



Mid-Season Update 2018-19

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Executive Summary – Outlook 2018-19

Economic Conditions

In 2019, global growth is expected to slow after strong growth of 3.8 per cent by New Zealand's trading partners in 2018. Growth has been slipping globally with concerns over Brexit and US–China trade relations. Investment in advanced economies has stalled, oil prices have been rising and China has reported its lowest GDP growth rate in nearly thirty years. Nevertheless, it remains high compared with mature economies.

New Zealand's economic growth has been slowing and is expected to ease further – to 2.5-3.0 per cent in 2019 and 2020.

The New Zealand dollar (NZD) is estimated to weaken against all major red meat trading currencies; the USD, euro (EUR) and GBP. This mainly reflects New Zealand's position relative to other economies, particularly trading partners, which is expected to be manifest in overall weaker demand for New Zealand's exports. In May 2019, the Reserve Bank of New Zealand cut the official cash rate (OCR) to 1.5 per cent – a record low – reinforcing the outlook of weakening global growth and domestic pressures on prices. No change was made at the end of June.

Livestock Numbers

Sheep numbers at 30 June 2018 provisionally totalled 27.25 million head, down 1.0 per cent on the previous June. This was driven by a decrease in breeding ewes (-3.6%) compared with 30 June 2017.

Beef cattle numbers at 30 June 2018 provisionally totalled 3.82 million head, up 5.0 per cent on the previous June. This was due to an increase across all beef cattle classes.

Total dairy cattle numbers were provisionally lower at 6.44 million head at 30 June 2018.

Lamb

Total lamb receipts under the USD0.69 exchange rate scenario are expected to be up 0.3 per cent to \$3.39 billion FOB in 2018-19. This will be the second year in a row that lamb exports exceed \$3 billion in nominal terms.

The increase in total receipts is driven by a forecast \$10,360 FOB per tonne for lamb meat – up 2.7 per cent – due to expected stronger in-market prices and easing NZD, while export volumes slip by 2.2 per cent.

The number of lambs for export, processed in 2018-19 is forecast to decline 4.4 per cent from the previous season. An increase in carcase weight partly offsets the reduced numbers processed.

Total mutton export receipts are expected to total \$692 million FOB, down 8.9 per cent on the previous season. The average value of mutton is expected to increase 5.3 per cent to \$6,801 FOB per tonne, driven by limited mutton supply from New Zealand and Australia. New Zealand's mutton exports are forecast to be down 13.4 per cent.

The farm-gate prices for lambs are expected to average \$139 per head or 745 cents per kilogram, which is up 3.4 per cent from the previous season. The annual average farm-gate mutton price is estimated at \$115 per head or 444 cents per kilogram for the 2018-19 season.

Beef

Total beef and veal receipts are expected to decrease 4.7 per cent to \$3.455 billion FOB in 2018-19, with lower volume and pricing driving the decrease. Co-product exports are expected to be unchanged.

Weakening in-market prices will contribute to a lower-than-average beef value per tonne in 2018-19 – down 3.2 per cent. Increased global production is expected to drive international trade competition, but demand from Asia, particularly China as it develops, and addresses African Swine Fever (ASF), and North America, is expected to accommodate the increased supply.

In the year ending in September 2019, the number of export cattle processed is estimated at 2.6 million head, up slightly compared with 2017-18. This reflects a further drop from record high numbers processed in 2014-15, particularly for cull cows as the dairy herd stabilised. For 2018-19, export beef production is estimated at 646,000 tonnes carcase weight, which is a marginal increase on 2017-18 as the national dairy and beef herds stabilise.

At the mid-exchange rate estimate of USD0.69, the average cattle price estimated at 489 cents per kilogram is 8.2 per cent down on 529 cents per kilogram for 2017-18.

Wool

Overall, wool has performed a little better than many expected, however, prices are far from the levels experienced earlier in the 2000s, let alone prior to that. Exports in the first 10 months of the wool season (i.e. for July 2018 to April

2019) totalled 75,000 tonnes clean, down 9.9 per cent on 2017-18, while the average value was up 10.6 per cent due to double-digit increases in the average value of exports of wools finer than 32 microns.

Sheep and Beef Farms

Gross farm revenue for the All Classes Sheep and Beef Farm is estimated to average \$573,400 per farm for 2018-19, up 3.2 per cent on 2017-18. The largest driver of this is high returns from sheep meat, including both lamb and mutton.

Total expenditure for the All Classes Sheep and Beef Farm is estimated to increase by 2.4 per cent for 2018-19. The largest expected decrease in expenditure is interest.

In 2018-19, the nominal Farm Profit before Tax per farm for the All Classes Sheep and Beef Farm, estimated at \$150,700 in the USD0.69 scenario is a 5.6 per cent increase from the previous year. In 2004-05 inflation-adjusted terms, real Farm Profit before Tax lifts 3.7 per cent to \$114,000.

