



Rabobank

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Trade Agreements and Increased Production

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Comprehensive and Progressive Agreement for Trans-Pacific Partnership

The 11-member version of the Trans-Pacific Partnership (TPP) looks set for formal signing in March (although respective governments need to sign off on the details before implementation). Gains are expected for beef-exporting countries Australia, New Zealand, Mexico, and Canada—through reduced tariffs into key global beef importer Japan, plus reduced tariffs into smaller importing countries Chile, Vietnam, and Peru.

China further opens beef market to the world

China is allowing more beef imports and importing countries, intensifying competition in the market. Chilled beef access has been granted for Argentina—the fourth country behind Australia, the US, and New Zealand to be granted such access. In frozen beef, Belarus has obtained approval, and two facilities were officially accredited in January. China has also signed a protocol for importing beef from France and the UK, and will likely begin shipments in the coming months. In addition, the first boatload of live cattle exports from northern Australia—the main live-cattle export region—arrived in January. This boatload is the strongest indication that a live-cattle trade may become more permanent.

Mercosur and EU trade agreement

A new proposal to allow Mercosur countries to send 99,000 tonnes of beef to the EU at a lower tariff level has been tabled as part of this long-running trade discussion. This is a significant volume, given total EU beef imports over the last couple of years have been between 204,000 tonnes and 270,000 tonnes. Brazil, Argentina, and Uruguay are already the EU's main suppliers (together accounting for 63% of total EU imports)—Brazil alone accounted for 107,000 tonnes in 2017. Mercosur negotiators are apparently seeking an increase, to 150,000 tonnes. This standoff may further prolong the discussions, which already run the risk of delay due to the Brazilian elections.

2018 US production looking even stronger

Predictions at the end of 2017 had US beef production growing by more than 3%, or an additional 360,000 tonnes. At the start of 2018, with updated cattle numbers, favourable market conditions, and given that large areas of the US are in drought, production increases have been revised by up to about 5%, or some 700,000 tonnes.

The Rabobank Seven-Nation Beef index rose through October and November, driven by improvements in US cattle prices (see Figure 1).

Figure 1: Rabobank Seven-Nation Beef prices, Jan 2010-Nov 2017



Source: Rabobank 2018

Feature: blockchain beef

Applications of blockchain technology are now being widely developed in the food industry. While many of the early applications have been driven by the desire to increase traceability and transparency, with a focus on food safety, opportunities do exist further up the supply chain.

Block... what?

In its simplest form, blockchain is a digital platform that stores, facilitates, and verifies transactions between users. Transactions, or blocks, are recorded on a shared ledger. Individual entities, such as growers or processors, own their own copy of the ledger, which is connected to thousands of other ledgers across the network. When a transaction is made, a new record (or block) is created and verified by the network, and added to the blockchain. This enables secure and near-instant interactions between businesses.

Provenance and transparency

A cornerstone of blockchain is that it enables traceability of information in the value chain, drastically simplifying the process of verifying product origin, quality attributes, and production and processing practices. This offers huge possibilities in a world in which consumers want high-quality, safe products, and increasing visibility of attributes and practices along the supply chain.

Food and tech companies are developing blockchain as a solution in response to changing consumer preferences. In 2017, JD.com announced it would explore using blockchain to track beef through the value chain; Cargill introduced blockchain technology to its Honeysuckle White-branded turkey supply chain in late 2017; and the World Wildlife Fund

in partnership with tech operators and a fishing and processing company in the Pacific Islands, is piloting a system that will allow the tracking of tuna.

While many of the early applications of blockchain in the food industry are primarily driven in response to consumers' desire to increase traceability and transparency, opportunities to realise benefits from blockchain further up the supply chain are growing.

