



**Rabobank**

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### African Swine Fever Reshaping Global Beef Markets

#### RaboResearch

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African Swine Fever has the potential to cause waves in the global animal protein pool, including in the beef market. This is our feature article this quarter, but just one of many important stories shaping the outlook for global beef markets . . .

#### NAFTA, or as it is now known: USMCA

On 30 September, the US and Canada reached an agreement to bring Canada into the US Mexico agreement, hence forming the US Mexico Canadian agreement (USMCA). The new agreement ends a period of uncertainty and allows these three important and integrated markets to continue operating. While having little impact on the US, Canada and Mexico beef trade, there is opportunity for increased meat trade with Mexico, which is important.

#### Russia reopening for Brazil

After almost one year, Brazilian beef has regained access to Russia. While this is an important destination that is likely to contribute to increasing Brazilian beef exports in 2019, the potential seems to be limited – at least in the short term – as only five Brazilian beef plants have been granted permission to export to Russia as of November 2018. Previously, 30 plants were accredited. Brazil will also find more competition in Russia as Argentina increased its presence in Russia during the Brazilian absence, with an estimated 50,000 tonnes exported during 2018.

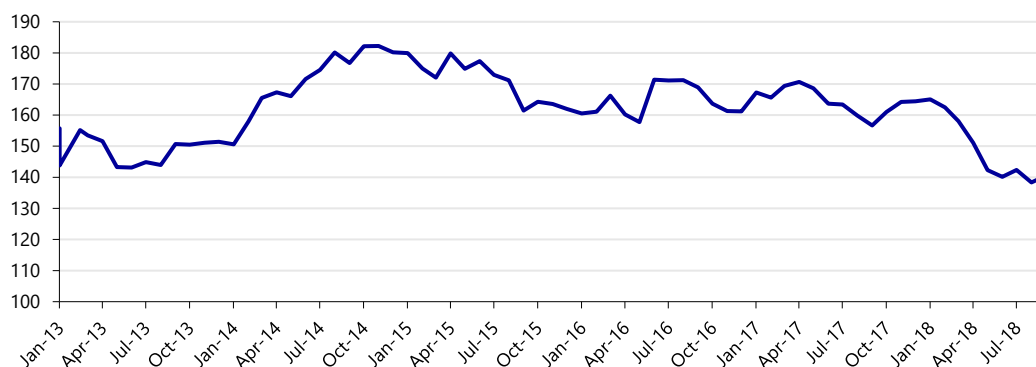
#### Trade – next round of tariff cuts in Japan and Korea, and ratification of CPTPP

Reductions in tariffs on beef in Japan and South Korea appear to be having the desired effect from a beef exporter point of view. Japanese and South Korean imports this year are the highest in ten years and up 5% on last year. The next round of tariff reductions are due early in 2019 and the CPTPP will enter into force on 30 December 2018 for the six ratifying countries.

#### Rabobank Seven-Nation Cattle Price Index

The Seven-Nation Cattle Price Index sees a slight rise in the last month, driven by a lift in prices for the US, Canada, Brazil and Australia (see Figure 1).

Figure 1: Rabobank Seven-Nation Cattle Price Index, Jan 2013-Oct 2018



Source: Rabobank 2018

## Feature: African swine fever to impact global meat trade

The continued spread of African Swine Fever (ASF) across China is resulting in increased slaughter, transport bans and volatile prices. A decline in China's pork production is clear. Rabobank looks at three possible scenarios and the impact they might have on global markets.

### China – the spread continues

ASF continues to spread across China. As of 19 November, there are now over 60 confirmed cases scattered across all the major pork-producing provinces. Most cases are in small-sized farms, but several were from larger-scale farms. Given the sheer size of production and the fragmented structure, it will be a great challenge for China to control the disease spreading in the coming year.

While culling of pigs as a consequence of infection is not significant in the context of total pig population, the ban on live hog transportation is the greater cause of market volatility. On 12 September, Chinese authorities banned the transport of live hogs in provinces with reported ASF outbreaks, and in the neighbouring provinces. As a consequence, huge regional price differences have opened up between hog surplus and deficit regions (see Figure 2). In addition, pork demand is softening. Specific markets, such as group dining, are believed to have lowered pork consumption over food safety concerns.

