

# Beef Quarterly Q3 2019

## Momentum Is Building in Sustainable Beef

#### RaboResearch

Food & Agribusiness far.rabobank.com

Published by the Global Animal Protein Sector Team

#### Lead author

Angus Gidley-Baird Senior Analyst – Animal Protein +61 2 8115 4058

For a full list of authors, see back page

Strong beef demand in China, with imports in 1H 2019 up by more than 50% YOY, and trade uncertainty – including the US-China trade war, Brexit, and new Mercosur access to the EU – are the dominant themes in global beef. The supply position in the US remains solid, while supply in Australia and New Zealand is tight, but improving in Brazil.

At the same time, beef production globally is coming under increasing scrutiny over its impact on animals and the environment. The past 12 months have seen a marked increase in beef supply chain responses to such scrutiny, and we expect even more in the coming 12 months. This is our feature article this quarter. And in other headlines...

### **Europe Opens up Beef Access**

Early in June, the EU agreed to allow the US a defined portion of the 45,000 metric ton global grain-fed quota. If ratified, the US will secure an agreed 18,500 metric tons of the quota, increasing to 35,000 metric tons over the next seven years. Also in June, the European Commission agreed a new trade deal with Mercosur (Brazil, Argentina, Paraguay, and Uruguay). If ratified, Mercosor would get a new 99,000-metric ton quota of beef at a 7.5% tariff, phased in over five years.

#### Australia Reaches the Safeguard Threshold for Exports to China

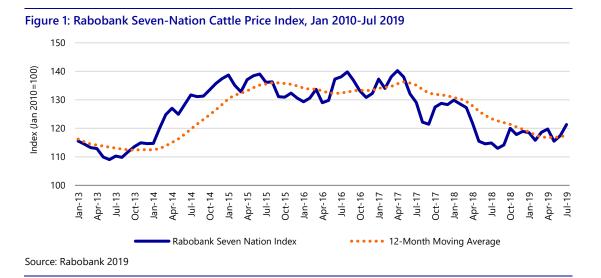
Australian beef exports to China triggered the 172,400-metric ton safeguard in mid-August, resulting in an increase in tariffs. It is understood that tariff lines doubled back to levels prior to the FTA.

#### Indonesian Government Provides Access for Brazilian Beef

The Indonesian government is reportedly allowing 10,000 metric tons of Brazilian beef import quota this year, following its loss in the WTO dispute (DS484) brought by Brazil.

### **Rabobank Seven-Nation Cattle Price Index**

The index has bumped between 115 and 120 through the first seven months of 2019. In the last three (May-Jul) months, prices in the US have declined, while prices in Australia, New Zealand, and Uruguay have risen (see Figure 1).



# Feature: Momentum Is Building in Sustainable Beef

Beef production globally is coming under increasing scrutiny, with questions raised about its impact on animals and the environment, creating pressure on beef supply chains to meet higher standards. While the concept of sustainable beef is not new, the past 12 months have seen a marked increase in sustainable beef-related activities across the globe – and we expect even more in the coming 12 months.

### **Defining Sustainable Beef**

Since 2012, leading beef industry stakeholders have been working together to define and promote the concept of sustainable beef through the Global Roundtable for Sustainable Beef (GRSB). The GRSB defines sustainable beef as "a socially responsible, environmentally sound, and economically viable product that prioritizes: Planet, People, Animal, and Progress." The exact performance criteria vary between regions, depending on the specific environmental, social, cultural, and economic conditions. The GRSB movement has grown steadily since inception, and today, it covers the major beef-producing countries of the world (see Figure 2).