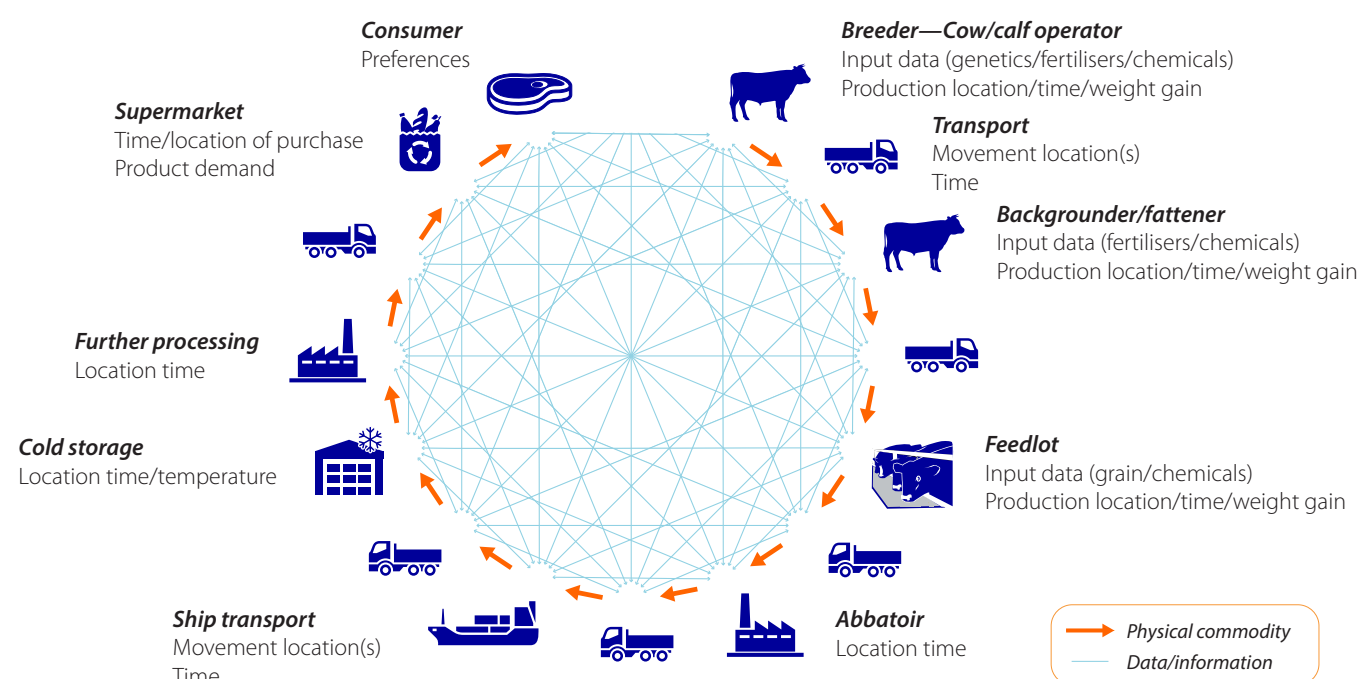
For example, the interoperability of blockchain makes it superior to current solutions for sharing genetic traits, making it simpler to track productive performance. A chain including, among others, the producer, feedlot, farmer, and genetic organisation would be able to share performance and verify breeding values, which is all transferred in real-time in the transaction.

The shared-ledger approach of blockchain dramatically simplifies back-office processes such as transaction reconciliation and reporting: a benefit for both beef processors/packers and farmers. Previously, where reconciliation required collating and cross-checking paperwork from multiple sources, the technology now instantly reconciles the transaction between all parties.

The weakest link

In order to achieve value, blockchain requires the involvement of all stakeholders along the value chain. But illustrating value and calculating a proper distribution of costs and benefits may take considerable time—and this remains the largest barrier to wide-scale adoption. In the case of demand pull or retail-led blockchain utilisation, producers and those up the supply chain may find themselves encouraged into blockchain participation—and it will be the early adopters of the technology who will benefit from early price premiums and efficiencies.

Figure 2: Application of blockchain along the beef (export) supply chain



Source: Rabobank 2017

Regional outlooks

Australia: dry conditions soften prices

Seasonal impacts are again driving the Australian market. With drier conditions through January and into February, producer demand has waned, and prices dropped. The Eastern Young Cattle Indicator fell 7% from the beginning of December, to AUD 5.39/kg cwt on 8 February (see Figure 3). Weather forecasts are not very strong for drought-breaking rains that would stimulate restocking demand in Queensland. As such, prices may continue to slide through Q1.