Economic Conditions

Global Growth Prospects

Table 1

	Economic Growth					
	Annual Average % Change, March Year					
	2015	2016	2017	2018	2019f	2020f
	%	%	%	%	%	%
US	+3.0	+2.3	+1.7	+2.4	+2.3	+1.8
UK	+2.9	+2.2	+1.7	+1.7	+1.4	+1.5
Euro zone	+1.5	+2.0	+1.9	+2.5	+1.7	+1.5
Japan	-0.3	+1.4	+0.8	+1.9	+1.1	+0.9
China	+7.2	+6.8	+6.8	+6.8	+6.5	+6.2
South Korea	+3.0	+2.9	+2.9	+3.0	+2.7	+2.5
Australia	+2.6	+2.5	+2.6	+2.6	+3.1	+2.8
Trading Partners	+3.7	+3.4	+3.4	+3.8	+3.5	+3.2
New Zealand	+3.7	+3.6	+3.7	+3.1	+2.7	+2.8

Note: The Euro zone consists of 15 Member States: Belgium, Germany, Ireland, Greece, Spain, Cyprus, Malta, France, Italy, Luxembourg, the Netherlands, Austria, Portugal, Finland and Slovenia.

Trading Partners covers those countries that account for about 85% of New Zealand's total merchandise trade.

f forecast | Source: Statistics New Zealand, NZIER Quarterly Predictions

Global growth from 2019 is expected to rise at a weaker rate than was expected in 2018 as global economic growth continues to lose drive, particularly in Europe. Political uncertainty in Europe and around Brexit is weighing on business investment prospects and consumer confidence. Global trade growth has contracted, with trade restrictions having undesirable effects on confidence and investment plans. Real wage growth remains subdued, largely matching moderate labour productivity increases.

The triple economic headwinds of Brexit, the US-China trade tensions, and the Chinese economy's slowdown are expected to continue to drag on the global economy into 2020, and possibly beyond. However, prices for New Zealand's meat are expected to remain steady, underpinned by tight supply and reduced competition from pork – a result of the African Swine Fever ("ASF"), which is impacting severely on pig production in Asia.

Oil prices trended higher through the first two-thirds of 2018 to about USD72 per barrel before retrenching to USD44 per barrel in early January 2019. Since then, prices have recovered to around USD56 per barrel, however a bearish OECD outlook appears to have constrained further increases. Oil inventories are growing (about 4% above seasonal averages), with US production increases outstripping OPEC production cuts.

The US economy continues to perform well compared to most other countries, albeit at a slower pace heading into 2020. The fiscal stimulus has run its course and higher tariffs have begun to increase business costs and reduce investment growth. The US labour market remains stable, with unemployment at a 50-year low, underpinning consumer spending and confidence. The US economy is close to having had its longest expansion on record, and the country's central bank – the Federal Reserve – is continuing its "balance-sheet normalization", which is effectively increasing interest rates. US central bankers raised interest rates four times in 2018 – to 2.5% – and this is currently considered a neutral rate.

China's 6.8% annual GDP growth in 2018 was equal to the previous March year. This was driven by a consumption-led economy, the result of the central bank in China providing liquidity to non-banking financial companies and lowering reserve requirements for banks. For the calendar year, China's GDP growth for 2018 was officially reported at 6.6%, which is the lowest level of growth in nearly three decades. The Chinese economy is expected to continue to slow through 2019 and into 2020, and this level of deceleration in growth is of major concern to the wider global community as declining growth rates in China are amplified in world trade. Trade tensions between China and the US continue to weigh on capital investment decisions and industrial production. China's inflation has fallen sharply, and risks remain around China's shadow banking activity.

Brexit continues to provide a large amount of uncertainty in global markets as to how the UK exit from the EU will take shape. Coupled with the deceleration of European GDP growth and Brexit uncertainty, business confidence around investment and export prospects are subdued. The domestic economy remains relatively strong in the UK with a robust labour market underpinning household spending.

GDP growth forecasts for the Euro area have been pared back considerably, following a sharp slowdown in 2018. Weakening external demand has reduced industrial output and reduced confidence, leading to delayed investment decisions. The cumulative effect has been due to differing issues between countries. France has suffered with industrial action and public unrest (“gilets jaunes” or yellow vests), Italy has had higher debt servicing costs and limp domestic demand, and Germany has experienced softening demand for its export products, leading to reduced industrial activity, which also was affected by modified emission regulations for automobiles.

Australia’s economy is proving resilient in the face of a housing market downturn and reduced demand for its mined raw materials. The labour market continues to improve and increased spending on public infrastructure, coupled with favourable financial conditions should assist with domestic demand.

GDP growth for Japan is forecast to reduce to 0.75% in 2019 from 1.1% in 2018 as demand for its exports contracts leading to reduced industrial outputs. Confidence in the economy is eroding after an increase in consumption tax in the second half of 2019. However, investment in the economy is encouraged by increases in government spending, tax cuts, increased corporate profits and a tight labour market.

Brazil continues to recover from its 2017 recession, with growth projected to increase from 2% in 2019 to 2.5% in 2020. Reforms introduced by the country’s newly elected government have reduced uncertainty and fostered stronger business confidence. The domestic economy is supported with tightening labour markets.