### **Sustainability Initiatives on the Rise**

Over the last 12 months, we have seen a noticeable step up in the number and variety of sustainable beef-related initiatives across the globe. The majority of these are market-driven initiatives, either with food retailers and foodservice companies in the lead, or initiated by beef processors and producers in response to these changing market dynamics. Some examples include:

 At a global level, McDonald's has committed to purchasing sustainable beef based on the principles and criteria established by the GRSB. Specific

- performance standards for McDonald's top 10 beefsourcing countries have been, or are being, developed.
- In mid-2018, the Canada Roundtable for Sustainable Beef became the first GRSB country program to launch certified sustainable beef. McDonald's is one company sourcing under this program.
- In 2018, Tyson, a large US beef processor, launched 'Progressive Beef,' a cattle sustainability program verified through USDA-approved auditors.
- In early 2019, the US Beef Industry Sustainability Framework was adopted by the US Roundtable for Sustainable Beef.
- The Brazilian Association of Carbon-Neutral Meat Producers was created in February 2019 to develop both supply of, and demand for, carbon-neutral beef. Brazilian processor Marfrig has already offered to deliver the first carbon-neutral beef products in 2019.
- Cargill announced in July 2019 that it would reduce greenhouse gas emissions from its beef production chain in North America by 30% by 2030.
- In 2017, Meat & Livestock Australia set the ambitious goal for Australian red meat to be carbon-neutral by 2030.

Some regulators are also tightening control over beef production systems, with significant implications. For example, the New Zealand government's recent Zero Carbon Bill would require livestock producers to reduce total gross methane emissions by between 24% and 47% below 2017 levels by 2050. To help achieve this target, the government has proposed introducing a farm-level price on livestock by 2025 (see Figure 3).

### Pace of Change to Only Increase

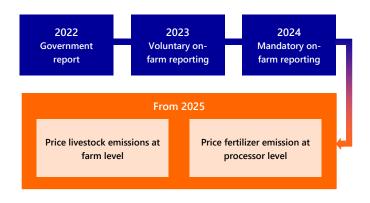
Rabobank expects this pace of change around sustainability in beef supply chains to increase further. The market will continue to be the main driver of change in most parts of the world, supported by the actions of governments, NGOs, pressure groups, as well as investors and the rise of alternative proteins.

Figure 2: Sustainable beef regional roundtables and initiatives



Source: GRSB 2019

Figure 3: New Zealand's Proposed on-farm emissions price



Source:, NZ Ministry for the Environment, Rabobank 2019

<sup>&</sup>lt;sup>1</sup> Rabobank has been a GRSB member since inception.

# **Regional Outlooks**

# Australia: Limited Cattle Supplies Start Lifting Prices

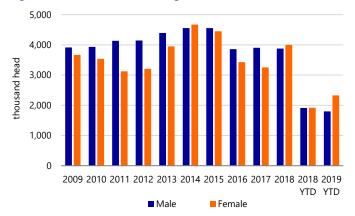
More limited cattle numbers are causing cattle prices to drift higher. The Australian cattle herd is estimated to be 26m head – the lowest number in over 20 years. Despite no real improvement in seasonal conditions, this limited cattle supply is starting to drive prices up, as buyers compete for an ever-shrinking pool of cattle.

Cattle slaughtered for the year to date (June) are up 14% on the same period in 2018 (see Figure 4). Females continue to dominate the numbers, making up 58% of the total slaughter. Female slaughter for the first six months (2.3m head) is up 21%, while male slaughter for the first six months (1.7m head) is down 6%. The decline in male slaughter, together with the ongoing high female slaughter, suggests that cattle inventory will decline further, as will availability of cattle for slaughter.

Cattle on feed remain at record levels, at 1.15m head for Q2. Dry conditions and low fodder availability suggest that some of the increased cattle on feed are being grain-finished. But cattle marketings continue to represent less than 70% of total cattle on feed, indicating that the proportion of cattle fed for over 90 days remains the same.

Beef exports for the year to date (July) were 684,071 metric tons swt, up 7% on 2018. Volumes to Japan were down 9%, but volumes to South Korea and the US were up 5% and 7%, respectively, while exports to China are up a massive 65%. Volumes sent to China triggered the 172,400-metric ton safeguard in mid-August, resulting in an increase in tariffs. It is understood tariff lines doubled back to levels prior to the FTA. As such, Australia is not expected to be at a disadvantage to other exporters.