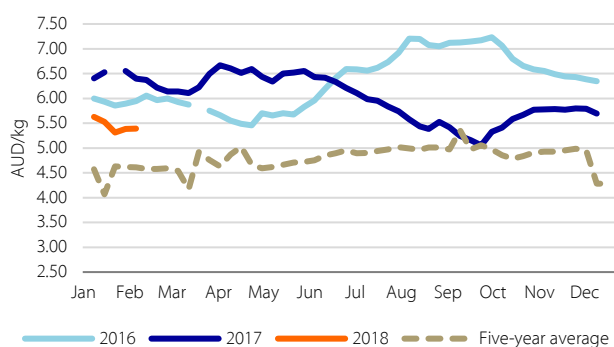
Cattle slaughter in 2017 was 2% lower than 2016, at 7.2m head. Numbers were stronger in the second half of the year, with 2H 2017 5% higher than the corresponding period in 2016, illustrating that the holding of stock for rebuilding was easing and—as herds rebuilt—more stock was coming on to the market. With improved seasons and increased cattle on feed driving up slaughter weights to just under 300kg cwt, production rose 1% in 2017, to 2.13m tonnes.

Exports in 2017 reflected the increased production, rising 3%, to 1.01m tonnes swt. Challenged by increased competition from the US and quota restrictions, exports to South Korea were down 16%, at 148,550 tonnes swt, while tariff advantages supported a 16% increase in exports to Japan (292,359 tonnes swt). Ratification of the Comprehensive and Progressive Agreement for Trans-Pacific Partnership in 2018 will support this continued strong trade with Japan.

Live (feeder and slaughter) cattle exports in 2017 were 22% lower than 2016, at 760,466 head.

The ongoing dry conditions in Queensland—which accounts for 40% of the Australian herd—will delay the rebuilding process and limit production growth through 2018.

Figure 3: Australian cattle prices (Eastern Young Cattle Indicator), Jan 2016-Feb 2018



Source: MLA, Rabobank 2018

Brazil: strong production growth in 2018

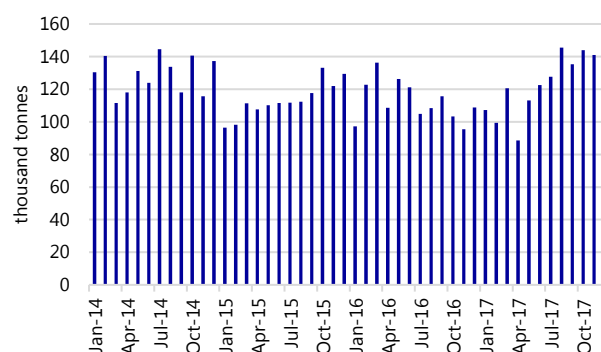
Rabobank estimates that Brazilian beef production will increase by around 5% during 2018, enhanced by an increasing number of cows that will be discarded owing to declining calf prices. In 2017, calf prices were, on average, 11% below 2016 levels. Brazilian beef production increased by 2.5% during the first nine months of 2017, compared to the same period in 2016, signalling that the cycle of female retention has now come to an end.

After having declined by 8% during 1H 2017, Brazilian beef exports rebounded and finished 2017 more than 9% higher, by volume, compared to 2016 (see Figure 4). Additionally, average export prices were also up by 4%. Hong Kong was the main destination in 2017, buying more than 350,000 tonnes of beef from Brazil, an increase of around 25% compared to 2016. China was the second-largest buyer of Brazilian beef, importing more than 210,000 tonnes: almost 30% more than in 2016.

Brazil's GDP is expected to increase between 2% and 3% in 2018, which, in turn, should support a consistent recovery in domestic beef consumption. Some additional demand will be more than welcome, as an additional supply—estimated to be around 400,000 tonnes—is expected to be available in 2018, when total Brazilian beef production is likely to exceed 9.8m tonnes.

Overall, both producers and packers are likely to deliver improved results in 2018, particularly compared to 2017. Meat processors will benefit from additional throughput and improved capacity utilisation (there is still considerable idle capacity in the country's slaughterhouses), resulting in lower fixed costs. On the cattle-producer side, the bigger availability of feeder cattle is also expected to result in lower costs. However, the pace of the recovery of local consumption will be key in defining live cattle prices.

Figure 4: Brazilian beef exports, Jan 2014-Dec 2017



Source: Brazilian Ministry of Industry, Foreign Trade, and Services; Rabobank 2018

Canada: fed cattle basis at record levels

Canada continues to be a market filled with mixed signals. The drivers behind the mixed signals are many. Drought conditions over a portion of western Canada and difficulty finding grass have limited expansion plans in the cow-calf sector. Canadian cattle inventory, including cow numbers, continues to be flat to marginally lower. At the same time, the weak US dollar, attractive feed-grain prices, strong beef demand, and increased exports of both beef and fed cattle have meant demand for cattle has been exceptional (see Figure 5). This has been reflected in lower exports of feeder cattle to the US—down 33% in 2017—and strong demand for calves (as many as 100,000 head of US calves were exported to Canada in 2017).

