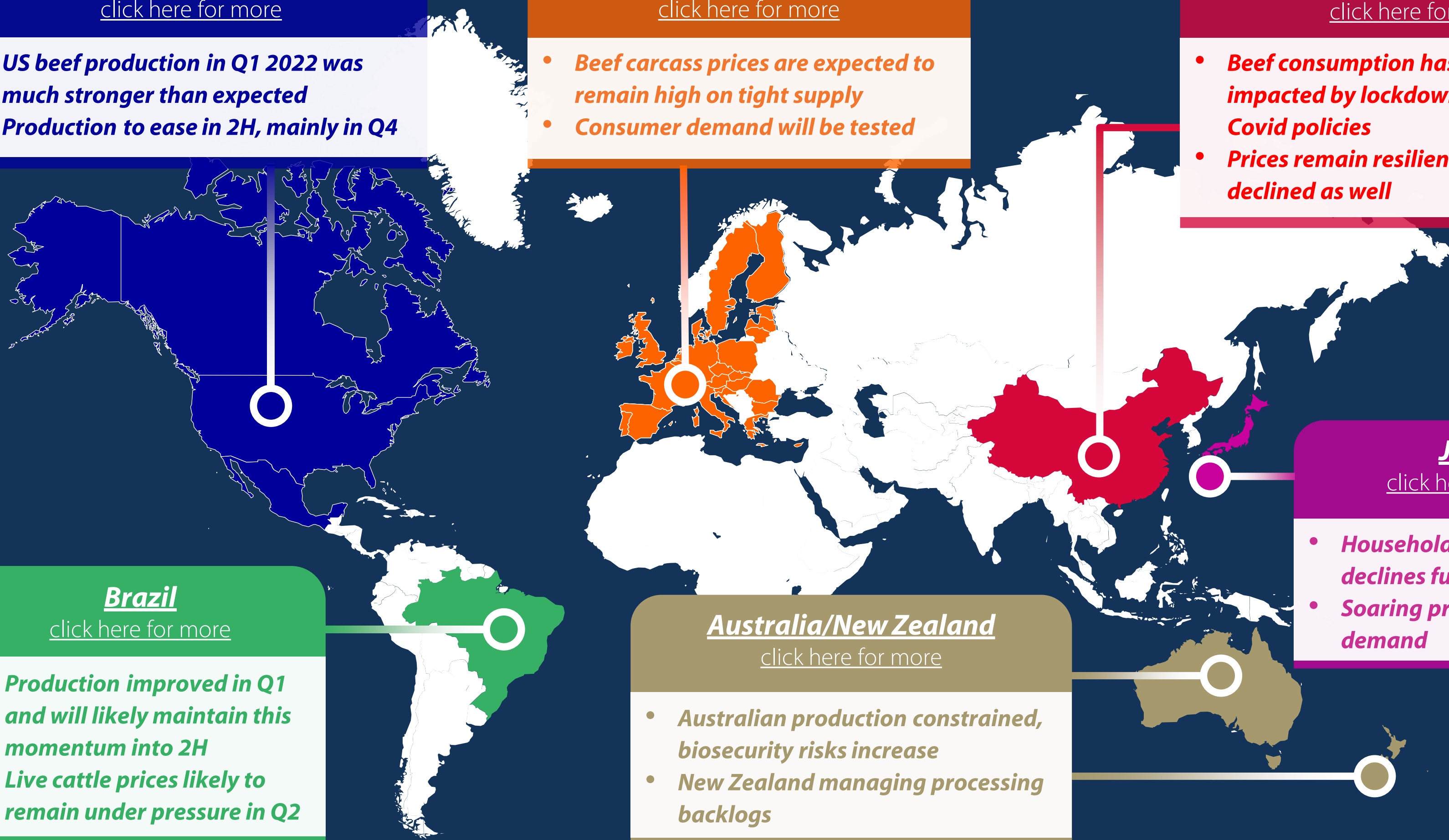


Figure 2: Australian recovery to slow and US production to rise in Q2 and Q3



*Note: Over-the-hook prices for Australian cattle are unavailable. Therefore, saleyard cattle prices have been used in this edition.
Source: Macrobond, AgriHQ, MLA, USDA, Stats NZ, Rabobank 2022

Global Beef Markets Summary



North America
click here for more

- US beef production in Q1 2022 was much stronger than expected
- Production to ease in 2H, mainly in Q4

Europe
click here for more

- Beef carcass prices are expected to remain high on tight supply
- Consumer demand will be tested

China
click here for more

- Beef consumption has been seriously impacted by lockdowns under zero-Covid policies
- Prices remain resilient, as supply declined as well

Japan
click here for more

- Household consumption declines further
- Soaring price damages demand

Brazil
click here for more

- Production improved in Q1 and will likely maintain this momentum into 2H
- Live cattle prices likely to remain under pressure in Q2

Australia/New Zealand
click here for more

- Australian production constrained, biosecurity risks increase
- New Zealand managing processing backlogs

Source: Rabobank 2022

Feature Article
First movers in the climate-neutral space

From commitments to actions

With increased focus on carbon over the last two years, we have seen numerous companies, industries, and governments make commitments around the reduction of greenhouse gases (GHG). Most major meat processing companies around the world have a statement on the environment and a commitment to reduce emissions – and in many cases, to reach net-zero emissions – by a specified timeframe (see Figure 3). We see the same for major food retail and foodservice companies. But until now, most commitments have not necessarily changed what consumers see – there have been few products offered with lower or zero emissions. But that is all starting to change as the first movers release climate-neutral products onto shelves. We will closely watch the positioning of these products and the associated pricing strategies.

The first movers

Around the world, we are starting to see positioning of low-emission and climate-neutral beef products on shelves. In Australia, one large cattle producer launched a carbon-neutral brand in 2019, and now a major retailer has introduced a carbon-neutral beef line, initially in selected stores followed by a national rollout. In early 2022, a leading New Zealand meat processing company successfully launched New Zealand's first net-zero-carbon beef product in the US. In late May, a large retailer in the UK announced a new Sustainable Beef and Lamb Scheme to support and incentivize its livestock farmers to reach net-zero by 2030.

We are starting to see companies take the next step. They are initiating and advancing programs to establish supply chains for and verify progress on reducing beef supply chain emissions and to help them to meet their stated commitments.

It is not an easy time to translate sustainability and emission commitments into action. Consumers around the world are paying more for beef now than at any previous time in history (see Figure 4). In our view, the full cost of production (sustainability initiatives aside) is not currently being passed onto consumers. Consumers' willingness and ability to pay is likely to be tested in 2022 as inflation levels climb around the world.