New Zealand

Figure 1



f forecast | Source: Beef + Lamb New Zealand Economic Service, NZIER Quarterly Predictions

New Zealand’s economic growth softened in the year ending March 2018 and is expected to reduce in the following 12 months – at slightly more than 2.5 per cent.

Net migration is slowing, driven by an increase in departures as tightening migration policy swells the number of failed residency visa applications and a clampdown on fraudulent student visa applications reduces arrivals. In 2018, tourist numbers grew 3.5% on the year prior, for the most part coming from additional Australian, US and Chinese visitors. Chinese visitor numbers are expected to reduce because of tensions between the two countries around the 5G mobile network upgrade. The New Zealand Government Communications Security Bureau (GCSB) considers the Chinese 5G provider Huawei poses "significant national security risks" and has banned Huawei from providing 5G network equipment.

While employment growth has softened, the labour market continues to remain tight and the unemployment rate is expected to fall to around 4% in the medium term.

The Reserve Bank (RBNZ) eased LVR (loan-to-value ratio) restrictions for property investors, reducing deposit requirements. This is expected to drive demand for the cheaper housing stock, placing them in direct competition with first home buyers.

Consumer confidence is steady and households remain buoyant about their financial situation.

A tight labour supply is causing some businesses to remain cautious about investment decisions and weak profitability is a common feature for many in business.

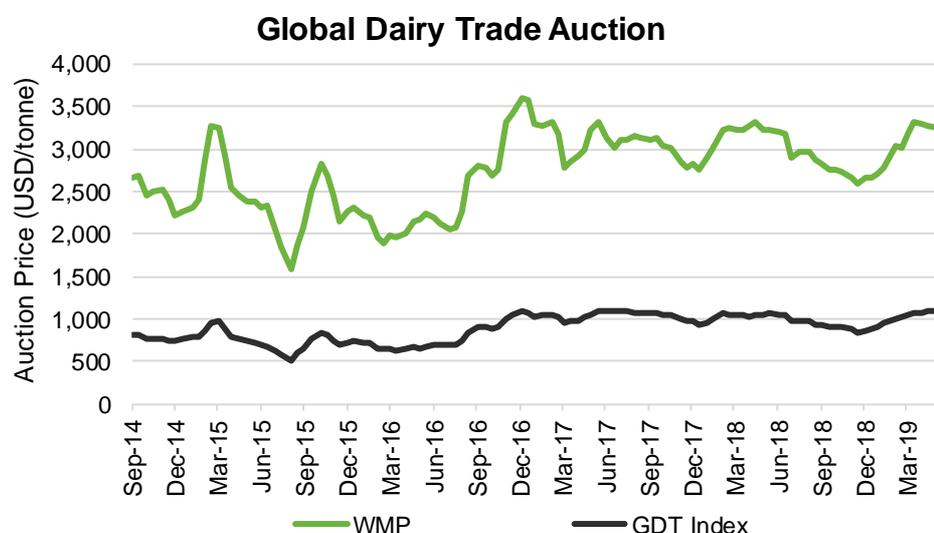
House prices appear to have plateaued in Auckland, although they continue to rise in other regions. This matches housing demand, which is growing outside Auckland. Residential building remains strong, but constrained by a lack

of capacity in the sector. The government's commitment to build affordable housing through the KiwiBuild programme may create further demand for residential builders.

Commercial building, which has recently been dominated by retail outlet refurbishments and new builds, remains strong, however lower business profitability has caused a fall in future commercial building commitments.

International dairy prices climbed as continuing dry conditions throughout New Zealand's dairying regions curtailed milk production. Returns to horticulture and meat remain elevated, and are expected to remain reasonably positive. Further regulatory constraints from government are expected to raise compliance costs for farmers. Rural debt continues to grow, underpinned by investments in horticulture and plantation forestry.

Figure 2



Source: Global Dairy Trade, Beef + Lamb New Zealand Economic Service

Consumer Prices

Table 2

	Consumer Prices					
	Annual Average % Change, March Year					
	2015	2016	2017	2018	2019f	2020f
	%	%	%	%	%	%
US	+1.2	+0.4	+1.6	+2.1	+2.4	+2.0
UK	+1.1	+0.1	+1.1	+2.8	+2.4	+2.1
Euro zone	+0.2	+0.1	+0.7	+1.4	+1.9	+1.6
Japan	+3.0	+0.2	-0.1	+0.7	+0.9	+0.9
China	+1.7	+1.7	+1.9	+1.8	+2.1	+2.4
South Korea	+1.2	+0.7	+1.3	+1.7	+1.7	+1.8
Australia	+2.1	+1.5	+1.5	+1.9	+1.9	+2.3
Trading Partners	+1.5	+2.0	+3.5	+1.7	+1.9	+1.9
New Zealand	+0.9	+0.3	+1.1	+1.6	+1.8	+1.8

Note: The Euro zone consists of 15 Member States: Belgium, Germany, Ireland, Greece, Spain, Cyprus, Malta, France, Italy, Luxembourg, the Netherlands, Austria, Portugal, Finland and Slovenia.