As a result, the Canadian fed cattle basis has been incredibly strong—both on a Canadian-to-US live price comparison, as well as Canadian live price to CME live cattle futures. The surge in basis has been driven by aggressive packer demand for fed cattle.

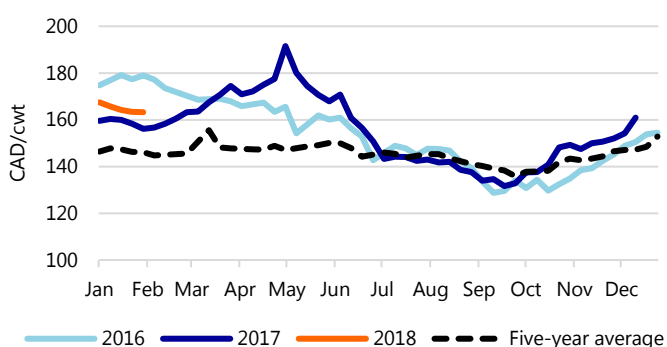
The strong basis has encouraged aggressive feed yard placements, but has also encouraged an aggressive rollover of cattle. As a result, carcass weights have been below the previous year, which has held total beef production at manageable levels.

Basis levels have been so strong that this has caused concerns of a bubble that leaves the Canadian fed cattle market vulnerable to a sharp price correction.

Accommodating the increased beef production has been an increase in per capita beef consumption. At the same time, exports of both fed cattle and beef to the US remain strong, as do beef exports to other destinations.

The uncertainty of the NAFTA negotiations creates a level of uncertainty around US trade relationships. However, beef exports to China and South-East Asia continue to provide underlying support to the long-term outlook.

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



Source: USDA, Rabobank 2018

China: shorter domestic supply

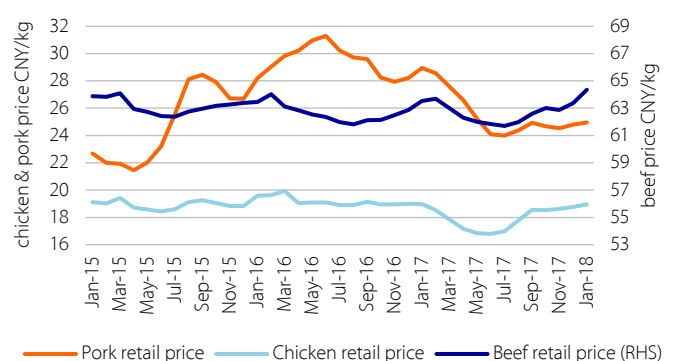
The Chinese beef market has performed strongly in recent quarters. This is reflected by the steadily rising farmgate prices since August. The finished cattle price reached CNY 29.8/kg in January, up 8% YOY. The beef retail price has also increased, compared with other meats (see Figure 6). In January, the beef retail price was 2.5 times higher than pork and 3.4 times higher than poultry. In January 2017, the difference was 2.2 times and 3.3 times, respectively. Sheepmeat, which is the substitute for beef, has also seen stronger price increases in recent quarters.

The low production volumes caused by two years of drought in northern China have supported the strong prices of beef and sheepmeat. In addition, the ongoing exit of small to medium milking cow operators, driven by a lack of profitability, has also contributed to the decline in cattle supply. Given the long production cycle, the local supply of cattle and beef meat is expected to be limited through 2018.

In 2017, China's official beef imports increased by 20% YOY, reaching 695,000 tonnes. The competition among South American exporters has been intense. Uruguay surpassed Brazil in the first 11 months, but lost the top position to Brazil in the last month. The two countries have very close shares in China's total imports in 2017, with Brazil exporting 197,000 tonnes. Argentina has shown the strongest growth, increasing exports to China by 66% in 2017.

Argentina will have more opportunity in 2018, now it has been approved by China to supply fresh chilled beef. In 2017, the US and New Zealand obtained access to the Chinese chilled-beef market, which previously was only accessible to Australia. Due to high prices, imports from Australia decreased by 14% in 2017. However, New Zealand showed strong growth, and as a result, total chilled beef imports were down only 4% YOY. Due to the premiumisation trend in the Chinese consumer market, chilled beef imports are expected to increase in 2018.