Figure 3: Commitments to reduce supply chain emissions grow

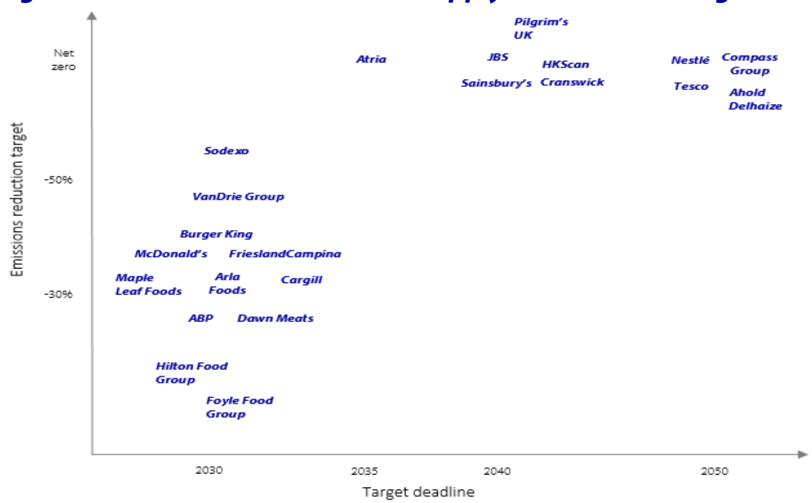
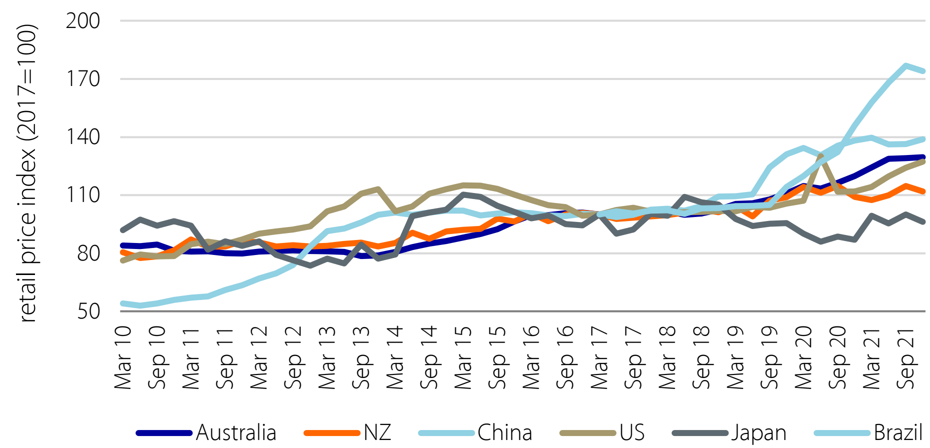


Figure 4: Global retail beef prices remain high



Source: ABS, Stats NZ, MOA, BLS, ALIC, Macrobond, Rabobank 2022

Feature Article
First movers in the climate-neutral space

But action is required to deliver on commitments – regardless of whether the economic outlook makes it a favorable time to invest in production system changes. The big question is: Will the market be able to support a further lift in beef prices to offer a 'premium payment' for net-zero-carbon beef?

Several of the first movers in the carbon-neutral beef space are utilizing offsets to generate their carbon-neutral status. These offsets add costs to the supply chain. But the reduction of emissions, while saving the costs of offsets, has its own costs, and for businesses to implement carbon-reduction practices, a return on investment or revenue to cover these costs is going to be needed. Theoretically, such a return needs to sit somewhere above business as usual to incentivize change but below the cost of purchasing offsets to maximize efficiencies.

A return on this investment may take many different forms. We see five possible forms of return, many of which will occur simultaneously.

Returns on investments to reduce GHG emissions in beef supply chains

Access to the market	Access to finance	Improving productivity	Premium prices	New revenue streams (carbon credits)
Retailers and foodservice operators want suppliers to reduce their Scope 3 emissions. Reducing emissions may even become a condition of supplying into domestic or international supply chains. Regulatory measures requiring reduced emissions may also be introduced to access some countries.	With banks making commitments to reduce emissions and participating in arrangements like the Net-Zero Banking Alliance, reducing emissions is set to become a component of accessing finance.	The premium market is modest in size, and changes in access to the market and to finance will not explicitly lead to better returns. As such, investments in sustainability and lower emissions should be made with one eye on how they also lift productivity.	Niche markets offer premium prices, and the inclusion of carbon neutrality may add to existing premium characteristics, supporting the premium claim. These niche markets are, by definition, limited.	Forming carbon markets and generating carbon credits through farming practices create a possible new income stream. Caution needs to be exercised, however, in generating and selling credits, as credits sold from the business are no longer available to meet any of the other supply chain requirements.

Source: Rabobank 2022

Australia

Production volumes historically low, and biosecurity threats increase

Rain in Queensland holds prices up

Substantial rain across many parts of Australia, including Queensland, has provided support to the cattle market. Although not necessarily season breaking – 44% of Queensland remains under drought conditions as of May 12 after dropping from 61% – it may allow just enough pasture growth going into winter to encourage producers to hold or possibly even pick up some additional cattle. The EYCI lifted slightly in the first week of May to AUD 11.07/kg cwt before dropping back to AUD 10.82/kg in the week of May 12 (see Figure 7). Although cattle supply is increasing, the favorable seasonal conditions are enough to maintain producer restocking demand. While we believe prices will drift down for the remainder of the year, the good seasonal conditions may mean prices remain relatively static into Q3 before producers reassess their buying appetite as summer approaches.

Production volumes remain constrained

Australian cattle slaughter numbers dropped to their lowest level in over 35 years in Q1 as processing plants contended with Covid-restricted workforces and a general lack of skilled labor (see Figure 8). Male slaughter numbers increased 2% YOY, continuing the growth trend we have seen for the last three quarters and reflecting the increasing cattle inventory. Female slaughter numbers remained in the low 40s (41%), also reflecting the ongoing herd rebuilding in progress. Favorable seasons and high numbers of cattle on feed boosted the average carcase weight to 324kg, another record, and continue the growth trend we have seen since 2019.

Nearby disease reports place Australian biosecurity on high alert

Official reports of lumpy skin disease (early March) and foot-and-mouth disease (late April) in Indonesia have placed Australian biosecurity operations on high alert. While no traces of the diseases have been detected in Australia, the proximity of Indonesia and the means by which the diseases can be spread increases the risks to Australia.

Figure 7: Rain supports cattle prices

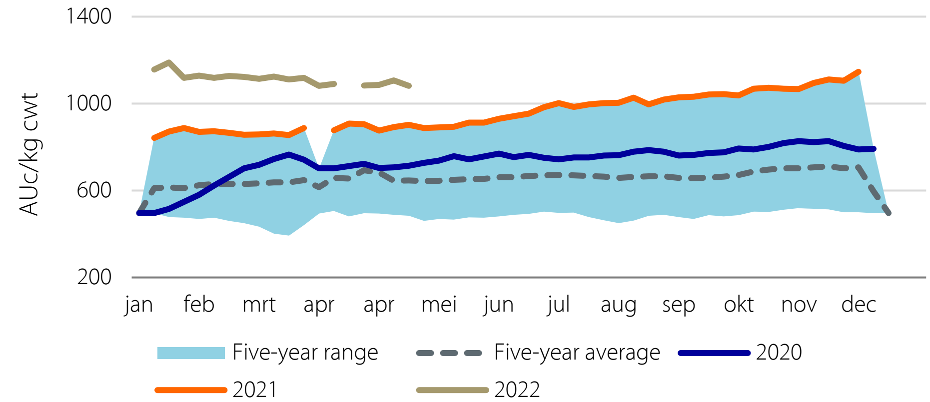
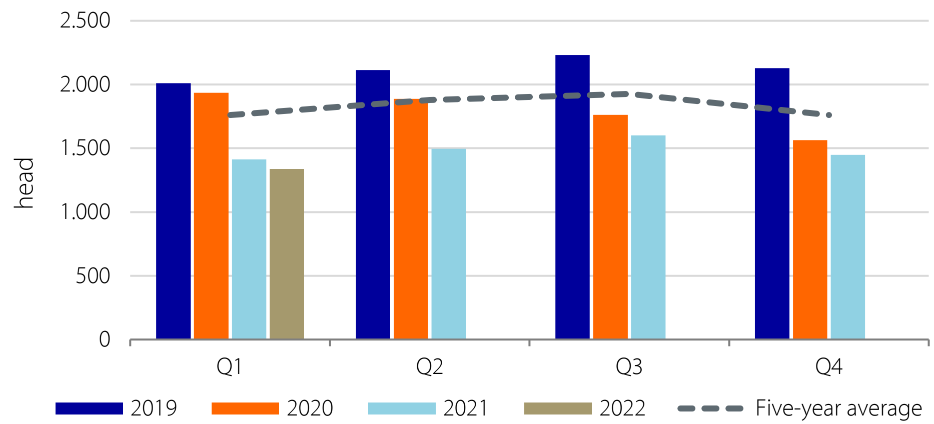