Figure 4: Australian cattle slaughter, 2009-2019



Source: MLA, Rabobank 2019

## **Brazil: Record Exports in 2019**

Brazil looks set to reach a record in shipped beef volumes in 2019, with Rabobank estimating a 3.9% growth in exports this year, compared to 2018. Exports for the first seven months of the year increased 20%, compared to the same period of 2018. This was driven by higher demand from China, Egypt (the third-largest Brazilian importer), and by the return of Russia at the end of last year (see Figure 5).

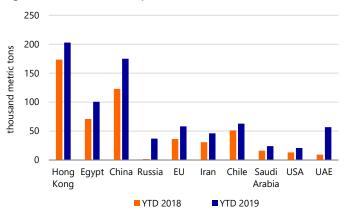
Exports for the year to date (July) totaled 981,000 metric tons, with China and Hong Kong accounting for 38.5% of the total. These volumes could have been higher, but an atypical case of BSE that occurred in late May partially paralyzed shipments in June.

Domestic consumption has continued to improve this year, reflecting a gradual recovery of the country's economic situation. Approval of important reforms should be concluded by congress in the coming months; this will assist economic recovery and support beef consumption.

On the supply side, the beginning of the year was marked by high levels of slaughter of females, mainly heifers. This followed the volumes of the previous year, which was the highest in the last ten years. We expect production to increase by around 2% in 2019.

Live cattle prices in July were 8% higher than the same month of last year. Strong international demand, recovering domestic demand, and favorable exchange rates should support the upward trend in domestic prices and increased production. Rabobank retains a positive outlook for the Brazilian beef market, but it is important to recognize some factors that may still impact the market, such as the US-China trade war, the progress of the US corn crop, and possible new beef slaughterhouse certifications.

Figure 5: Brazilian beef exports, Jan-Jun 2018 vs. Jan-Jun 2019



Source: MDIC, Rabobank 2019

# Canada: Support From Exports Expected to Wane

Canada's beef production has been robust through 1H 2019. Year-to-date fed slaughter has been up 5.7%, and, as a result of a sharp increase in carcass weights, year-to-date beef production is up 7%. As a result of improving cattle quality and the escalation in carcass weights, grading percentages of Canadian AAA and Prime are both above year-ago levels.

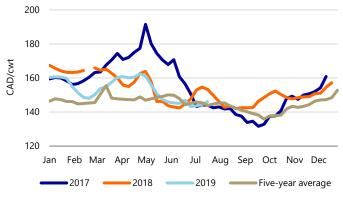
The Canadian market has been supported by strong exports of both cattle and beef. The strong exports have been driven by large numbers of cattle on feed providing a fed cattle supply, the strong US dollar, and US trade disputes – which make Canada a more convenient trading partner than the US.

Year-to-date Canadian feeder cattle shipments to the US are up 9%. While early in the year feeder cattle shipments were in line with 2018 levels, there has been a sharp increase in shipments of feeder cattle to the US in June and July. Shipments of Canadian fed cattle to the US are up 71% over a year ago. But after the strong pace earlier in the year, shipments of fed cattle have dropped significantly in recent weeks and are expected to decline even more, as Canada's cattle trade adjusts to a more limited US slaughter capacity due to the fire at the Tyson plant in Holcomb, Kansas.

Fed cattle prices started the year under pressure, with eroding basis levels. However, the aggressive slaughter rates and excellent beef exports have improved, driving a sharp rally in fed cattle prices during the early spring. Since posting a seasonal peak in early May, fed cattle prices have declined and are now trading at prices in a similar trading range to a year ago (see Figure 6).

Feeder cattle prices in Canada were strong during the second quarter, but have been eroding through the summer. Reports of weather conditions have been mixed. Some reports are that grass conditions have been better than a year ago, but weather conditions have been dry across western Canada. This may force cattle off grass early.