Figure 6: Chinese retail meat prices, Jan 2015-Jan 2018



Source: Chinese Ministry of Agriculture, CAAA, Rabobank 2018

EU: production to grow, but prices variable

EU beef supply is estimated to increase in 2018, due to slight increases in production and imports. Even though prices in the EU are variable, Rabobank expects 2018 average prices to experience more pressure.

Beef production stabilised in 2017, after several years of expansion. Total EU supply for 2017 is estimated at 26.5m head, or 7.8m tonnes, just below the record level of 2016. On average, EU heifer slaughter grew close to 2%. Conversely, dairy cow and young cattle slaughter dropped by almost 4%.

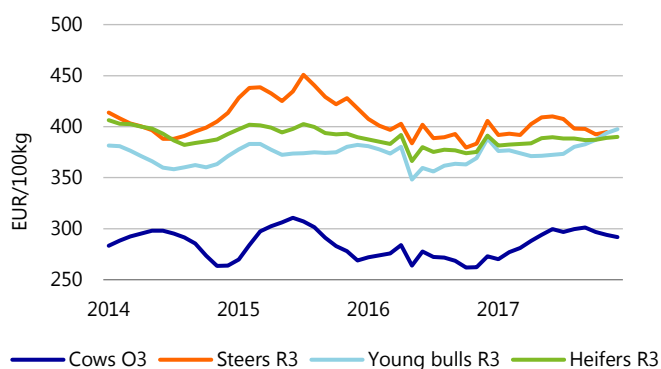
Among the main producing countries, Poland, Ireland, and Spain maintained structural growth, while Germany, France, and the UK declined. The decline in production in the UK and in France is partly compensated by increasing imports. The intra-EU beef trade is expected to increase in 2018, balancing out supply and demand.

Exports and imports of beef were close to balance at 400,000 tonnes for 2017. Nearly 75% of imports are sourced from South America, and in 2017, Argentina and Uruguay gained market share at the expense of Brazil. The EU-Mercosur trade negotiations (as referenced on page 1) could lead to an increase in these imports. In addition to beef trade, live animal exports increased 7%, to 1m head, in 2017.

EU beef consumption has been declining. However, in southern Europe—especially Spain and Italy—current economic optimism signals potential increasing demand for beef.

EU prices are diverging. Germany follows a classic seasonal pattern. In the Netherlands, prices continue to be under pressure due to the high dairy-cattle slaughter. In Italy and Spain, prices are increasing due to the increasing demand. Increasing exports from Ireland and Poland support prices in these countries (see *Figure 7*).

Figure 7: EU cattle prices by category, Jan 2014-Dec 2017



Source: European Commission, Rabobank 2018

Indonesia: live imports expected to be stable, but uncertainties exist

Indonesian 2018 feeder-cattle imports are expected to reach 500,000 head (flat YOY), with a number of key drivers. Firstly, seasonal Ramadan and Idul Adha demand will drive import numbers in the first few months of 2018. Secondly, a potential easing in Australian feeder-cattle prices would support feedlotting margins. China's emerging demand for slaughter cattle from blue tongue-free areas poses a threat, but it is not initially expected to place restrictive pressure on availability of feeder cattle.

Feeder cattle imports at the start of 2018 are softening, possibly given news of approved increases in frozen Indian carabeef imports. The 1:5 breeder-to-feeder requirement for imports could dampen feeder imports closer to December, when the first audit is due. We believe boosting breeder imports this year will be a significant challenge, given Australian supply constraints. Last year, imports of Australian breeders reached 14,360 head, in comparison to feeder imports of 498,511 head. Feeder imports had weakened 30% YOY in Q4 2017, as high prices and a weak rupiah squeezed feedlotting margins.

In 2017, frozen Indian carabeef imports reportedly reached 55,000 tonnes, with year-end inventory of 18,000 tonnes. This did little to lower beef retail prices, which steadied at IDR 116,000/kg for the year (see *Figure 8*). For 2018, the government has issued new quotas of 31,000 tonnes of frozen carabeef to state-owned logistics company Bulog as an extension of unrealised 2017 quota. Bulog is also said to have a permit to import 100,000 tonnes for 2018 (including the extended 2017 quota).

With a low calving rate to date, herd rebuilding efforts through mandatory artificial insemination since last year may not have much impact on Indonesia's beef supply. Net of breeder replacement and annual slaughter, calves from the program would not be available for slaughter until 2019/20 at the earliest.