Trading Partners covers those countries that account for about 85% of New Zealand's total merchandise trade.

f forecast | Source: Statistics New Zealand, NZIER Quarterly Predictions

Inflation remains stable at under 2%. A higher value NZD constrained the price of imported goods – mainly apparel and vehicles – while capacity limitations around housing-related costs pushed non-tradable inflation higher.

Wage inflation has been slow to increase despite the tightening labour conditions, but this is expected to change as public sector wage growth is forecast to increase and provide a lead for the private sector. Those businesses that employ a workforce of low-waged employees have found margins tighten as additional cost from legislated increases in the minimum wage have not been able to be passed onto customers. Typically these employees are in the manufacturing and retail sectors of the economy.

In the early part of 2019, the RBNZ restated its neutral stance and signaled that the OCR (official cash rate) would not be raised until mid 2021. However, in May 2019, it reduced the OCR to 1.5% p.a. – the lowest level in at least two decades. Debt remains very high as a proportion of disposable income, which has been facilitated by very low mortgage rates. International risks to the New Zealand economy bring a degree of caution to the reinstatement of more “normal” interest rates for the RBNZ. This outlook by the RBNZ is expected to ease the value of the NZD over the next couple of years.

Interest Rates

Table 3

	Short-term Interest Rates					
	% p.a., March Year					
	2015	2016	2017	2018	2019f	2020f
	%	%	%	%	%	%
US	0.1	0.0	0.2	0.5	1.4	2.2
UK	0.3	0.4	0.5	0.0	0.3	0.8
Euro zone	0.3	0.1	-0.1	-0.4	-0.3	-0.2
Japan	0.1	0.1	0.1	0.1	0.1	0.1
Australia	2.6	2.8	2.4	1.8	1.8	2.0
New Zealand	3.6	2.6	2.0	1.9	1.9	1.9

Note: The Euro zone consists of 15 Member States: Belgium, Germany, Ireland, Greece, Spain, Cyprus, Malta, France, Italy, Luxembourg, the Netherlands, Austria, Portugal, Finland and Slovenia.

End of March year, except New Zealand, average for March quarter.

f forecast | Source: Reserve Bank of New Zealand, NZIER Quarterly Predictions

A slowdown in global growth and the threat of a trade war between China and the US have tempered conditions for interest rate increases. This has provided support to stock markets.

The trade spat between China and the US is beginning to be felt by industry in the US and the Federal Reserve revised down, in February, its growth projections for the US economy. This resulted in a halt to interest rate increases and a reduced expectation of more increases in the future (out to 2021). The Federal Reserve reduced by .25 percentage points its medium and long-term funds rates.

The People’s Bank of China (PBoC) appointed a new governor, Yi Gang, in March 2018. Yi provided a step change from previous governors by becoming more forthcoming. He hosted the bank’s inaugural briefing to explain monetary and economic data. The PBoC has stepped away from currency intervention, allowing the China’s currency – the renminbi – to fluctuate by 10% against the USD. Interest rates were raised by the PBoC in March 2018 and it has since then cut rates four times.

The Bank of England (BoE) raised interest rates to 0.75 per cent in 2018, citing concerns over external inflationary pressures and a flagging currency. In the face of an uncertain Brexit outcome and the headwinds of faltering global growth, the BoE signalled a cautious approach to interest rate rises in the foreseeable future.

The Bank of Japan (BoJ) has held rates at 0.1%, in line with other economies and with the likelihood of reducing GDP growth.

The European Central Bank (ECB) is expected to keep interest rates close to zero, and has implemented additional stimulus into the banking system. The president of the ECB recently stated that there had been a “sizable moderation in economic expansion that will extend into the current year.”

Exchange Rates

Table 4

Sep Year	NZ Dollar Exchange Rates		
	Annual Average		
	USD	GBP	EUR
2016-17	0.71	0.56	0.65
2017-18	0.70	0.52	0.59
2018-19f	0.66	0.51	0.58
2018-19f % change	-5.7%	-1.9%	-1.7%