Figure 6: Alberta fed steer prices, Jan 2017- Jul 2019



Source: Canfax, Rabobank 2019

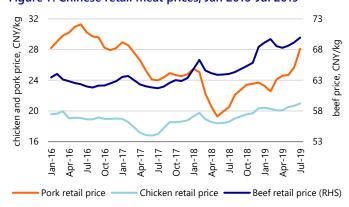
## China: Retail Prices Remain Strong

Reflecting strong demand for beef, China's retail beef prices remained high through the summer of 2019, which is usually the low season for beef consumption. Beef retail prices increased to a record high, at CNY 70/kg in July (see Figure 7). Such price performance is particularly outstanding, as the whole economy continues to soften: GDP growth slowed to 6.3% in 1H 2019, the lowest quarterly growth rate since 1992.

We believe several factors contribute to the strong prices. Consumers are shifting from pork to other proteins. African swine fever has caused pork prices to rise, and pork demand has softened due to perceived food safety risks. Chinese beef supply is limited. Local beef production is expected to be stable as seasonal conditions return to normal, but new investment is still limited. Furthermore, gray-channel imports have declined since 2018, due to strengthened inspection along the border. We expect these factors to remain unchanged in the coming months – and therefore, beef prices will continue to be supported. Nevertheless, beef prices are already very high for average consumers, so the potential for further price increases is limited.

China's official beef imports continued their strong growth in 1H 2019, up 53% YOY, reaching 311,000 metric tons. Argentina saw the strongest growth, up 126% YOY in 1H, narrowly exceeding Brazil to be the largest supplier to China, with 151,000 metric tons. Brazil supplied 149,000 metric tons, and Uruguay supplied 141,000 metric tons. Australia, holding the fourth position, increased strongly by 65%. Other exporting countries which have seen rapid growth include Canada, Chile, and Costa Rica. However, imports from Canada have slowed recently, due to the ban on all Canadian meat products after China reportedly found ractopamine and forged veterinary health certificates in shipped pork. We expect the momentum of strong beef import growth to continue for the rest of the year.

Figure 7: Chinese retail meat prices, Jan 2016-Jul 2019



Source: Chinese Ministry of Agriculture, CAAA, Rabobank 2019

# **Europe: Beef Production Down**

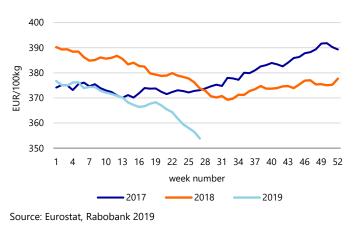
Beef production has been flat in Europe during 1H 2019, and Rabobank expects a small decline in 2H 2019, with total EU production for 2019 to be down by up to 1% YOY. Additional slaughter in 2H 2018, which continued into the first months of 2019, is one reason for this. The other is the longer-term, gradual decline in the overall EU cow herd. However, the picture is quite varied across the EU, with countries like Ireland and Spain showing growth in production, while in other countries such as France, Poland, and the Netherlands, production has declined more markedly.

Uncertainty in the market, mostly associated with trade, is not helping. Brexit tops the list of these uncertainties, and is followed by EU-Turkey relations and new trade agreements - in particular, the recently announced EU-Mercosur trade deal. The expectation of Brexit in Q1 2019 distorted some production and trade flows, and the plan for Brexit in Q4 2019 is likely to have similar effects. The slowdown of live cattle exports from the EU to Turkey continued in 1H 2019, although EU exporters have found opportunities in alternative markets. While the recently announced EU-Mercosur deal will take some years to come to fruition, the establishment of new tarifffree quotas to the EU's largest beef importer is already concerning local producers. On the other hand, the recent agreement between the EU and the US over allocation of the quotas for high-quality beef imports will not affect overall import levels.

Prices in Europe have been down by about 5% YOY in 1H 2019 (see Figure 8). While we expect prices to firm seasonally in 2H 2019, we do not see them reaching average levels, despite the tightening supply situation. High pork prices may provide support to beef prices.