Figure 8: Indonesian national beef prices, Jan 2015-Jan 2018



Source: Indonesian Ministry of Trade, Rabobank 2018

Mexico: production, exports, and consumption all growing

The herd expansion is expected to continue through into 2018, with the government programme to repopulate the herd having a positive impact. In addition, good prices have incentivised continued reproduction of cattle in cow-calf operations. However, not all these cattle are staying in Mexico—the result being that herd expansion will potentially slow and affect production in future years.

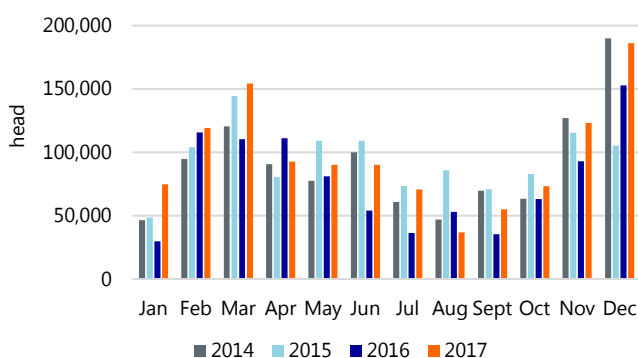
In 2017, Mexico exported 1.1m head to the US, an increase of 24.7% (see Figure 9). More importantly, the number of heifers exported to the US in 2017 increased by 114%, from 87,586 head to 214,515 head. The slowing in herd expansion could be compounded even further if the protocols to export live cattle to Indonesia are formalised this year. Mexico is expected to export 15,000 head to Indonesia, with potential upside growth if protocols are agreed.

Beef production increased in 2017, reaching 1.92m tonnes, an increase of 2.5%. Beef production is expected to grow, with more cattle available for slaughter and weights increasing (average weights in 2017 were 317kg, with expectations they could reach 320kg). In 2018, production is expected to increase by about 47,000 tonnes, to 1.96m tonnes, an increase of another 2.5%.

Domestic consumption is expected to increase 1.6% in 2018, driven mainly by higher income groups. Domestic consumption increased 1.7% in 2017, from 1.80m tonnes to 1.84m tonnes—despite an inflation rate higher than 6%, interest rates increasing, and a devalued Mexican peso.

Mexican exports are expected to increase by another 20,000 tonnes, to reach 300,000 tonnes in 2018. But there may be incentives to export even more, with renewed interest and the possibility that Russia will start importing beef from Mexico in 2018. Mexico continued to be a net exporter of beef in 2017, exporting 280,000 tonnes of beef, while importing 206,000 tonnes.

Figure 9: Mexican monthly cattle exports, Jan 2014-Dec 2017



Source: GCMA, Rabobank 2018

New Zealand: production and exports to ease

Tightening domestic supply and improving export returns will help to support cattle prices. However, the strengthening of the NZ dollar against the US dollar since the start of December (up nearly 6%) continues to create headwinds for processors. Consequently, Rabobank expects schedule prices to remain relatively stable over the next three months.

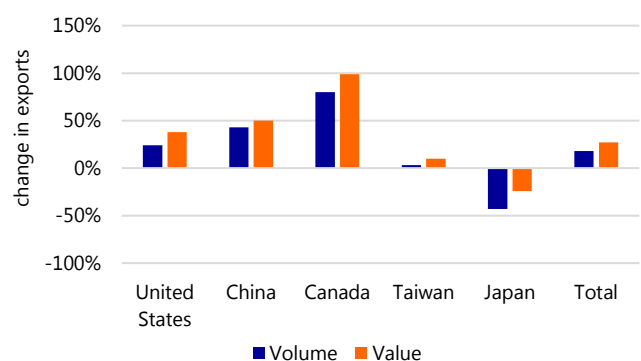
New Zealand's total beef kill for the first three months of the 2017/18 season (Oct-Dec) was 15.5% ahead of the same period last year. Cattle in many parts of the country were being killed earlier in the season, with dry seasonal conditions and lower feed supplies forcing many farmers to destock. Since December, most key cattle-producing regions have received significant rainfall, restoring feed levels and slowing the supply of cattle to the processors.

While slaughter prices did ease slightly over the quarter, overall, prices remained relatively firm, despite the sharp increase in domestic production. As of early February, the North Island bull price averaged NZD 5.30/kg cwt, and the South Island bull price averaged NZD 5.05/kg cwt (down 5% and 3%, respectively, on November 2017).