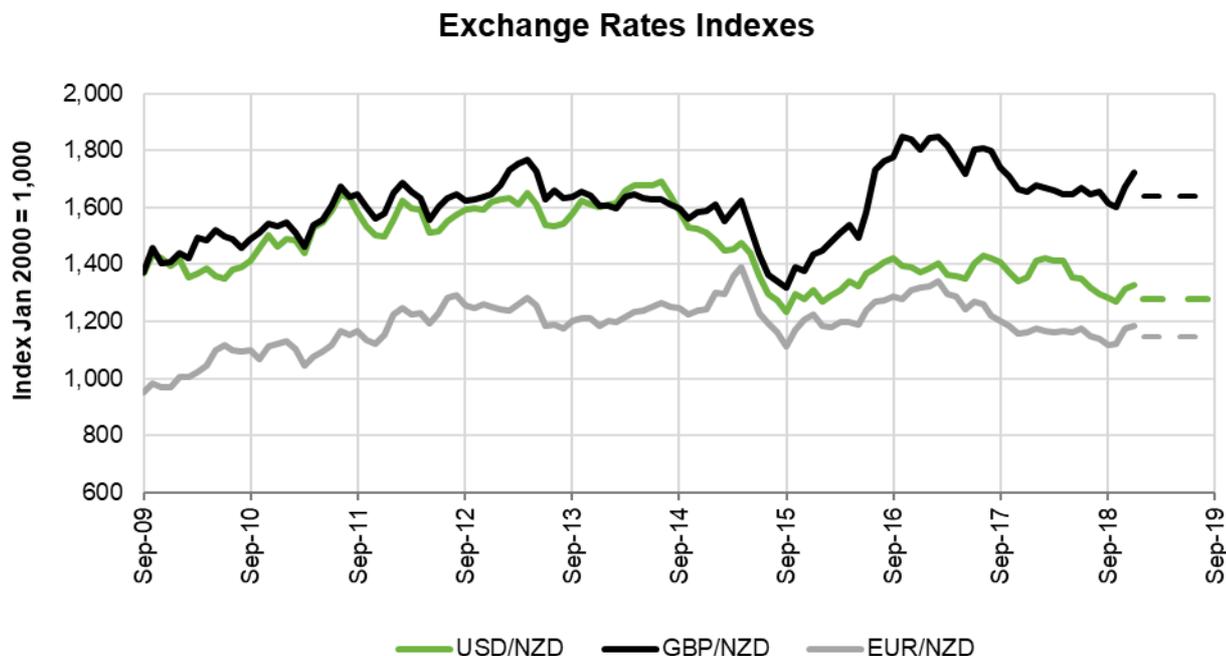
f forecast | Source: Beef + Lamb New Zealand Economic Service, Reserve Bank of New Zealand

Table 4 shows the annual average exchange rates for the three major currencies in which New Zealand meat and wool products are traded.

For the year to September 2019, the New Zealand dollar (NZD) is estimated to weaken against all major currencies in which New Zealand red meat is traded: the USD, euro (EUR) and sterling (GBP).

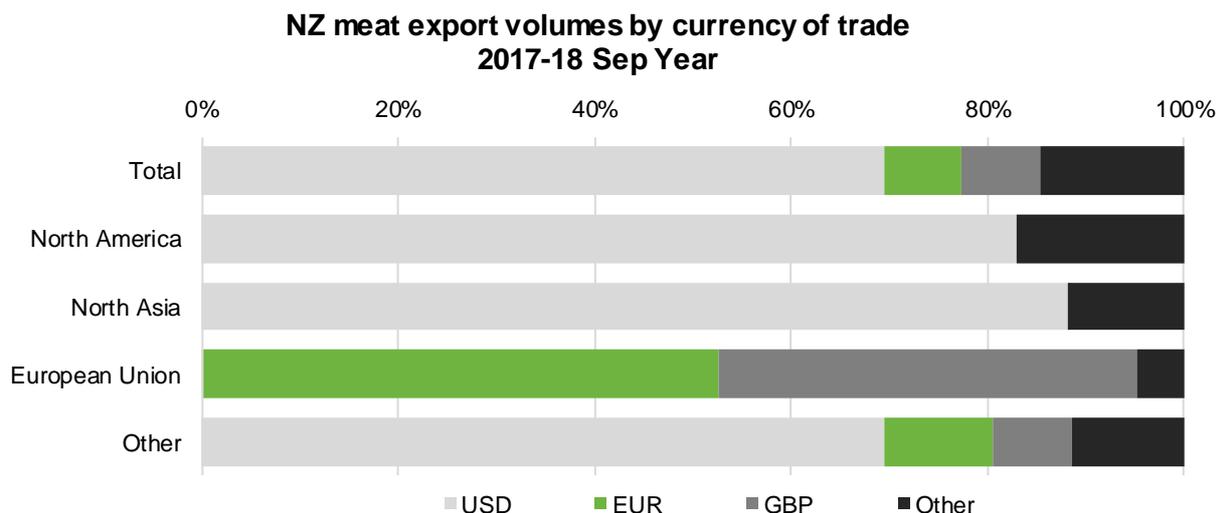
Figure 3 indicates a reasonably steady exchange rate for 2017-18, however at the start of 2019 the value of the NZD rose markedly, driven by poorer growth prospects in the northern hemisphere and an uncertain outcome of Brexit.

Figure 3



Source: Beef + Lamb New Zealand Economic Service, Reserve Bank of New Zealand

Figure 4



Source: Beef + Lamb New Zealand Economic Service, New Zealand Customs

Exchange rates have a significant impact on meat export receipts because most New Zealand meat export transactions are denominated in foreign currencies.

Figure 4 shows the volumes of New Zealand meat (beef, veal, lamb and mutton) export by currency in which the trade is denominated. In the year ending September 2018, 70 per cent of meat export volumes were reported as being traded in USD-denominated contracts, 8 per cent in EUR and 8 per cent in GBP. Understandably, the currency of trade usually depends on the region of the trade.