Export performance in 1H 2019 has been quite strong, with some shifts in destinations, but overall levels flat with 2018. Imports have been down by about 7% for the first five months of the year, with Argentina the one origin to go against this trend.

Figure 8: Europe beef prices, Jan 2017-Apr 2019



# Indonesia: Tailwind From Reduced Carabeef Trade

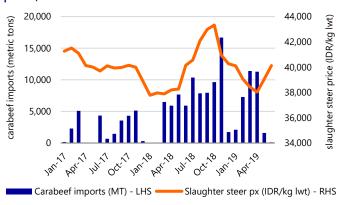
Indonesian feedlotters' margins should remain positive in Q3 2019. The gradual increase in Australian feeder prices since April was compensated by the weaker Australian dollar and resilient finished steer prices in the domestic markets. Demand for Eid al-Adha is typically a boon for the local cattle trade, although it also supports finished (imported) steer prices. More slaughtering for the event is increasingly delegated to nearby slaughterhouses.

Australian feeder prices ranged from AUD 2.67/kg lwt to AUD 2.95/kg lwt in July – rising from AUD 2.64/kg lwt to AUD 2.90/kg lwt in June 2019. Supporting feedlotters' margins, Australian feeder prices have tracked close to the five-year average for 1H 2019 and below prices of the previous three years. Prices in early August 2019 have increased further, to AUD 2.75/kg lwt to AUD 3.10/kg lwt, but remain in line with the five-year average.

Improved finished cattle prices are believed to be a result of two factors. Strong domestic demand is supporting beef retail prices – June 2019 beef retail prices were at a record. This demand is believed to be due to the trickledown effect of the government's accommodative annual bonuses to civil servants. In addition, improved finished cattle prices have been supported by the near absence of Indian carabeef imports (see Figure 9). Increasing Indian carabeef import prices saw imports for the months of May and June plunge to just 1,596 metric tons and 112 metric tons, respectively (from 11,284 metric tons in April). The clampdown in gray-channel trade into China reduced Indian exporters' economies of scale, necessitating higher prices.

In 1H 2019, imports of Australian live feeder cattle reached 288,896 head (+28% YOY). May and June 2019 feeder imports had increased 30% YOY. We expect live feeder imports to moderate in 2H 2019, as lower availability from Australia has an effect – and thus local cattle prices should remain supported.

Figure 9: Indonesian carabeef imports and slaughter steer prices, Jan 2017-Jun 2019



Source: APEDA, Southeast Asia Beef Market Report, Rabobank 2019

# Mexico: Drought Driving Increased Turnoff

Several regions of Mexico are experiencing severe drought, causing cattle losses in different states. Southeastern states have experienced some of the worst conditions, forcing cattle into northern feedlots as fodder supplies run out. These additional numbers mean feedlots in the north are currently running at full capacity – and if conditions persist, this could put pressure on feeder cattle prices in the second half of the year.

Cattle exports have slowed down after a strong start to the year (see Figure 10). June and July numbers dropped below the five-year average. Cattle exports from January to July are 12% (84,000 head) higher than in 2018. Total exports to the US for the year to date are 777,000 head. The proportion of heifers in the total cattle export volume remains on average, at 23%, but in the last four weeks has reached the same levels as in 2018.

Beef production is running 2.5% higher (23,000 metric tons higher) for the first six months of 2019, well in line with our estimated production growth. At this growth rate, Mexico is in line to reach record production levels this year of over 2m metric tons cwt. However, feed will potentially become more expensive, as different regions in the country are suffering from drought conditions.

After last year's decline in net exports of beef to the US, 2019 exports have seen a strong rebound, surpassing the net exports of 2018 in the first seven months of the year. With exports to the US increasing at a rate just below the record year of 2017, there is potential that 2019 will be another record year. Overall, we expect Mexico to export 340,000 metric tons cwt of beef to the US and other regions in 2019, an increase of 9% YOY.