Higher production resulted in an 18% increase in exports in Q4 2017 (see Figure 10). Combined with strong average values, the value of exports increased 29% YOY, to NZD 588m over the Oct-Dec quarter—the second-highest on record. Export volumes for the quarter to New Zealand's largest two markets, the US and China, were up 24% and 43%, respectively, on the same period last season. Despite the increase in export supply, the average value received per tonne increased in both the US and China, indicating that demand from end-users in these two key markets remains strong.

Japan's tariff hike on frozen beef did see the value of New Zealand's exports to Japan for the quarter decline by 24%—but as Japan currently takes less than 4% of New Zealand's total beef exports, the decline has not had a significant impact on overall export returns.

Figure 10: Change in NZ beef exports, Q4 2016 vs. Q4 2017



Source: MIA, Rabobank 2018

US: guardedly optimistic

US cattle markets have started 2018 with guarded optimism. 2017 finished as the second-most profitable year for US cattle producers—and, at least for the first quarter of 2018, market momentum continues.

Supporting the positive market momentum was the 1 January cattle inventory report, which showed a slower expansion rate than what was expected. All cattle and calves are estimated at 93.7m head, up 1%. All cows and heifers calved at 41.1m head, up 1%, with beef cows at 31.7m head, up 2%. Beef replacement heifers are estimated at 6.13m head, down 4%, while other heifers are estimated at 9.33m head, up 4%. Steers 500 pounds and over are estimated at 16.4m head (fractionally lower than a year ago), and calves under 500 pounds, at 14.4m head, are only fractionally larger than a year ago.

The slower-than-expected expansion in 2017 and the heavy front-end load of cattle on feed creates a tighter-than-expected supply and brighter market outlook for the second half of 2018. Cattle prices for the year to date have been holding at, or above, expected levels, supported by a continuation of solid demand by both the domestic and export markets (see Figure 11).

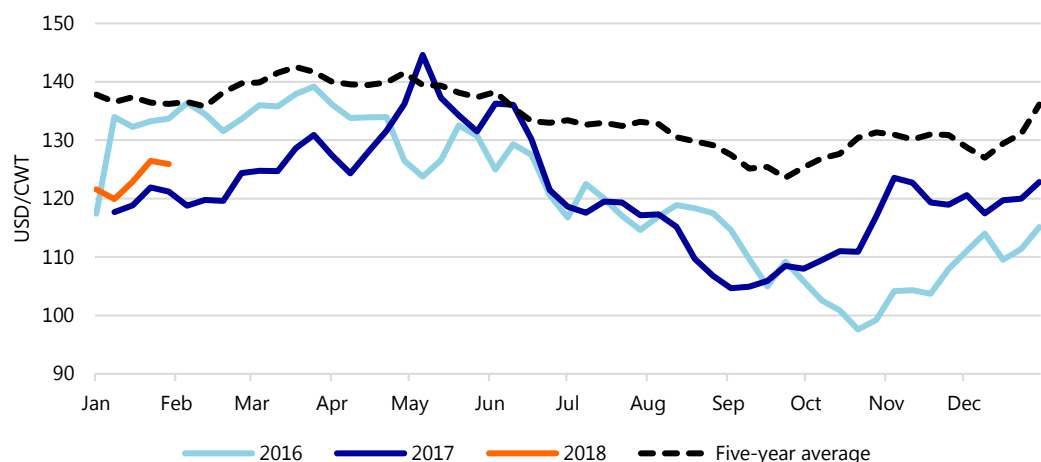
While market tone has started the year with solid footing and continuation of profitability in all sectors, there are a number of potential headwinds that could become driving issues as the year unfolds.

Foremost in the list of concerns are expanding drought conditions. Currently, there are 27 states that are showing various degrees of drought stress. Cow population of those 27 states is 31.4m head, 76% of the US cow population. This will become critically important as the calendar moves through the spring rainy season and into the heat of summer.

Other areas that need close observation are the risk of escalating carcass weights. Currently, cattle on feed numbers are up 8% over a year ago. Due to drought, placements into feed yards are heavily front-end loaded and expected to decline through the first half of the year. The available fed cattle supply for the first half of the year is set—but with a good availability of feed grains at very attractive prices, it will be critically important to avoid excess carcass weights in order to keep total beef production at manageable levels.