### Three scenarios for China

Rabobank has developed three scenarios to consider potential future impacts of ASF on Chinese pork production. They include drops in production by 2%-4% (1m-2.1m tonnes), 6%-8% (3.1m-4.2m tonnes), and 10%-15% (5.3m-7.9m tonnes), depending on how China's policy evolves. Pork consumption is also expected to drop in each scenario, but not by as much as production. Lower consumption reflects surging prices, supply shortages and consumers' food safety considerations.

In each scenario, existing exporters – the EU, Canada, and Brazil – are expected to supply more pork meat to China in 2019. But how much more depends on respective domestic supply and price competitiveness in the global market. In 2019, the EU could mobilise more than two million tonnes, including pork offal, to supply China. But this will come at the expense of exports to other markets, provided prices of shipments to China are attractive. Brazilian pork exports to China increased by 247% in the first ten months of 2018 to 132,900 tonnes, due to ample supply following the closure of trade with Russia. Pork production in Brazil could rise between 4% and 5% in 2019, meaning Brazil could be able to increase exports to China by a further 60% in 2019 to 256,000 tonnes. China is also likely to turn to the US for more pork imports, if

the price in other regions rises to overcome price and tariff differences. Since the first reported ASF outbreak in China, US markets have gradually adjusted to reflect the upside trade potential, despite great uncertainty.

### Europe – impact limited

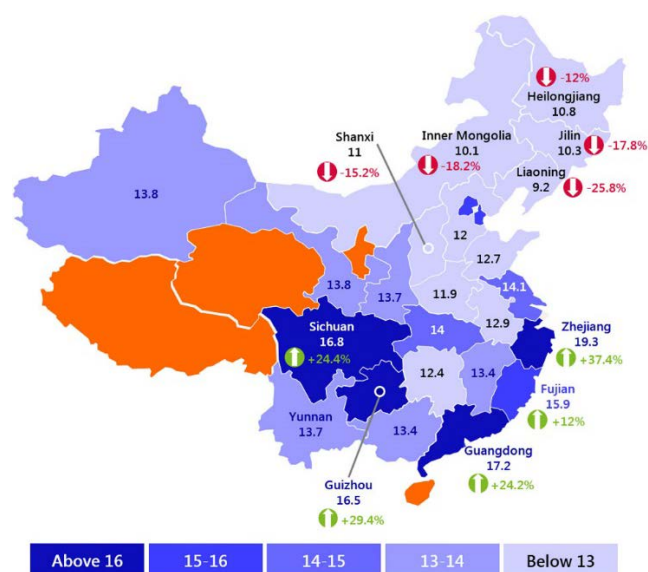
In Europe, ASF remains widespread in the east. The 'open' borders with Ukraine and Belarus make it extremely difficult to eradicate in this region. The Belgian outbreak has been controlled, with all cases being contained in the restricted zone. So far, the impact remains limited for Europe, as the infected countries are not key producers or key exporters.

### Other meats get a leg up

A drop in pork consumption will give rise to increases in other animal proteins, including egg, poultry, beef, mutton and seafood. Poultry will probably benefit the most. This is because poultry is already the major substitute for pork, particularly in meat processing and catering, and also because poultry is widely accepted by all the consumer groups in China.

Although beef is not a major substitute for pork, the pork supply shortage in China will likely also push up beef consumption. In particular the consumption of fresh meat at retail markets, where consumers tend to more readily shift to beef from both a trading up and food safety perspective. With beef production in China stagnant for a couple of years, increased beef consumption will require the share of beef imports to rise year-on-year. In the first nine months of 2018, China's official imports of beef increased by 40% YOY. Rabobank expects to see this strong growth continue in 2019. All the major exporters, including South American countries, Australia, New Zealand and some European countries, will benefit from China's stronger demand in 2019.

Figure 2: China live hog price variations



Source: Boyar, BOABC, Rabobank 2018

## Regional outlooks

### Australia: Seasons still dictating prices

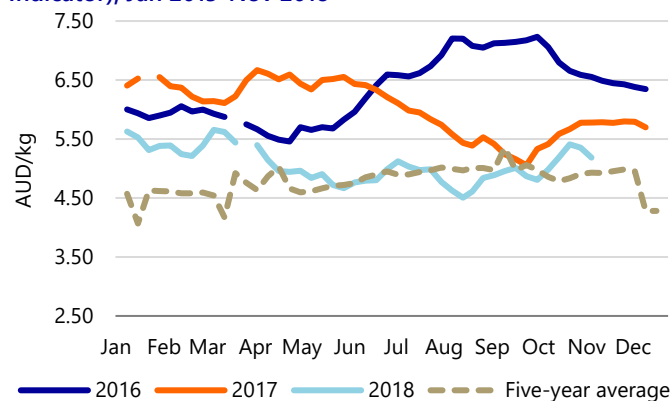
Despite some falls of rain through eastern states in late October, conditions remain dry, and slaughter numbers remain elevated. However, the generally limited supply of cattle is keeping prices firm.