# Strong Exports Support Prices New Zealand bull prices lifted steadily over the last

**New Zealand: Limited Supplies and** 

New Zealand bull prices lifted steadily over the last quarter. These were largely in line with the normal seasonal trend, as kill numbers slowed over winter. Prime cattle prices increased at a faster pace, in part due to greater procurement pressure, and are now sitting well ahead of last year's levels. In mid-August, the North Island bull price averaged NZD 5.50/kg cwt (+2% YOY), while the North Island steer price averaged NZD 6/kg (+7% YOY).

Rabobank expects farmgate prices to remain firm over the next quarter, with some potential for upward pressure due to favorable export market conditions and tight domestic supplies. The demand outlook from China for beef remains positive, while US-imported beef prices continue to sit well above year-ago levels. In addition, exporters have recently benefited from favorable exchange rate movements against the US dollar. Rabobank forecasts some further weakening of the NZ dollar against the US dollar over the next 12 months.

Cattle supplies through May-July tightened at a faster rate than the same period last year, following a surge in supplies earlier in 2018, when dry conditions saw many farmers kill cattle earlier than normal. As a result, New Zealand's YTD cattle kill has come back from +5% YOY in May, to now be sitting almost exactly where it was at this point last year (-0.1% YOY). Supplies will remain seasonally tight over the coming months, before increasing again from November onwards.

Despite the decline in export volumes (down 5%), New Zealand's export receipts (in NZD terms) for the three months (May-July) were up 5% YOY (see Figure 11). New Zealand beef exports to China from May-July were up 105% YOY by value and 91% YOY by volume. Conversely, exports to the US were down 42% YOY by value and 34% by volume, as US importers struggle to compete with prices currently being paid by the Chinese market.

Figure 10: Monthly Mexican cattle exports, Jan 2017
Jul 2019

200,000

150,000

Jan Feb Mar Apr May Jun Jul Aug Sept Oct Nov Dec

2017

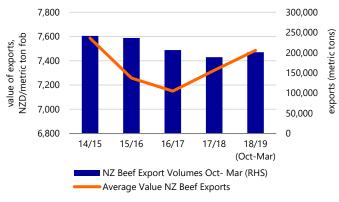
2018

2019

Five-year average

Source: USDA, Rabobank 2019

Figure 11: NZ beef exports, 2014/15-2018/19



Source: Meat Industry Association, Rabobank 2019

## **US: Challenges Continue**

On Friday, 9 August, a fire at the Tyson beef plant in Holcomb, Kansas closed the plant. All employees on duty at the time were safely evacuated – and while the full extent of the damage and time to make repairs is not yet clear, the closest thing to a consensus is that the facility will be closed for 90 to 120 days... possibly longer. Daily capacity of the facility is about 6,000 head and accounts for 6% of US fed beef slaughter. At the time of the fire, weekly slaughter was running around 94% of national capacity. By temporarily taking out 6% of total capacity, it is easy to see that US fed slaughter will be very close to 100% capacity. That totally changes market leverage between cattle feeders and packers. Tyson has stated that it will increase slaughter rates at other facilities. With lower cattle prices and substantially higher wholesale beef prices, packer margins are estimated to have jumped to around USD 400/head. That certainly incentivizes all packers to increase capacity to maximum levels to work through the problem. Making slaughter capacity even more of a challenge is the fact that the majority of US fed cattle are sold under a marketing agreement or formula. That will make prioritization and distribution of market-ready cattle more complex.