Figure 8: Cattle slaughter lowest in over 35 years



Source: MLA, Rabobank 2022

Brazil

Exports recovering strongly, but domestic demand remains soft

Return of Chinese purchases further boosts Brazilian exports

Growth in beef exports continued at a very strong pace in the first three months of the year, driven by increased Chinese imports following the lift of the embargo in December 2021 and an increase in import volumes from the US, Egypt, and the UAE. China remains the main destination, representing 42% of total exports and accumulating 243,000mt in Q1, an increase of 30% YOY (see Figure 9). The US became the second largest importer, with an increase of 283% and a volume of 54,000mt for Q1. The total volume of all exports sold in Q1 was 526,000mt, a record for the period and 29% higher YOY.

The increased demand for Brazilian beef in export markets added to the appreciation of live cattle prices in the local market to boost export prices in Q1. China registered the biggest year-on-year price increase in Q1, from USD 4,669/mt to USD 6,381/mt (+37%). The strong prices and higher volumes pushed the value of exports 59% higher YOY, to a record USD 2.9bn. We expect exports to grow by around 10% in 2022.

Improved supply increases downward pressure on live cattle prices

High export volumes and seasonally low domestic demand have amplified the influence of global markets in the pricing of live cattle in the local market. However, with the supply of grass-fed cattle gaining strength, a seasonal reduction in rainfall, and the consequent greater bargaining power of slaughterhouses, prices in April fell by 3% compared to the previous month (see Figure 10). With the industry's more elongated slaughter schedules, prices may ease further in Q2, but we don't expect large drops.

Domestic consumption will benefit from the Mother's Day holiday in May (the second most important holiday after the end-of-year festivities). Furthermore, with beef becoming more competitive against chicken and pork, which have registered increases since February and March respectively, consumers are expected to increase beef consumption. However, high food inflation and the continuing fragility of consumer purchasing power will continue to challenge domestic demand this year.

Figure 9: Exports to China continue to grow in both volume and value

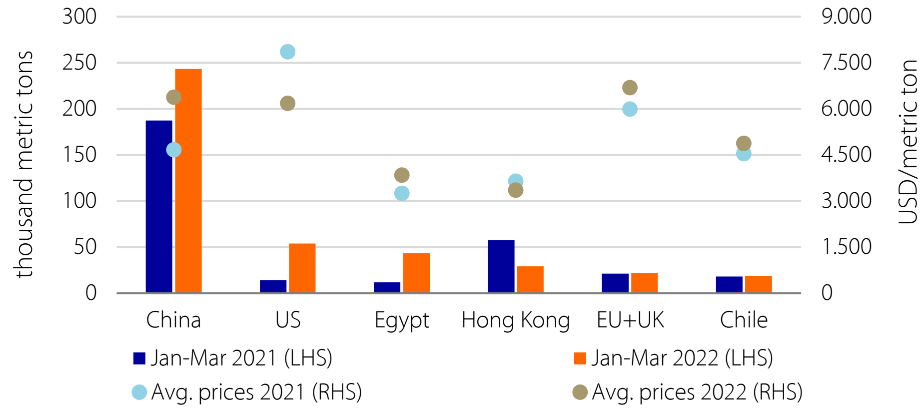
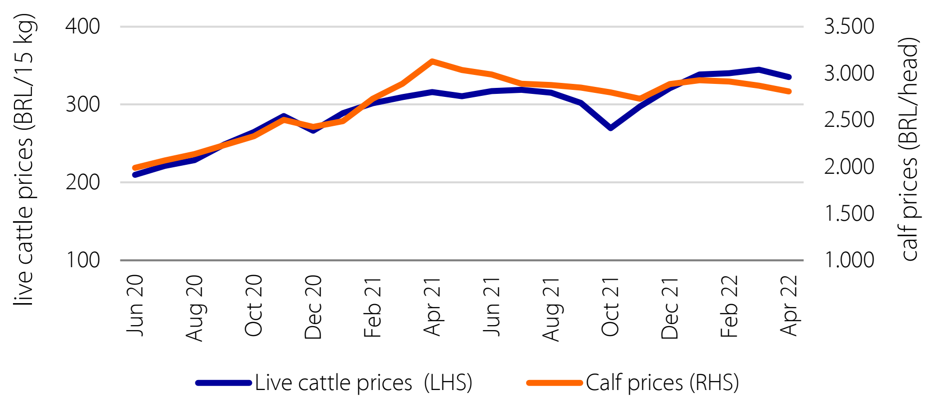


Figure 10: Supply rise sways live cattle prices, which follow the calf trend



Source: Secex, Cepea, Rabobank. 2022

Canada

Heavy front-end supplies will limit cattle availability as we move forward

Additional feed crisis averted

After feed availability for the Canadian cattle industry had already reached dire levels due to the 2021 drought, trucker blockades, and Covid-related logistical slowdowns, things were poised to get much worse in March. On March 20, Canadian Pacific Railway halted operations over a labor dispute with employees, threatening already stressed supplies of feed grain from the US. Thankfully, the work stoppage ended only two days later, yet feed supplies remain tight.

North American trade continues to be supportive

While higher prices are putting some pressure on beef purchases and causing some consumers to slide down the premiumization scale, beef demand continues to be relatively robust. Canadian beef and beef product export volumes to the US market reached their highest March level since 2005. Year-to-date exports to the US, through March, are up 13% YOY and 23% higher than the five-year average for the same three-month period. The Canadian dollar is at its weakest level relative to the US dollar since 2020, which is supportive of Canadian exports but raises the costs of imported cattle and feed.

Slaughter demand remains robust

Western Canada's fed cattle slaughter volumes continue to track ahead of 2021, up 4% YTD through the week ending May 2. Increased corn imports from the US have continued to support high cattle on feed numbers, which were up 9.7% YOY in April and at their highest April levels since 2001 (see Figure 11). Strong packer demand is evident, as fed cattle prices in early May were at their highest level since June 2017, even as market-ready fed supplies are reported as ample (see Figure 12). The heavy front-end load continues, as drought conditions and high hay costs have forced rapid cow herd contraction and limited heifer retention. Expect feeder cattle prices to hit new, multi-year highs in the second half of the year. Needed rains in late April and early May have reportedly improved pasture conditions in some areas.