The other uncertainty in the market are the unknowns of US trade policy. NAFTA negotiations are ongoing, but slow to progress. There is still discussion of reopening KORUS, tariff rates are still an issue with Japan, and last week, there were comments that the US could join the TPP if conditions were right.

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



Source: USDA, Rabobank 2018

Dashboard

Legend and units

<i>Production</i>	<i>Consumption</i>	<i>Exports</i>	<i>Imports</i>
1,000 tonnes	1,000 tonnes	1,000 tonnes	1,000 tonnes

Δ = year-on-year change

All prices in local currencies

Australia: production up, prices down

<i>Production</i>		<i>Exports</i>		<i>Cattle prices (AUD/kg cwt) EYCI</i>		<i>Export beef prices (AUD/kg FOB) US 90CL Cow</i>	
Dec 17: 150.7	YTD Dec 17: 2,130.9	Dec 17: 87.9	YTD Dec 17: 1,014.9	Jan 18: 5.48	YTD Jan 18: 5.48	Jan 18: 5.87	YTD Jan 18: 5.87
Δ 0%	Δ +1%	Δ -2%	Δ +3%	Δ -15%	Δ -15%	Δ -1%	Δ -1%

Brazil: production up, prices down

<i>Production</i>		<i>Exports</i>		<i>Live cattle price (BRL/15kg)</i>		<i>Beef wholesale price (BRL/kg)</i>	
Sep 17: 635.2	YTD Sep 17: 5,646.8	Dec 17: 132.6	YTD Dec 17: 1,477.0	Dec 17: 145.23	YTD Dec 17: 138.91	Dec 17: 9.78	YTD Dec 17: 10.11
Δ +8.1%	Δ +2.5%	Δ +21.7%	Δ +9.5%	Δ -2.7%	Δ -9.1%	Δ -1.8%	Δ -0.8%

China: positive scorecard

<i>Production</i>	<i>Consumption</i>	<i>Imports</i>		<i>Cattle prices (CNY/kg)</i>		<i>Retail beef prices (CNY/kg)</i>	
2017: 7,070	2017: 8,720	Dec 17: 74.7	YTD Dec 17: 694.7	Dec 17: 29.8	YTD Dec 17: 28.2	Dec 17: 64.4	YTD Dec 17: 62.63
Δ +1.3%	Δ +2.0%	Δ +31%	Δ +19.9%	Δ +8%	Δ +0.6%	Δ +2%	Δ 0%

EU: production up, imports contracting

<i>Production</i>		<i>Export</i>		<i>Imports</i>		<i>Cattle prices (EUR/kg)</i>			
						<i>Young Bulls R3</i>	<i>Steers R3</i>	<i>Cows O3</i>	<i>Heifers R3</i>
Nov 17: 718	YTD Nov 17: 7,157	Nov 17: 80	YTD Nov 17: 706.5	Nov 17: 26	YTD Nov 17: 286	Dec 17: 3.98	Dec 17: 4.01	Dec 17: 2.92	Dec 17: 3.90
Δ +2.5%	Δ +0.4%	Δ -1.1%	Δ +11.6%	Δ -1.7%	Δ -26.8%	Δ +2.4%	Δ -1.2%	Δ +6.8%	Δ 0%

New Zealand: production up, prices down

<i>Production</i>		<i>Exports</i>		<i>Cattle prices (NZD/kg cwt)</i>		<i>Export beef prices (NZD/kg FOB)</i>	
Nov 17: 718	YTD Nov 17: 7,157	Nov 17: 80	YTD Nov 17: 706.5	Nov 17: 26	YTD Nov 17: 286	Dec 17: 3.98	Dec 17: 4.01
Δ +2.5%	Δ +0.4%	Δ -1.1%	Δ +11.6%	Δ -1.7%	Δ -26.8%	Δ +2.4%	Δ -1.2%

US: exports continue to grow

<i>Production</i>		<i>Exports</i>		<i>Imports</i>		<i>Five-market steer (USD/cwt)</i>	<i>Fed beef cutout (USD/cwt)</i>
Dec 17: 974.31	YTD Dec 17: 11,871	Dec 17: 118.25	YTD Dec 17: 1,179	Dec 17: 96.17	YTD Dec 17: 1,263	Jan 18: 122.57	Jan 18: 206.22
Δ -1%	Δ +3.8%	Δ +3%	Δ +13.3%	Δ 0%	Δ -1.1%	Δ +2.3%	Δ +6.7%

Imprint

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