As a reference, in 2017-18, 35 per cent of lamb exports were to the European Union and 42 per cent was to North Asia. Whereas for beef, 49 per cent was exported to North America and 38 per cent to North Asia.

In 2017-18, 52 per cent of the meat exports to the EU were traded in EUR and 43 per cent in GBP, while 83 per cent of the meat exports to North America were traded in USD. Nearly 88 per cent of trade with North Asia was denominated in USD. Nevertheless, importers effectively purchase USD using their own currency, so as the value of Asian currencies adjusts so does the value of the product to the importer. This is particularly the case when the Chinese currency (the yuan) moves relative to the USD.

Exchange Rate Sensitivity – 2018-19

Table 5

NZD Exchange Rates						Exchange Rate Change from USD 0.66	
						to USD 0.59	to USD 0.73
USD	0.59	0.63	0.66	0.69	0.73	-10%	+10%
GBP	0.46	0.48	0.51	0.54	0.56	-10%	+10%
EUR	0.52	0.55	0.58	0.61	0.64	-10%	+10%
Farm-Gate Prices Received							
\$ / head							
Lamb	160	149	139	131	123	+14.4%	-11.8%
Mutton	135	124	115	106	98	+18.0%	-14.7%
Steer/Heifer	1,679	1,570	1,471	1,382	1,301	+14.1%	-11.6%
Cow	902	843	790	742	699	+14.1%	-11.6%
Bull	1,808	1,691	1,585	1,489	1,401	+14.1%	-11.6%
All Beef	1,395	1,304	1,222	1,148	1,081	+14.1%	-11.6%
¢ / kg							
Lamb ¹	852	795	745	699	657	+14.4%	-11.8%
Mutton ¹	524	482	444	410	379	+18.0%	-14.7%
Steer/Heifer	608	568	533	500	471	+14.1%	-11.6%
Cow	456	426	400	375	353	+14.1%	-11.6%
Bull	599	560	525	493	464	+14.1%	-11.6%
All Beef	558	521	489	459	432	+14.1%	-11.6%
Fine ²	2,129	1,981	1,848	1,727	1,618	+15.2%	-12.5%
Medium ²	837	778	726	679	636	+15.2%	-12.5%
Crossbred ²	304	283	264	247	231	+15.2%	-12.5%
All Wool ²	451	419	391	365	342	+15.2%	-12.5%

1 includes wool and skin 2 wool ¢/kg greasy | Source: Beef + Lamb New Zealand Economic Service

Table 5 shows farm-gate prices under five different exchange rate scenarios. This approach provides an indication of the impact of exchange rate volatility on the prices paid to farmers.

The shaded column represents the forecast exchange rates for the major currencies for 2018-19 and the related farm-gate prices used to derive the base estimates of FOB export receipts and farm revenue in this report. The four other scenarios show the impact on farm-gate prices of variations of ± 5 and ± 10 per cent in the exchange rates for the USD, GBP and EUR.

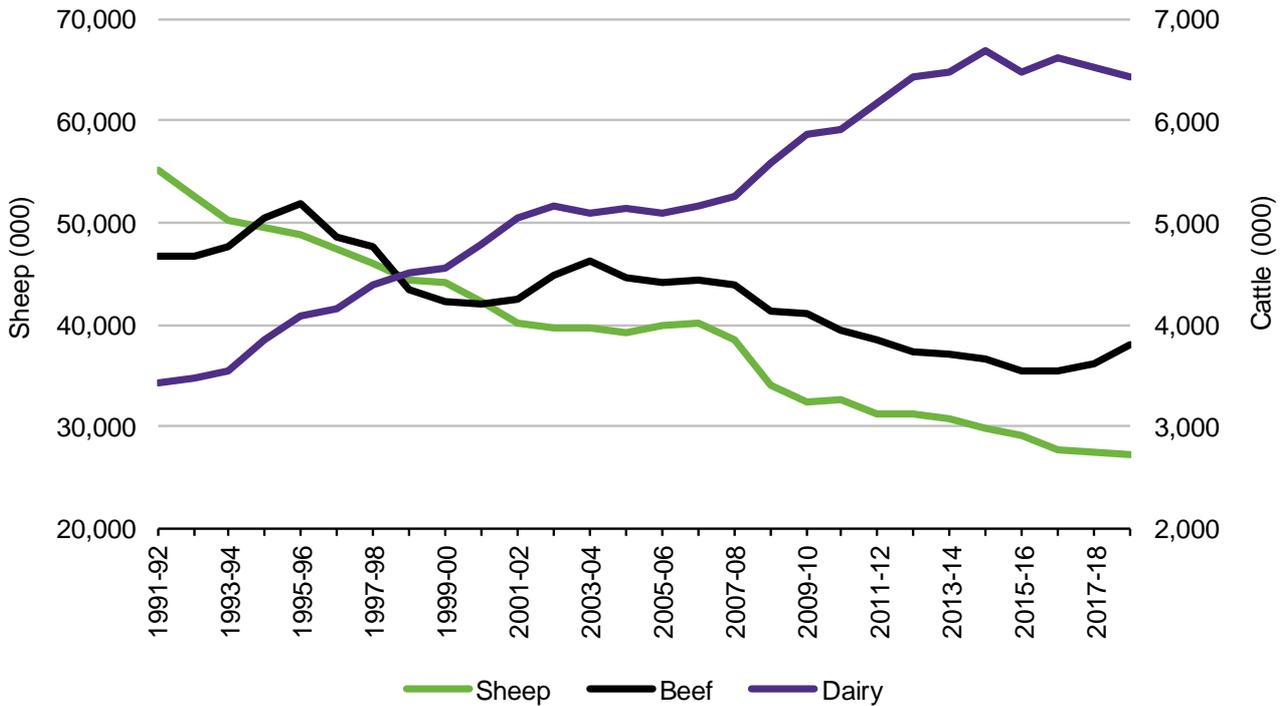
Meat and wool production is seasonal with the majority of production sold from late November through to June. This means that the value of the NZD during this period is crucial to farmers and export companies.