Rabobank expects that limited supplies of heavy, finished cattle will keep prices for these cattle firm while prices for cows and younger cattle will be heavily dictated by the season. Although prices for cattle are currently at sustainable levels, young cattle will be exposed to some downside pressures over the coming months if seasons do not improve. A drier than average outlook for the next three months, together with the onset of southern weaner sales in January, may cause young cattle prices to ease further. The EYCI jumped to AUD 5.41/kg in late October – the highest it had been in seven months. It subsequently fell back to AUD 5.18/kg on 8 November (see Figure 3).

September slaughter numbers (659,900 head) were higher than 2017, up 8% YOY. Year-to-date slaughter remains 10% higher than 2017, with female slaughter up 22% and male slaughter down 1%. Average carcass weights have dropped back to 285kg, the lowest weight since July 2016 – reflective of the higher female component and lower heavy cattle numbers.

Beef exports (98,888 tonnes swt) saw a jump in October, up 15% YOY. Strong volumes to China, South Korea and Japan supported this, up 40%, 25% and 15%, respectively. Despite higher volumes of females in total slaughter Australian exports to the US – the normal market for lean trimmings – are down 1% for the year to date (October). Total live cattle exports for October (123,928 head) were up 46% YOY. Exports to Indonesia and Vietnam are up 14% and 13% respectively for the year to date.

Figure 3: Australian cattle prices (Eastern Young Cattle Indicator), Jan 2015-Nov 2018



Source: MLA, Rabobank 2018

### Brazil: Production growth forecast to slow

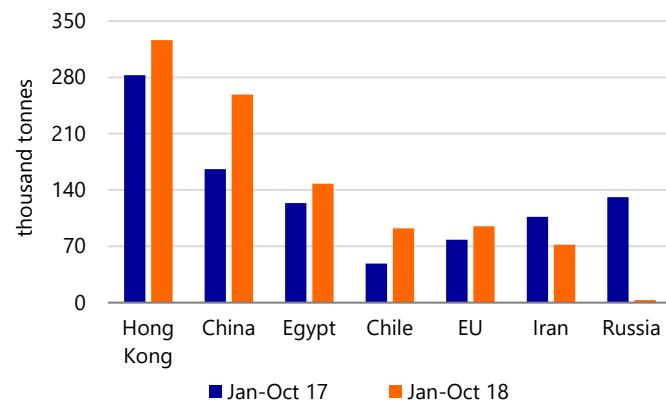
Brazilian beef exports have increased by 10% during the first ten months of 2018. Among the main destinations, China and Chile have showed the strongest gains, rising by 56% and 90% YTD, respectively. On the other hand, the Russian market remained closed to Brazil in this period (see Figure 4). The embargo was lifted as of November 2018 although with a reduced number of plants allowed to export beef to Russia. Russia is an important destination that is likely to contribute to increasing Brazilian beef exports in 2019.

Domestic beef consumption is expected to continue recovering in 2019. This is on the back of modest improvements registered in 2017 and 2018, following the 2015-16 recession. Rabobank expects Brazilian beef production to increase by around 2% in 2019, after an estimated increase of 4% in 2018. The anticipated slower growth is mainly due to the significant increase in cow culling that took place during 2018.

During Q4 2018, live cattle prices have been relatively stable. Given the expected slowdown in supply and the more positive landscape for local demand, prices are likely to find higher levels in 2019, particularly in the second half of the year. By early November, live cattle prices in the futures market (October 2019 contracts) were negotiated 6% above average October 2018 levels. As a result, beef cattle producers are expected to see improved results in 2019, after two years of modest prices for fed cattle.

Rabobank believes the Brazilian beef market outlook is positive. Not only because of increasing exports but also due to the likely improved local market conditions, which might result in higher beef prices in the wholesale market. This is particularly important for players with little access to the international market.