Figure 11: Cattle on feed at 21-year April high

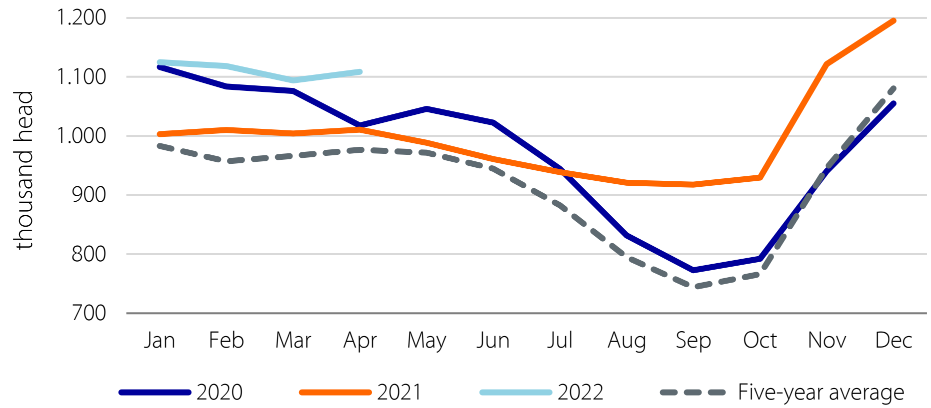
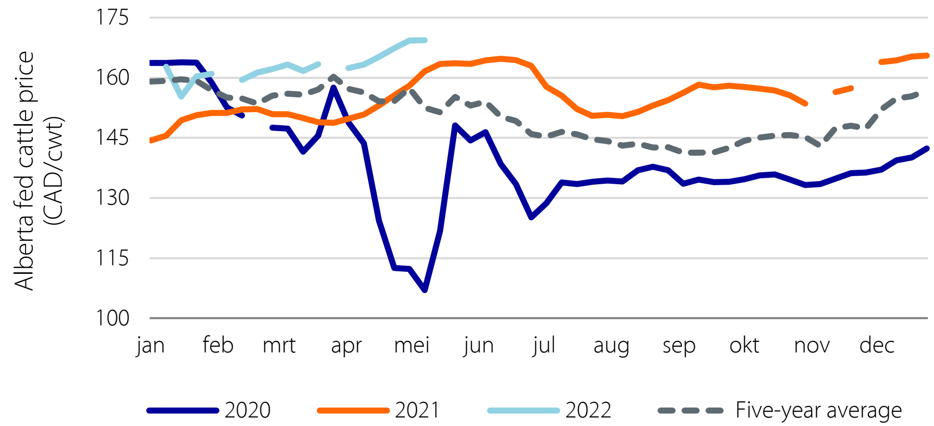


Figure 12: Fed cattle prices at highest level since June 2017



Source: CanFax, Rabobank 2022

China

Beef demand depressed by Covid-related lockdowns

Strict measures against Omicron negatively impact food spending

Entering Q2, China adopted stricter measures, including lockdowns in some big cities, to combat the rising cases of Omicron. Foodservice has been heavily impacted, with March sales down by 16% YOY. Foodservice sales in April are expected to be even worse, as the country persists with a zero-Covid policy and dining-in was prohibited in a number of cities. As beef consumption relies heavily on foodservice, we believe beef sales in the first four months of 2022 have seen a big decline. Beef sales via e-commerce have declined sharply as well, due to a shortage of delivery labor. Based on MARA data, beef sales volume of three major e-commerce platforms in March were only about 10% of the same period in 2021. As supply drops alongside the drop in demand, retail prices remain strong compared with other animal proteins (see Figure 13). We believe there is backlog of cattle for slaughtering, which will pressure prices when lockdowns are lifted.

Weak beef imports likely to continue in Q2

Beef imports in Q1 2022 dropped by 17% YOY, to 510,000mt. The key reasons include the ban on Brazil in 2021, which caused the decline at the beginning of 2022, weaker demand within China due to Covid restrictions, and strong international prices. Imports from Brazil dropped 44% YOY in Q1 2022 but are expected to recover to normal levels in Q2 as Brazilian exports increase. However, China Customs banned several export plants in Brazil due to biosecurity issues, and strong prices for Brazilian beef will affect the pace of shipments. Uruguay's exports also increased in Q1, by 20%, and the US also increased exports to China, taking advantage of China's strong demand for premium products. For Q2, import demand will depend on how the Covid policy slows customs clearance and the distribution of goods and how high stock levels in warehouses at ports and in coastal cities affect the market. In addition, the slow recovery of foodservice and logistics/transportation, along with Covid policy, will make traders hesitant to import a large volume of beef in the short term. All these will further slow down beef imports in Q2.

Figure 13: Beef retail prices stronger than other proteins

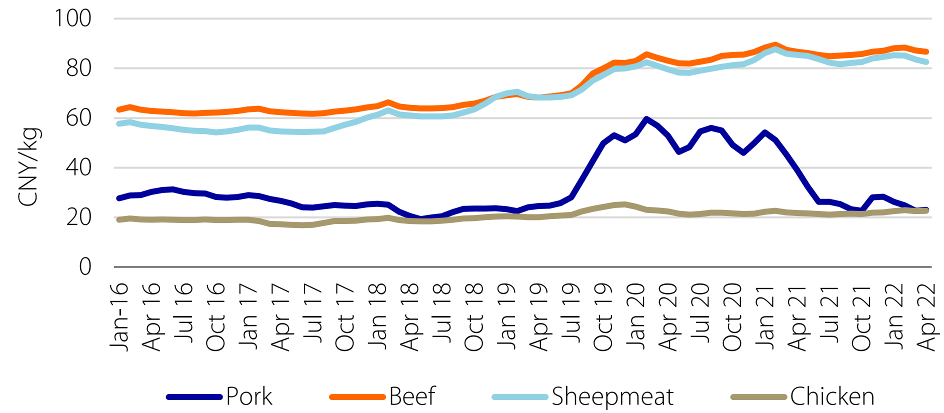
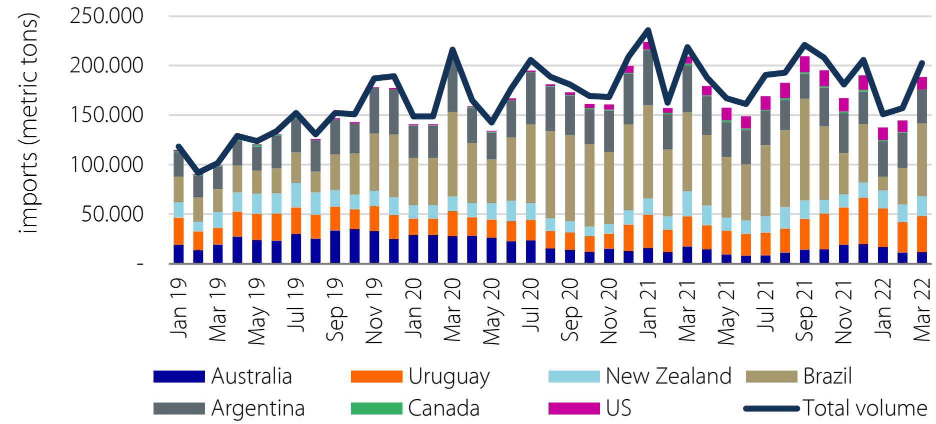


Figure 14: Beef imports dropped in Q1 2022



Source: MARA, China Customs, Rabobank, 2022

Europe

High prices to test domestic and export demand

Beef production in Europe is declining, with some exceptions

In February 2022, production was down by 0.4% YTD in the EU-27+UK. This is following a decline of 0.8% YOY in 2021. Increasing production in Ireland (+10% YTD), Spain (+9% YTD), Poland, (+4% YTD), and the Netherlands (+1% YTD) could not offset the declines in Germany (-6% YTD) and France (-9% YTD). We expect cattle supply across Europe to generally remain limited in Q2 and into Q3.