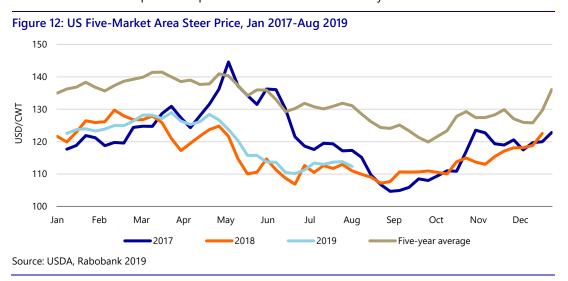
Since the miserable weather conditions of winter and a prolonged, wet spring have passed, improved domestic beef demand has been exceptional. Reflecting this demand, choice cutout values are up USD 27.31/cwt, and select cutout values are up USD 7.11/cwt. Year-to-date US beef exports are down just over 2%, reflecting headwinds caused by US trade uncertainty and the impact of a stronger US dollar.

Cattle on feed numbers have been slowly declining, but as of July, they remain 2.5% above yearago levels. Year-to-date (July) slaughter rates are up about 1.5% over a year ago, but because of lower carcass weights, year-to-date beef production is the same as 2018. With more normal weather conditions, carcass weights and the pace of exports are expected to increase during the second half of the year, but are yet to be seen.

Fed cattle prices have held, all but unchanged from year-ago levels, but they have dropped below year-ago levels as the shock of the Tyson fire was incorporated into the market (see Figure 12).

Feeder cattle and calf prices had been trending slightly below year-ago prices, largely reflecting higher feed grain prices. Underlying support in the market had been from strength in deferred live cattle futures and optimism from anticipated strength in all proteins due to the spread of African swine fever. Prices were sharply lower this past week, a result of the shockwaves of the Tyson fire.

The US cattle and beef industry will work through the hardship of the Tyson fire. Supply and demand elasticities indicate that fed and feeder cattle prices could decline in coming months. Although, given the impact of the fire, there remains a large degree of uncertainty as to what conditions and market prices will prevail for the remainder of the year.



7/9

# Dashboard

# Legend and units

Production	Exports	Imports
1,000 metric tons	1,000 metric tons	1,000 metric tons

 $\Delta$  = year-on-year change

All prices in local currencies

### Australia

Pro	duction	Exports		Cattle prices (A	AUD/kg cwt) EYCI	Export beef prices (AUD/kg FOB) US 90CL Cow		
Jun 19: 197.99	YTD Jun 19: 1,165	Jul 19: 114.9	YTD Jul 19: 684.1	Aug 19: 530.85	YTD Aug 19: 482.11	Aug 19: 7.08	YTD Aug 19: 6.61	
Δ +1%	Δ +3%	Δ +9%	Δ +7%	Δ +14%	Δ -5%	Δ +23%	Δ +14%	

### **Brazil**

Pro	duction	Exports		Live cattle price (BRL/15kg)		Beef wholesale price (BRL/kg)	
Jun 19: 625.0	YTD Jun 19: 3,955.4	Jul 19: 180.4	YTD Jul 19: 982.3	Jul 19: 153.12	YTD Jul 19: 152.71	Jul 19: 10.60	YTD Jul 19: 10.64
Δ -13.9%	Δ +4.1%	Δ +15.9%	Δ +20.1%	Δ +2.1%	Δ +6.9%	Δ -0.9%	Δ +9.0%

### China

Production (1,000 metric tons)	Consumption (1,000 metric tons)	Import (1,000	metric tons)	Cattle prices	s (CNY/kg)	Retail beef pr	ices (CNY/kg)
YTD Mar 19: 11.1	1H 19: 19.2	Jun 19:133	1H 19: 697	Jul 19: 32.47	YTD 19: 32.21	Jul 19: 69.96	YTD 19: 69.07
Δ +1.6%	Δ +2.4%	Δ +62%	Δ +53%	Δ +8.4%	Δ +7.1%	Δ +9.2%	Δ +7.1%