Figure 4: Brazilian beef exports, Jan 2017-Oct 2018



Source: MDIC, Rabobank 2018

## Canada: Cattle feeding remains aggressive

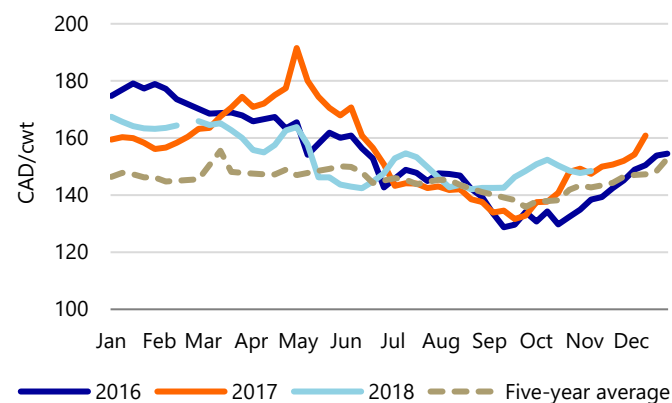
Canada continues to have an aggressive cattle market. Numbers of cattle on feed are posting a strong YOY gain and at the same time Canadian cattle slaughter is the largest it has been since 2009. The strong market performance has been driven by not only a solid domestic market but also strong beef exports to both the US as well as growing exports into the international market (see Figure 5). A view from within the Canadian market is that they will be able to realise increased beef exports due to growing global beef demand, and also capitalise on the situation where US exports are being constrained because of the tariff and trade battles.

While market momentum is solid, there are a number of headwinds, including the feeder and fed cattle basis and seasonal conditions. The current economic structure of the Canadian market is heavily dependent on strong basis levels to the US holding above historical levels. However, there is growing evidence to suggest basis levels have started to ease back towards more traditional levels.

Areas across western Canada and the southern border suffered from abnormally dry conditions during the summer and fall. The dry weather lifted cow slaughter and the early movement of calves and feeder cattle. Dry conditions have also limited the availability of forage and Canadian barley. Hay prices are considerably higher than a year ago. The shortage of domestic feed grain supplies are forcing higher the cost of gain, although large US corn stocks are making imports of US feed grains attractive and keeping a lid on feed costs.

The aggressive Canadian outlook has caused an increase in US feeder cattle being shipped to Canada. A sizable percentage of US feeder cattle going to Canada are Holstein steer calves.

Figure 5: Alberta fed steer prices, Jan 2016-Aug 2018



Source: CanFax, Rabobank 2017

## China: Beef prices close to records

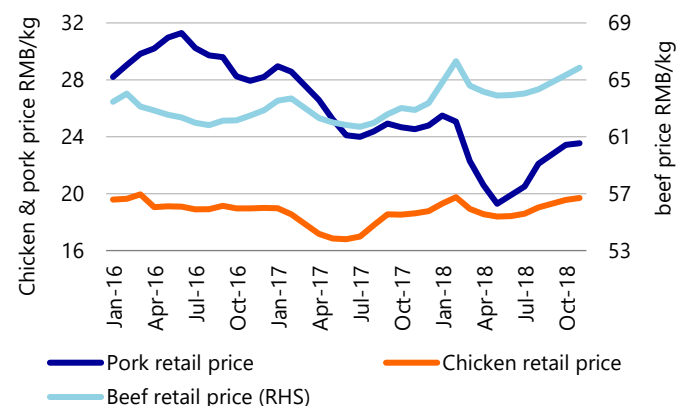
The Chinese beef market continues to perform strongly, with prices reaching some of their highest levels in over 15 years (see Figure 6). The tight supply relative to steadily growing demand is the major cause for the strong price. African Swine Fever is also the minor factor as some consumers have reduced pork consumption over food safety concerns and increased their consumption of other proteins.

China's Statistics Bureau has released the agricultural data of the first three quarters of 2018. Domestic beef production increased by 0.6% YOY, but the beef cattle inventory decreased by 0.2% YOY, creating the expectation of lower domestic production in the coming year. Driven by the high price, farmers tend to shorten the fattening time, causing average carcass weights to decline.

In the first nine months of 2018, China's official beef imports increased by 40% YOY, reaching 456,000 tonnes. Strong domestic demand and tight local supply are believed to be driving up imports. Although, the decline in grey channel trade as a result of stricter inspections on the borders may also be a factor.

Entering 2018, China granted access to a number of European countries, including Ireland, the Netherlands, Denmark, France, and the UK, to export frozen beef to China. French beef was heavily promoted at the recent China International Import Expo, indicating an ambition to enter China's market. The Expo also highlighted the increasingly important role played by e-commerce. During the Expo, JBS, and Win-Chain, Alibaba Group's global sourcing company, signed a USD 1.5bn meat supply deal for the coming three years. A portion of the imports is believed to be directly targeted to online shopping, with the rest competing in the B2B market, leveraged by comprehensive services including cold chain logistics and supply chain management provided by e-commerce players.