Imports to increase on recovering demand from foodservice

EU-27+UK beef imports grew 1% YOY in 2021 compared to 2020. In the same period, volumes from Brazil, Argentina, Australia, and the US contracted, while imports from Uruguay increased by 25%. Import volumes in the coming months will be supported by expanding supplies in some exporting countries, such as Brazil, and returning foodservice demand after a period of Covid-19 restrictions. In the first two months of 2022, imports were up by 1% YOY. Imports from Argentina were up by 16%, but volumes from Brazil (-3% YTD) and Uruguay (-6% YTD) fell in the same period.

Beef exports from the EU-27+UK were down by 17% YTD in January and February 2022, with volumes to major destinations, such as Cote d'Ivoire (-7% YTD) and Ghana (-29% YTD), declining (see Figure 15). Continued high prices are believed to be a reason. Higher-value markets remain important for European beef. Beef exports to Switzerland and Japan were up 47% and 55%, respectively, in the same period.

Increasing consumer prices will test demand

Beef carcass prices have remained strong across Europe, up 35% YOY in week 17, 2022 (see Figure 16). Continued limited supply will support prices in the coming months. However, increasing consumer prices will test demand going forward. Beef continues to have the highest price point among animal protein products, but consumer prices have been increasing across all species. To keep products affordable, package sizes in retail are expected to decrease, which will likely impact consumption volumes.

Figure 15: High beef prices likely impact trade flows to lower-value markets

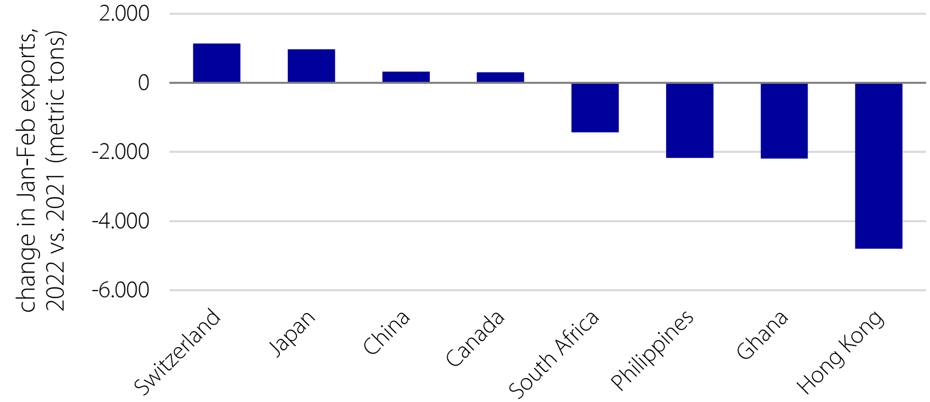
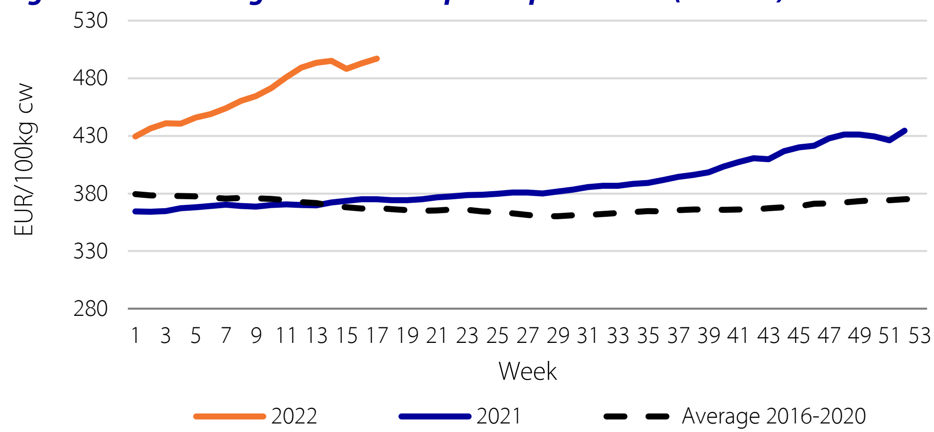


Figure 16: EU average beef carcass price up 35% YOY (ACZ-R3)



Japan

Beef imports declining as household consumption falls

Beef imports have fallen sharply

Beef imports have been declining year-on-year since November 2021. March 2022 volumes dropped 26.6%, to fall 13.6% below 2019 volumes. Imports of chilled beef products decreased 26.2% YOY due to the high prices of US and Australian product. Frozen product imports fell by 27.1% YOY, although imports from New Zealand increased.

Household consumption decreases further

In March 2022, the Japanese government lifted quasi-emergency measures, including the voluntary 8pm or 9 pm curfew. While we expect a gradual recovery in the foodservice industry, household consumption of beef has remained low since October 2021, showing further declines in both January and February 2022 (see Figure 17). In contrast, imports of pork and chicken have continued to increase.

Soaring prices damage demand

On the back of high prices in international markets and cost increases as a result of a sharp depreciation of the Japanese yen, the retail price of imported beef has remained high (see Figure 17). We expect this trend of high prices to continue, reflecting the impacts of the Russia-Ukraine crisis, supply chain delays, and disruption due to Covid-19. At these high prices, consumers are likely to maintain a budget-focused mindset, which will mean a slow recovery of demand for imported beef.