Exchange rate movements have a significant leveraged effect on farm-gate prices. A 10 per cent increase in the NZD against the USD – from 0.66 to 0.73 – and the associated cross rates against the GBP and the EUR decreases the average lamb price received by farmers by 11.8 per cent. Alternatively, were the NZD to depreciate by 10 per cent – from 0.66 to 0.59 against the USD – the farm-gate lamb price would increase by 14.4 per cent.

The greater leverage of the exchange rate on the farm-gate price assumes that value added to the product remains constant from the farm-gate to shipping of product for export. Therefore, a greater proportion of the change in the total export price feeds back to the farm-gate price.

Livestock Numbers

Figure 5



Source: Beef + Lamb New Zealand Economic Service | Statistics New Zealand

Sheep

Total sheep numbers at 30 June 2018 were provisionally 27.25 million head, decreasing 1.0 per cent on the previous season. This was due to a decrease in breeding ewes (-3.6%), which was moderated by a lift in the number of hoggets that were carried over balance date compared with the previous season.

North Island sheep numbers decreased 2.2 per cent (296,000 head) to 13.3 million. Overall, a decrease in breeding ewe numbers was moderated by a lift in ewe hoggets to ram. In the North Island, the only region where there was an increase in the number of hoggets mated was the East Coast. High mutton prices enabled farmers to transition to younger ewes at a lower net cost.

South Island sheep numbers were almost static (+0.2%) with the population remaining just over 13.9 million. This was driven by a lift in sheep numbers in Marlborough-Canterbury (+3.0%) offsetting the decrease in numbers outside this region, particularly Southland (-1.8%) where a poor spring compelled farmers to sell more lambs store and reduce the number of hoggets retained.

This situation of deep culling is not expected to be repeated in the year to 30 June 2019. Expectations are for the New Zealand sheep flock to 30 June 2019 to remain almost static (+0.5%).

Cattle

Total beef cattle numbers at 1 July 2018 were provisionally 3.80 million head, up 5 per cent on the previous season. This was driven by an increase in all classes of beef cattle in both the North and South Islands. Total dairy cattle numbers declined by 1.4 per cent to 6.44 million head. The number of dairy weaners increased by 4.4 per cent, with this year being the largest retention of weaner heifers in over a decade. Dairy cows (including in-calf heifers) and other dairy cattle reduced by 2.1 per cent and 5.3 per cent respectively.

North Island beef cattle numbers increased by 2.5 per cent to 2.64 million head. Beef cows and replacement heifers had the greater increase in numbers – up by 5 per cent. Generally, older cattle were retained on farms to increase liveweight and boost margins. Regionally, cattle numbers declined in western North Island, but increased in eastern North Island, Waikato and northern North Island. In the North Island, total dairy cattle numbers reduced by 1.1 per cent to 3.91 million animals. The North Island carries 69 per cent of the beef cattle herd and 61 per cent of the dairy herd.

South Island beef cattle numbers increased 11.1 per cent to 1.16 million head. Again, the increase was driven by good conditions in Marlborough and Canterbury where cattle numbers lifted by 13.4 per cent. In the southern regions of Otago and Southland beef cattle numbers increased by 7.3 per cent overall. The exception was the number of weaner cattle retained, which decreased by 1.6 per cent. Dairy cattle numbers reduced by 1.9 per cent in the South Island to 2.52 million head. The South Island carries 31 per cent of the beef cattle herd and 39 per cent of the dairy herd.

Expectations are for both the beef and dairy cattle herds to be unchanged at 30 June 2019.