Figure 6: Chinese retail meat prices, Jan 2016-Nov 2018



Source: Chinese Ministry of Agriculture, CAAA, Rabobank 2018

## EU: Production stabilising but consumption easing

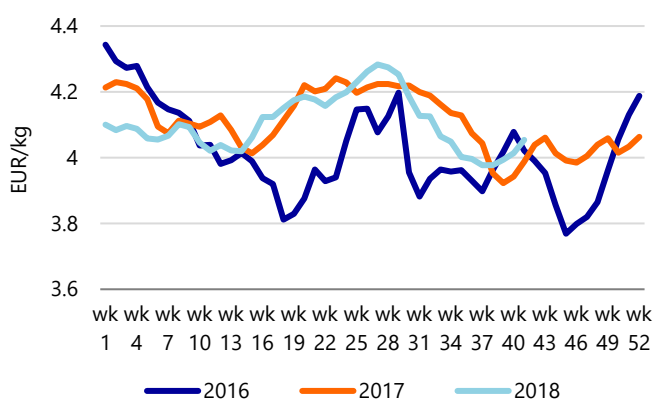
Results from the spring EU survey show that the total EU cattle herd fell by 1% YOY. In the two main cattle-producing countries, France and Germany, the herd fell by more than 2%, with significant reductions in younger cattle aged one year and younger. In the Netherlands, herd reduction has accelerated to meet phosphate legislation requirements, and fell 4.4% YOY.

The 2% increase in the number of cattle slaughtered in the EU (first eight months of the year compared to the same period in 2017) is mainly attributed to the dry summer in northern Europe, but also to reduced EU live exports. Cows and heifers showed a marked increase in slaughter - 3.9% and 7.7% YOY respectively. Winter feedstocks for dairy cattle are already being used in parts of France, Germany, Ireland, Denmark and Sweden. If fodder reserves become low towards the end of winter, additional cattle may be slaughtered.

Since the beginning of the year, beef prices have been under pressure. The larger domestic supply, coupled with increased EU imports (predominantly from Brazil and Argentina), and the reduced volume of exports, have exerted extra pressure on beef prices. The EU reference price is down 2.6% in October compared to the same period last year (see Figure 7). In the coming months, price increases will depend heavily on supply, but also on the development of pork prices in particular, related to the ASF situation in the world.

Production is expected to stabilise in the course of 2019, and consumption could decrease slightly. EU beef trade is likely to mirror the volumes of 2017, both for imports and exports. Despite the fact that France and Ireland have direct access to China, quantities will remain low unless ASF transpires to have a large impact and creates additional demand for beef.

Figure 7: EU Beef Reference Price, Jan 2016-Oct 2018



Source: EU Commission, Rabobank 2018

## Indonesia: Feeder imports to drop

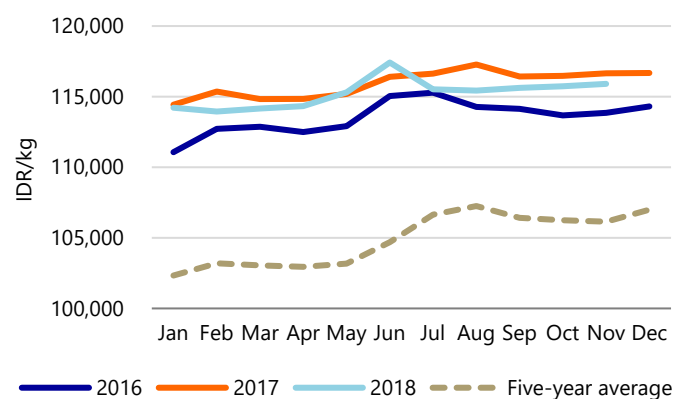
Australian feeder cattle live export prices remained elevated in early November, at AUD 2.90-AUD 3.10/kg lwt – up from AUD 2.78-AUD 3.00/kg lwt in August. Current Indonesian feedlot demand indicates continued strong imports for October before easing in November. These feeder imports would reach their finished weights by February-March 2019. Q1 is typically a low-demand quarter, and the strong import volumes suggest front-loading activities to fill capacities ahead of the scheduled December 2018 government audit for the 5:1 feeder/breeder requirement. News reports indicate that feedlots will be penalised if they do not meet the requirement (they may, for example, not be granted import permission for a year).