Figure 17: The quantity of beef purchased by households is declining*

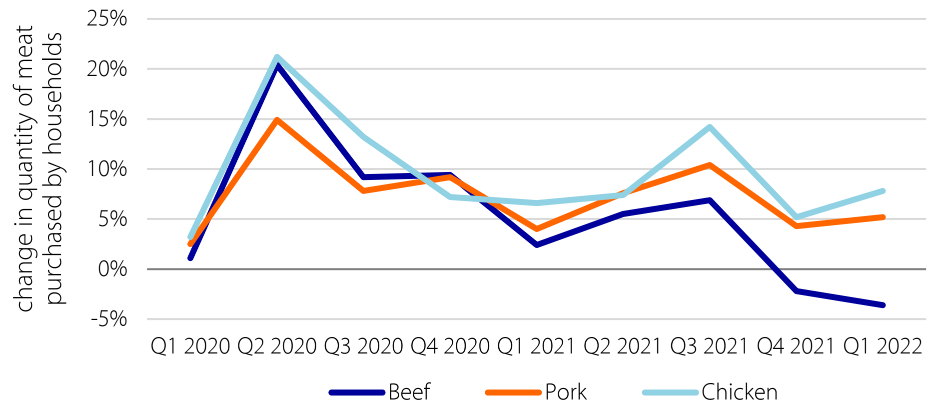
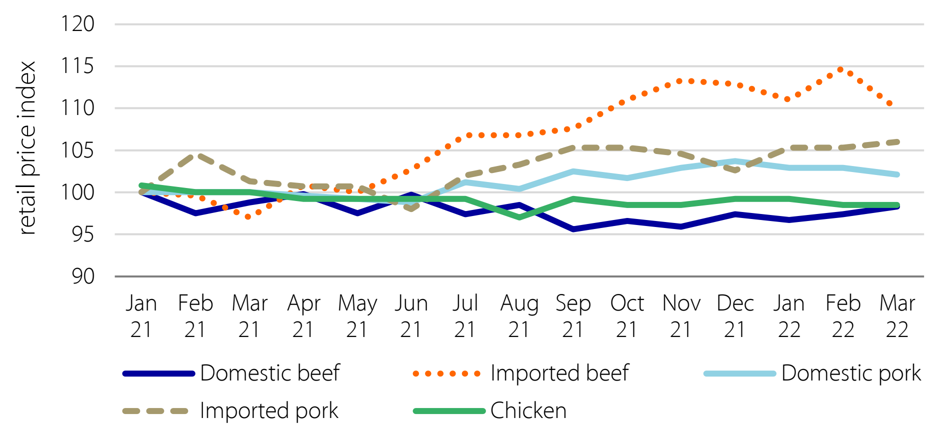


Figure 18: Imported beef prices remain high



*Quantity by weight

Source: Ministry of Internal Affairs and Communications of Japan, Rabobank 2022

Mexico

Strong beef exports and foodservice recovery supporting markets

Strong demand for cattle continues

Mexican cattle inventories remain stable despite the increase in feed costs and other inputs. Feeder cattle prices remain at record highs, finding strong support from beef prices and steady demand for cattle. On average, 2022 cattle prices have increased around 20% compared to a year ago (see Figure 19). Another important factor to consider in the cattle market is that Mexico's cattle exports to the US have declined by about 30% in 2022 compared to a year ago. Most of this is due to already high numbers of cattle on feed in the US, driven by drought conditions and high hay prices.

Beef production trending higher

Mexican beef production continues to find momentum. This year, production is expected to be 2.2m mt, which if realized, is slightly higher than the 2.1m mt in 2021. From January to March 2022, beef production was already 2.5% higher than year-ago levels (see Figure 20). Higher production depends in part on feeder cattle exports remaining low.

Strong export demand is supporting strong markets

In general, domestic beef consumption this year remains relatively sluggish, particularly among middle-income groups, due to the effects of high inflation on household purchasing power. Mexican beef prices have eased marginally throughout the year but remain around 20% higher, on average, than 2021. However, beef consumption is recovering in some sectors, such as tourism and foodservice, as Mexico continues to reopen after Covid-19 lockdowns.

So far in 2022, Mexican beef exports remain strong, reaching record highs in both volume and value. During the first quarter of the year, Mexican beef exports reached 90,000mt cwe, up 30% compared to 2021. On the other hand, Mexican beef imports have declined sharply this year, down almost 18% from a year ago.

Figure 19: Feeder cattle in high demand at record prices

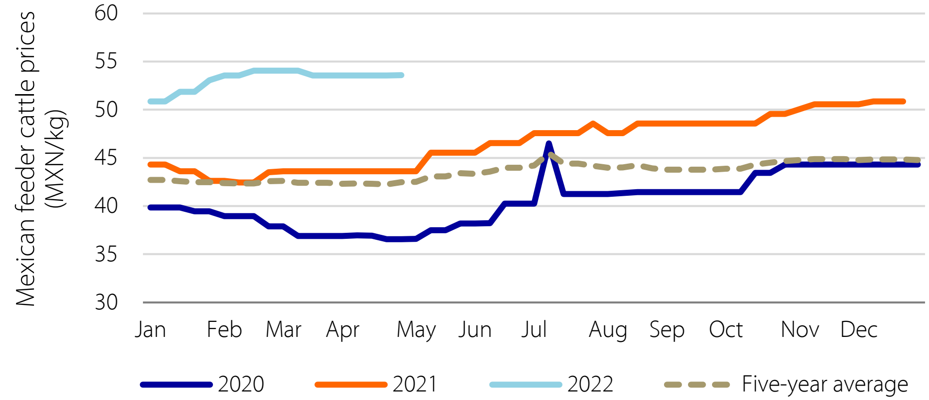
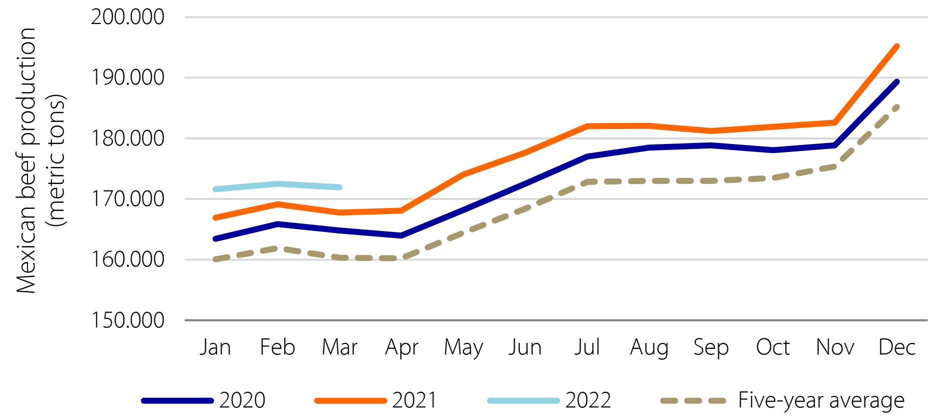
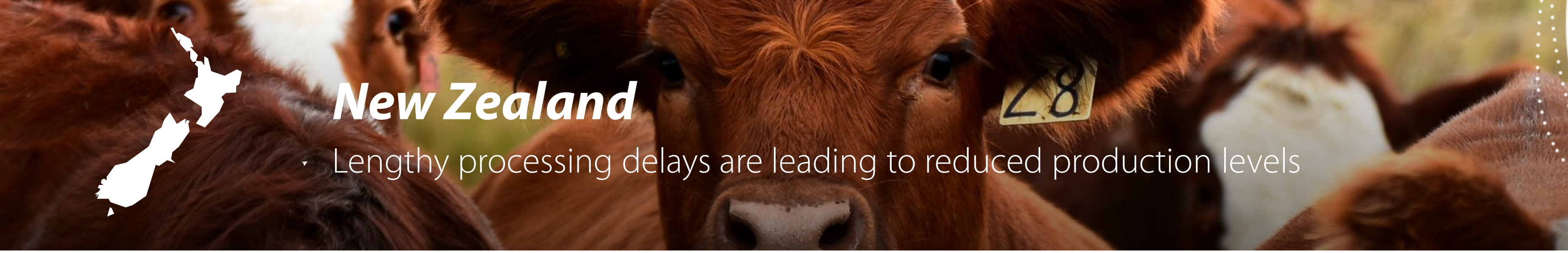


Figure 20: Beef production continues to increase



Source: USDA AMS, Rabobank 2022



New Zealand

Lengthy processing delays are leading to reduced production levels

Strong prices offsetting drops in volumes

New Zealand export volumes continued to decline in Q1 2022, following the same trend of late 2021. Total beef exports for Q1 fell back 7% YOY, driven by processing backlogs and shipping challenges. However, export earnings were 35% higher YOY, supported by strong global beef prices. This flowed through to an average farmgate North Island bull price of NZD 5.90/kg cwt in April (see Figure 21).