### EU

Production (1,000 metric		F	100t-i t)			Cattle prices (EUR/kg)			
	tons)	Export (1,0	ou metric tons)	Import (1,000 metric tons)		Young Bulls R3	Steers R3	Cows O3	Heifers R3
May 19: 672	YTD May 19: 3,248	May 19: 20.5	YTD May 19: 153.2	May 19: 9.1	YTD May 19: 66.97	Aug 19: 3.50	Aug 19: 3.55	Aug 19: 2.81	Aug 19: 3.62
Δ +3.2 %	Δ +0.1 %	Δ -44.2%	Δ -7.3%	Δ -50.1%	Δ -15.4%	Δ +0.7%	Δ -1.1%	Δ -0.1%	Δ -0.5%

## **New Zealand**

Proc	luction	Ex	ports	Cattle prices	(NZD/kg cwt)	Export beef price	es (NZD/kg FOB)
Jun 19: 60.9	YTD June 19: 426	Jul 19 : 36.7	YTD Jul 19: 294.9	Aug 19: 5.50	YTD Aug 19: 5.16	Jul 19: 8.15	YTD Jul: 7.66
Δ -6%	-	Δ - 14%	Δ +2%	Δ +2%	Δ -2%	Δ +11%	Δ +5%

## US

Proc	luction	Ех	ports	Imports		Five-Market Steer (USD/cwt)	Fed beef cutout (USD/cwt)
Jun 19: 3,233.6	YTD Jun 19: 19,315.6	Jun 19: 124.3	YTD Jun 19: 673.9	Jun 19: 121.4	YTD Jun 19: 714.3	Aug 19: 106.68	Aug 19: 218.12
Δ -3.3%	Δ +0.07%	Δ +0.05%	Δ-3%	Δ -8%	Δ +3.1%	Δ -3.5%	Δ +7%

# **Imprint**

### RaboResearch

Food & Agribusiness far.rabobank.com

#### Food & Agribusiness Animal Protein Global Sector Team

Justin Sherrard	Global Strategist	<u>justin.sherrard@rabobank.com</u>
Angus Gidley-Baird	Australia	angus.gidley-baird@rabobank.com
Matz Beuchel	Europe	matz.beuchel@rabobank.com
Don Close	US	don.close@rabobank.com
Blake Holgate	New Zealand	blake.holgate@rabobank.com
Chenjun Pan	China	chenjun.pan@rabobank.com
Andrick Payen	Mexico	andrick.payen@rabobank.com
Ben Santoso	Southeast Asia	ben.santoso@rabobank.com
Wagner Yanaguizawa	Brazil	wagner.yanaguizawa@rabobank.com
Beyhan de Jong	Europe	beyhan.de.jong@rabobank.com
Christine McCracken	US	christine.mccracken@rabobank.com
Nan-Dirk Mulder	Europe	nan-dirk.mulder@rabobank.com
Gorjan Nikolik	Europe	gorjan.nikolik@rabobank.com

### © 2019 - All rights reserved

This document has been prepared exclusively for your benefit and does not carry any right of publication or disclosure other than to Coöperatieve Rabobank U.A. ("Rabobank"), registered in Amsterdam. Neither this document nor any of its contents may be distributed, reproduced or used for any other purpose without the prior written consent of Rabobank. The information in this document reflects prevailing market conditions and our judgement as of this date, all of which may be subject to change. This document is based on public information. The information and opinions contained in this document have been compiled or derived from sources believed to be reliable, without independent verification. The information and opinions contained in this document are indicative and for discussion purposes only. No rights may be derived from any potential offers, transactions, commercial ideas et cetera contained in this document. This document does not constitute an offer or invitation. This document shall not form the basis of or cannot be relied upon in connection with any contract or commitment whatsoever. The information in this document is not intended and may not be understood as an advice (including without limitation an advice within the meaning of article 1:1 and article 4:23 of the Dutch Financial Supervision Act). This document is governed by Dutch law. The competent court in Amsterdam, The Netherlands has exclusive jurisdiction to settle any dispute which may arise out of or in connection with this document and/or any discussions or negotiations based on it. This report has been published in line with Rabobank's long-term commitment to international food and agribusiness. It is one of a series of publications undertaken by the global department of RaboResearch Food & Agribusiness.