Rabobank believes the strong feeder cattle imports since August 2018 are not sustainable, and expects feeder cattle imports to drop in December 2018 and subsequent months – regardless of any regulatory relaxation. Filled capacities, increasing feeder prices, the weak rupiah and competition with Indian carabeef would work to reduce feedlot margins in Q4 2018 and Q1 2019.

Export data from APEDA India suggested that for the first nine months of 2018, frozen carabeef shipments to Indonesia reached 52,164 tonnes swt. However, if the remainder of the 100,000 tonnes import quota were to be realised in Q4 2018 this would have downward pressure on retail prices.

Between August and November, monthly beef retail prices in Indonesia averaged between IDR 115,600/kg and IDR 116,100/kg and are currently at IDR 115,900/kg (see Figure 9). Rabobank expects beef retail prices in Indonesia to remain flat in Q4 2018 and then ease in Q1 2019 on seasonally lower demand.

Figure 8: Indonesian national beef prices, Jan 2016-Aug 2018



Source: Indonesian Ministry of Trade, Rabobank 2018

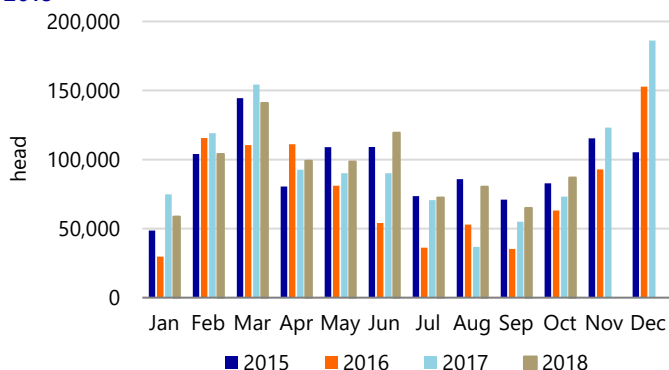
## Mexico: Increasing exports to Japan and South Korea

Mexico is joining the party with Australia and the US in exporting larger volumes of beef to Japan and South Korea. Exports to Japan and South Korea are 43% higher and 150% higher respectively for the YTD compared to last year. While the combined exports to Japan and South Korea accounted for 6% of total Mexican exports in 2017, this year, they have increased to 8% of total exports. The increased volumes have helped partially offset some of the lower volume exported to the US due to strong competition in the US from other proteins and US domestic beef prices. Mexican beef exports to the US continue to be lower, down 14%, while imports from the US are 8% higher.

Cattle exports continue to be higher after a slow start at the beginning of the year with year-to-date exports 8% higher than last year (see Figure 9). More importantly, the proportion of heifers in total feeder cattle exports to the US is reaching 2014 levels. The heifer share is running at an average of 21.6% this year, just below the 2014 level of 21.8%.

Mexico could potentially see 2m tonnes of beef produced in 2019, a volume that has not been reached for many years. Hitting this mark will depend on cattle availability, carcass weights and exports to the US. However, feeding costs may rise. Feed prices are closely tied to the exchange rate, which could potentially increase. Production for the end of 2018 is estimated at 1.9m tonnes. For 2019, production is expected to increase by 2% reaching a total of 2m tonnes.

Figure 9: Mexican monthly cattle exports, Jan 2015-Oct 2018



Source: GCMA, Rabobank 2018

## New Zealand: Prices face downward pressure

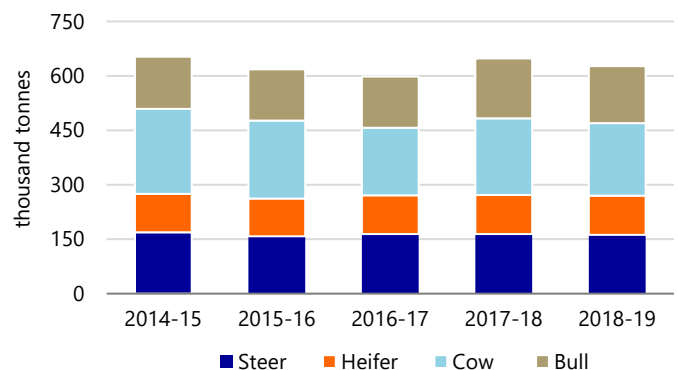
Domestic cattle prices have dropped consistently since mid-September on the back of declining demand from the US. While the weakening NZD against the USD has helped mitigate some of the negative impact on New Zealand farmgate returns, prices still took a hit between early August and November. Bull prices dropped 7% in the North Island and 9% in the South Island. Prime cattle prices, which aren't as reliant on the US market, are down 6% from their September peak.