Export volumes to New Zealand's top two markets, China and the US, declined through Q1 (see Figure 22). Limited global beef supplies are expected to provide price support through Q2, but export values could come under pressure if China's beef imports remain soft on the back of enforced lockdowns. We expect New Zealand's export volumes to China in Q2 will be considerably lower.

Grilling season in the US is expected to provide further price support for lean trimmings, which are New Zealand's main export to the US and used in burger patty production. Despite high inflation levels in the US, we expect that lower-priced items like beef patties will be less impacted by any tightening in consumer spending, insulating demand for New Zealand beef.

Labor shortages and supply chain challenges at home

Although seasonal conditions have mostly been favorable across New Zealand in 2022, the main challenge facing farmers and processors is backlogs of cattle due to Covid-related labor shortages and supply chain challenges. The relaxing of Covid regulations and border rules has allowed more labor to enter New Zealand since April, alleviating some of the pressure felt at processing plants.

The beef kill for the season was down 7% YOY in mid-April, equivalent to around 107,000 head of cattle lower. Although we expect steer and heifer slaughter numbers to be 1.4% and 5.5% lower, respectively, in the 2022 season, it is likely that there will be a carryover of stock into the new season (which starts October 1, 2022), lifting 2023 season export volumes.

Figure 21: Strong export earnings support cattle prices

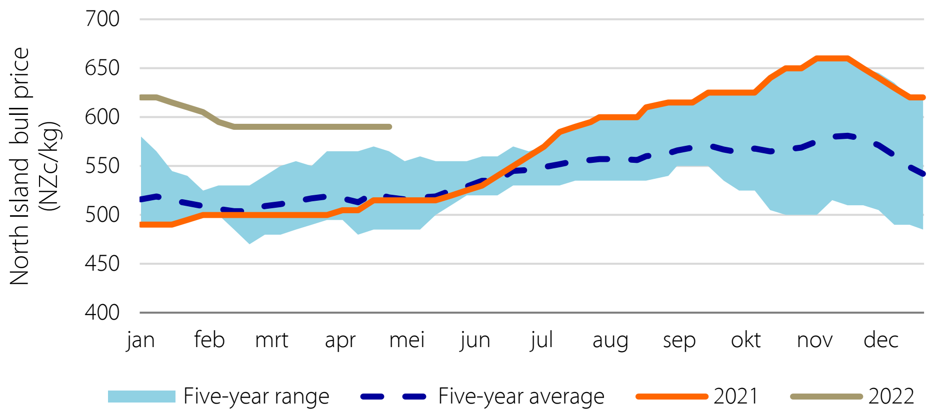
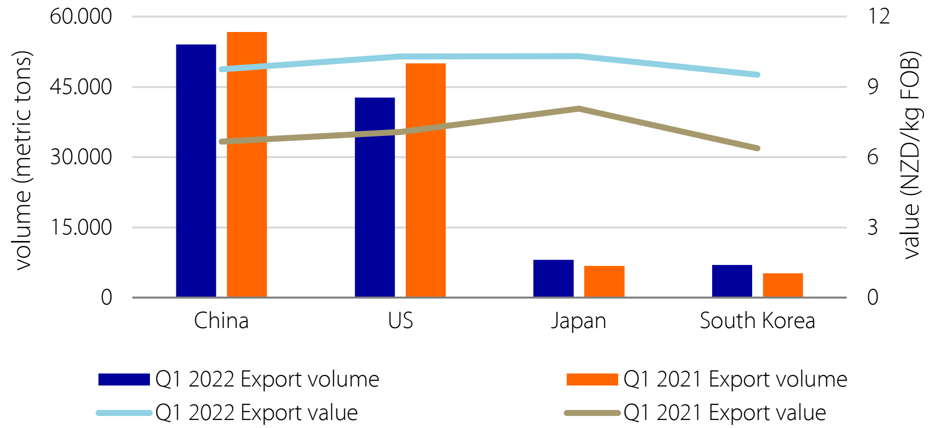


Figure 22: Beef export volumes to China and the US dropped in Q1



Source: Stats NZ, AgriHQ, Rabobank 2022

United States

Strength in Q1 to hold momentum through mid-2022 before liquidation is felt

Strong market conditions, with production up

Strong is the best word to describe the US beef market in Q1 2022. Production was up, exports were robust, and cattle on feed numbers grew in Q1 2022. Drought conditions are leading to increased slaughter and cattle on feed numbers, with the ongoing contraction in the cow herd another contributor.

Production rose by about 2% YOY in Q1 2022, due largely to increased slaughter. Drought and high feed costs weighed on the non-fed herd, with total numbers up 8% YOY in Q1 and beef cow slaughter up 18% YOY. This increase in non-fed slaughter, along with higher-than-expected cattle on feed numbers, means production estimates through 2022 need adjusting. US beef production is expected to remain strong through Q3 2022, before easing in Q4 on reduced availability. Overall beef production is expected to decline by about 1% YOY in 2022.

Cattle on feed numbers also remained strong in Q1 2022, up 1% YOY and 5% above the five-year average (see Figure 23). April reached a record high, with many regions continuing to show higher placements than 2021 levels. Despite the strong cattle movements from winter grazing to feedlots, feeder cattle prices remain strong.

Year-to-date beef prices have lost momentum. Beef cutout values and most cuts are moving below year-ago levels, though they remain above historical averages. The current downtrend appears as consumer confidence is softening and as households start adjusting expenditures to higher inflation and prices.

Exports are also strong off the back of increased production

March's exports were the third highest on record, and total Q1 2022 exports increased 5% YOY (see Figure 24). Growth in exports to South Korea helped offset a decline in exports to major destinations Japan and Mexico. Exports to China showed another quarter of significant growth, up by 45% YOY in Q1 2022.

With lower production expected in 2022 and current USD strength likely to drag on US exports, total exports for 2022 are projected to decline about 4% YOY from 2021.