Rabobank expects prices to face further downward pressure for the remainder of 2018, and into early 2019, as the New Zealand cattle slaughter begins to gain pace against the backdrop of weaker US demand. To limit the extent of any price declines, exporters will be looking to redirect increasing volumes of product into China, where the short-medium demand outlook remains positive. However, there remains limited market opportunities for New Zealand's bull beef product outside of the US.

Beef production for the coming 2018/19 season (Oct-Sept) is forecast to be down 3% (see Figure 10). Export volumes from New Zealand should decline marginally over the next 12 months. While national herd numbers will remain stable, NZ's cow slaughter is expected to be lower than in 2017/18, when the culling of a maturing NZ dairy herd led to an 8% lift in overall beef production.

Export data for the 2017/18 season reveals the increasing importance of China as a key export market for New Zealand. Overall, export volumes for 2017/18 totalled 431,873 tonnes (up 9%), while export receipts totalled NZD 3.1b (up 13%). Exports to China jumped 34% in volume and 38% in value over that period. China, New Zealand's second-largest export market, now accounts for 23% of New Zealand's total beef export receipts. However, export volumes were down for the high value Asian markets of Korea (-4%) and Japan (-16%), with strong competition from Australian and US exports.

Figure 10: NZ beef production, 2014/15-2018/19



Source: B+LNZ, Rabobank 2018

## US: Market holds risk of extreme volatility

Fed cattle prices have been lethargic in a narrow trading range for the summer and autumn. As a result of fed cattle prices during the spring never reaching originally-expected levels, late summer and autumn prices never got as bad as was expected. While prices have recovered from the autumn low, limited price recovery is expected for the remainder of the year (see Figure 11).

2019 will start with contradictory price signals that could easily lead to extreme price volatility for the year. Total domestic protein production levels for the coming year hold bearish concerns. Beef production is expected to be up 3%, pork production up 5% and broiler production up 3%, causing a massive year-on-year increase of total meat supplies. The increased product estimates are expected to cause price pressure and increased competition at the retail counter for all species. The increased production also creates the need for robust exports to clear supplies from the domestic market.

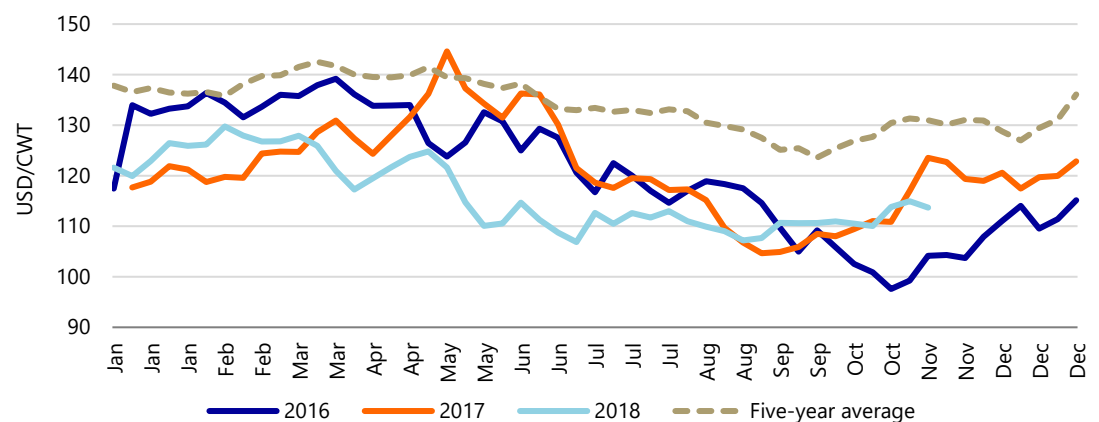
At the same time, 2019 holds uncertainties that could create an extremely bullish situation. First, the winter feeding season has started with El Niño weather conditions that have already produced a lot of rain and early snow across the majority of US cattle feeding regions. If the El Niño conditions continue, this will limit cattle performance, escalate cost of gain beyond budgets and limit total beef production – by reducing carcass weights and forcing cattle to have additional days on feed. The other wild card in the market is African Swine Fever in China and Eastern Europe. If the disease continues to spread in China and even into South-East Asia, the demand for increased imports of protein into the infected areas could be exceptionally bullish for all proteins globally.