Figure 23: Cattle on feed numbers maintain their strength

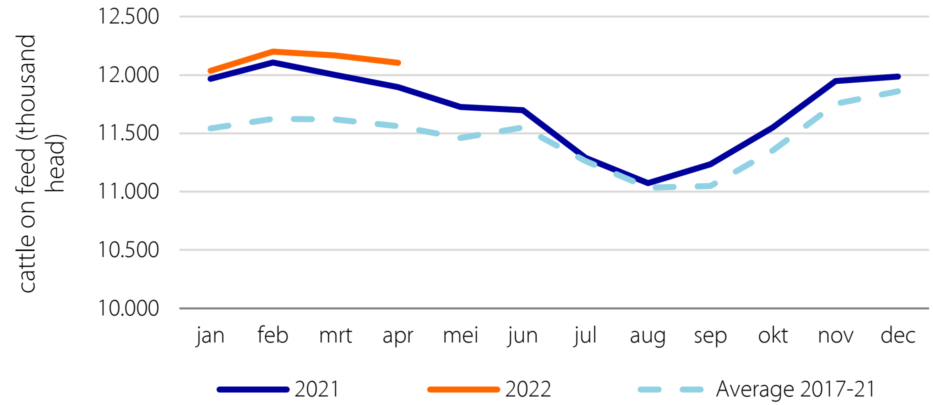
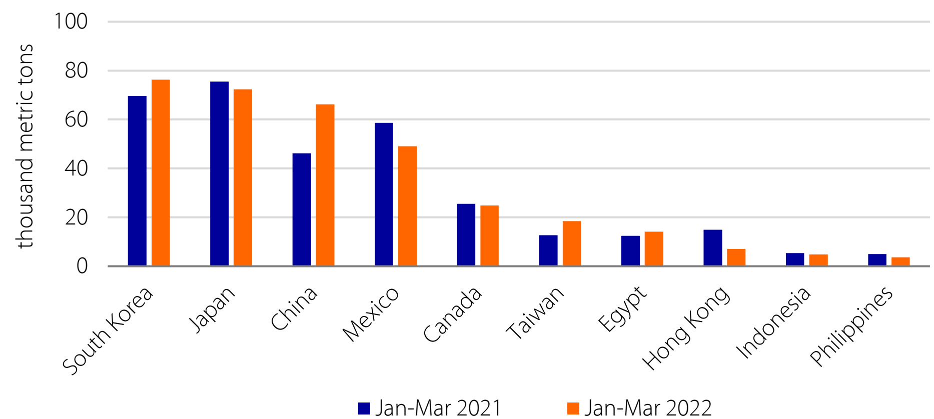


Figure 24: China stands out in Q1 exports



Source: USDA, Rabobank 2022

Global Outlook: Macroeconomic Dashboard

Figure 25: FX forecast over the next 12 months

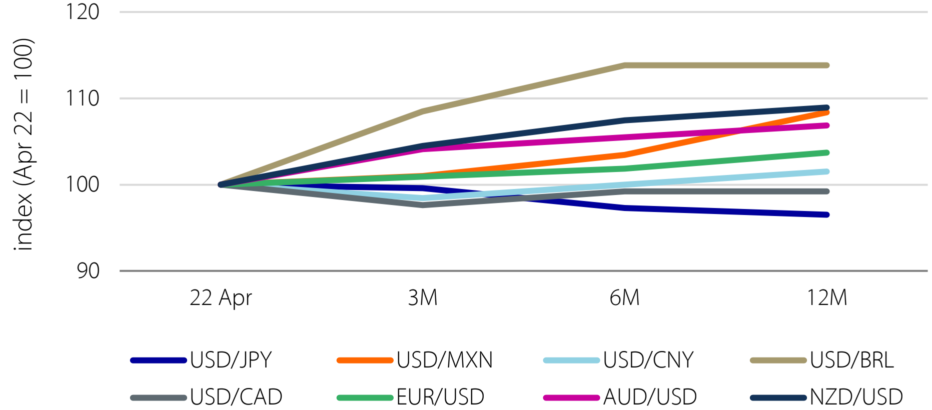


Figure 26: GDP growth in most countries is expected to slow

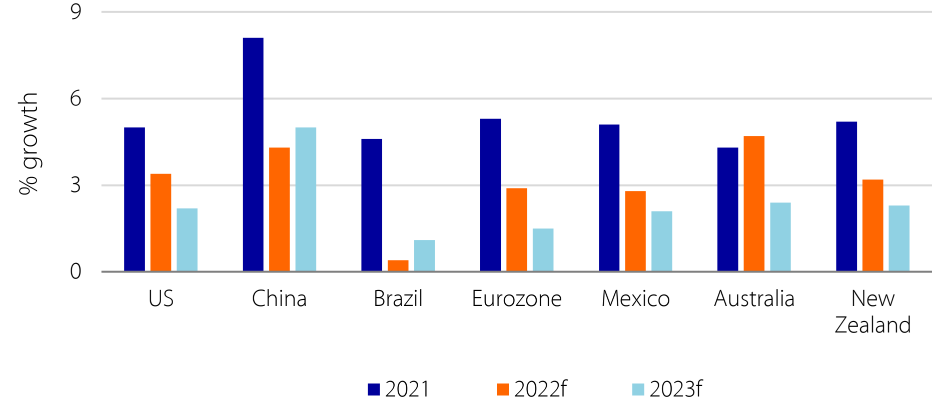


Figure 27: Chilled container costs continue to rise

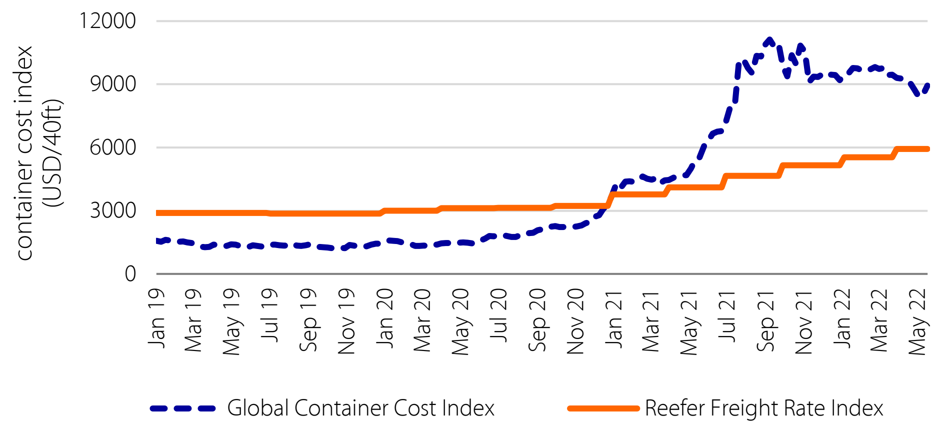
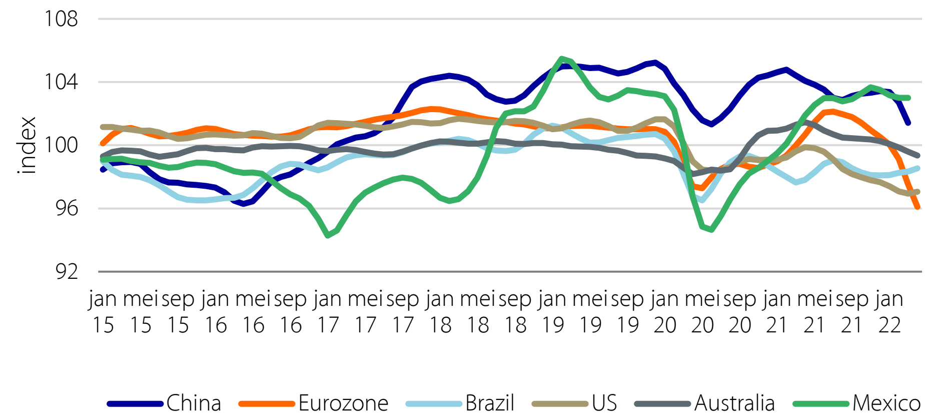


Figure 28: Consumer confidence softens



Source: OECD MEI, Consumer opinion surveys, Confidence indicators, Composite indicators, OECD Indicator, Normal=100, SA, Index, **Drewry**, **Freightos**, Rabobank 2022

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Global Beef Quarterly

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