As a result the US beef complex is starting the New Year with both bullish and bearish market conditions, depending upon which story captures headlines on any given day. The market is going to be vulnerable to price volatility, making risk management a real challenge.

Feeder cattle prices have been better than expected, driven by the premiums in deferred live cattle futures. Winter grazing programmes have been delayed in many areas because excessive rain is preventing turn out on winter forages.

Bred heifer and cow prices have held together exceptionally well given the view that breeding herd expansion has probably reached a peak. Cull cow prices on the other hand have been under severe pressure due to forced liquidation because of drought conditions in areas over the summer.

Figure 11: US Five-Market Area Steer Price, Jan 2016-Nov 2018



Source: USDA, Rabobank 2018

# Dashboard

## Legend and units

Production	Exports	Imports
1,000 tonnes	1,000 tonnes	1,000 tonnes

Δ = year-on-year change

All prices in local currencies

## Australia: production up prices down

Production		Exports		Cattle prices (AUD/kg cwt) EYCI		Export beef prices (AUD/kg FOB) US 90CL Cow	
Sep 18: 188.2	YTD Sep 18: 1,732.9	Oct 18: 98.89	YTD Oct 18: 938.4	Oct 18: 5.11	YTD Oct 18: 5.08	Oct 18: 5.52	YTD Oct 18: 5.76
Δ +4%	Δ +8%	Δ +15%	Δ +12%	Δ -7%	Δ -16%	Δ -5.6%	Δ -3.8%

## Brazil: Up on all measures

Production		Exports		Live cattle price (BRL/15kg)		Beef wholesale price (BRL/kg)	
Jun 18: 698.5	YTD Jun 18: 3,779.3	Oct 18: 161.2	YTD Oct 18: 1,329.4	Oct 18: 148.56	YTD Oct 18: 144.35	Oct 18: 10.15	YTD Oct 18: 9.83
Δ +9.5%	Δ +4.1%	Δ +12.0%	Δ +10.5%	Δ +5.5%	Δ +4.5%	Δ +5.4%	Δ +0.7%

## China: Up on all measures

Production (1,000 tonnes)	Consumption (1,000 tonnes)	Import (1,000 tonnes)		Cattle prices (CNY/kg)		Retail beef prices (CNY/kg)	
YTD Sep 18: 30,410	YTD Sep 18: 4,440	Sept: 98.2	YTD Sep 18: 728.3	Oct: 30.74	YTD Oct 18: 30.25	Nov: 65.85	YTD Nov 18: 64.5
Δ +0.6%	Δ +0.6%	Δ +108%	Δ +44%	Δ +6.2%	Δ +7.1%	Δ +4.5%	Δ +4.2%

## EU: Production up exports down

Production (1,000 tonnes)		Export (1,000 tonnes)		Import (1,000 tonnes)		Cattle prices (EUR/kg)			
						Young Bulls R3	Steers R3	Cows O3	Heifers R3
Aug 18: 673	YTD Aug 18: 5,201	Sep 18: 18.2	YTD Sep 18: 170.4	Sep 18: 13.2	YTD Sep 18: 154.8	3.76	3.95	2.78	3.82
Δ +3.8%	Δ +2.2%	Δ -13.9%	Δ -6.3%	Δ -12.1%	Δ +9.9%	Δ 2.8%	Δ -3.7%	Δ -8.8%	Δ -1.9%

## New Zealand: Prices down

Production		Exports		Cattle prices (NZD/kg cwt)		Export beef prices (NZD/kg FOB)	
Sep 18: 24	YTD Sep 18: 648	Sep 18: 14.6	YTD Sep 18: 324.6	Nov 18: 5.00	YTD Nov 18: 5.28	Sep 18: 8.08	YTD Sep 18: 7.27
Δ +4%	Δ +8%	Δ +5%	Δ +9%	Δ -10%	Δ -3%	Δ +8%	Δ +1%

## US: Exports up

Production		Exports		Imports		5 Market Steer (USD/cwt)	Fed beef cutout (USD/cwt)
Sep 18: 978.8	YTD Sep 18: 10,352.1	Sep 18: 117.5	YTD Sep 18: 1,068.1	Sep 18: 108.6	YTD Sep 18: 1,058.8	Oct 18: 111.68	Oct 18: 204.43
Δ -3%	Δ +2.6%	Δ +6.6%	Δ +13.2%	Δ +3.8%	Δ +1%	Δ -2.8%	Δ +3.6%



# Imprint

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