Table 6

	Livestock numbers				
	million head				
	Breeding Ewes	Hoggets	Total Sheep	Beef Cattle	Dairy Cattle
30 June 2017	17.76	8.88	27.53	3.62	6.53
30 June 2018p	17.11	9.23	27.25	3.80	6.44
17-18 to 18-19 % change	-3.6%	3.9%	-1.0%	5.0%	-1.4%

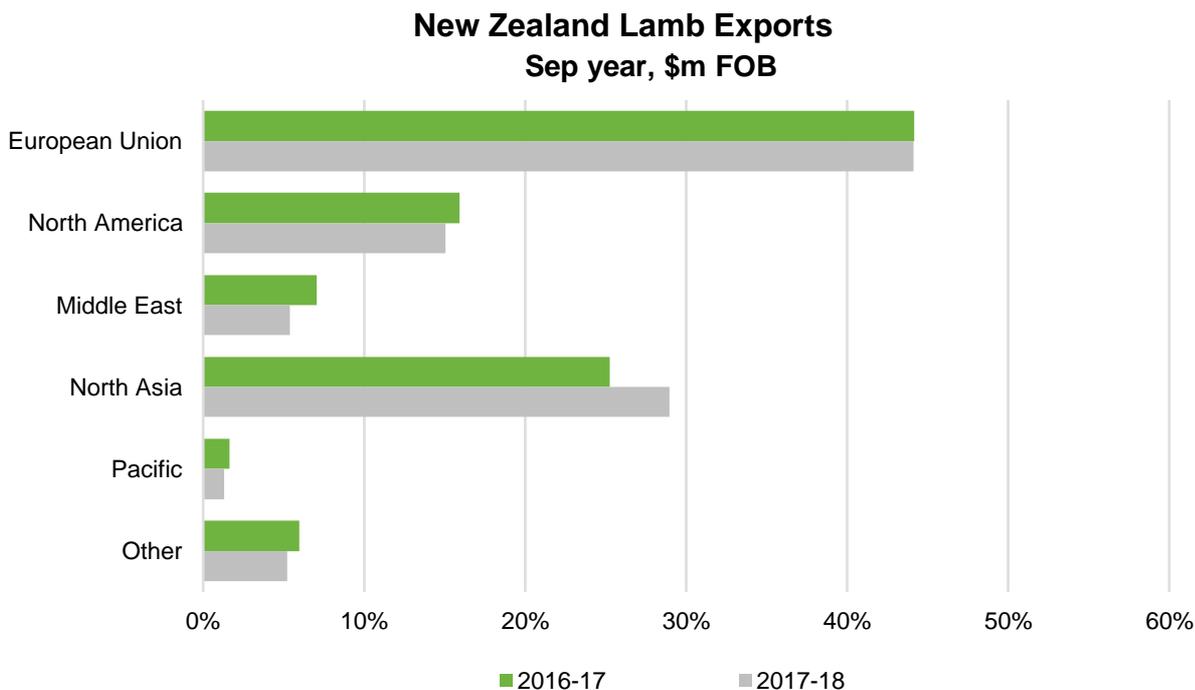
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Source: Beef + Lamb New Zealand Economic Service | Statistics New Zealand

Lamb and Mutton Exports

Lamb

Figure 6



Source: Beef + Lamb New Zealand Economic Service, New Zealand Customs, New Zealand Meat Board

2018-19

Total lamb receipts under the USD0.66 exchange rate scenario are expected to be up 0.3 per cent to \$3.39 billion FOB in 2018-19. This will be the second year in a row that lamb exports exceed \$3 billion in nominal terms, and is largely driven by a forecast average value for lamb meat of \$10,360 FOB per tonne – up 2.7 per cent.

In 2018-19, the volume of New Zealand lamb exports is expected to decrease by 2.2 per cent as declining ewe numbers resulted in 0.7 per cent fewer lambs born, and fewer lambs available for processing (down 4.1 per cent), partly offset by higher carcasse weights, which are expected to be up 2.2 per cent.

Gains in the value of lamb meat exports in 2017-18 are expected to be maintained in 2018-19. Steady demand and good in-market prices maintain values, with reducing supply underpinning this result.

The proportion of total lamb exports from meat eased by one percentage point to 93 per cent. An increase in demand for co-products (offal and skins) elevated year-on-year value by 12.8 per cent.

2017-18

In the year ended September 2018, total lamb receipts (meat and co-products) increased 24 per cent to \$3.355 billion FOB.

Total New Zealand lamb meat exports were up 6.1 per cent to 312,930 tonnes shipped weight in the year ending September 2018. In addition, the average value was up 17 per cent to \$10,086 FOB per tonne for 2017-18.

Receipts from co-products increased 18 per cent to \$199 million FOB, following a fall of 10 per cent in 2016-17. At \$80 million, lamb skins accounted for about 40 per cent of total co-product receipts in 2017-18, but were down 5 per cent. Total receipts for offals contributed significantly to increased co-product returns, which were up 42 per cent to \$119 million. The proportion of lamb export value as meat (i.e. not from co-products) was steady at 94 per cent of total lamb value.

Within the six per cent increase in total lamb meat exports, the proportion of total exports to North Asia increased by 22 per cent by volume and 18 per cent by value, growing by over 23,000 tonnes and \$279m respectively. Exports to the Middle East dropped by 18.3 per cent in volume but only 4.4 per cent in total value. Lamb meat shipments to North America fell by 3.4 per cent, however the value of those exports increased by 18 per cent. The EU imported an additional 5,447 tonnes of lamb from New Zealand (+5.2%) paying an additional \$280m (+24.8%).

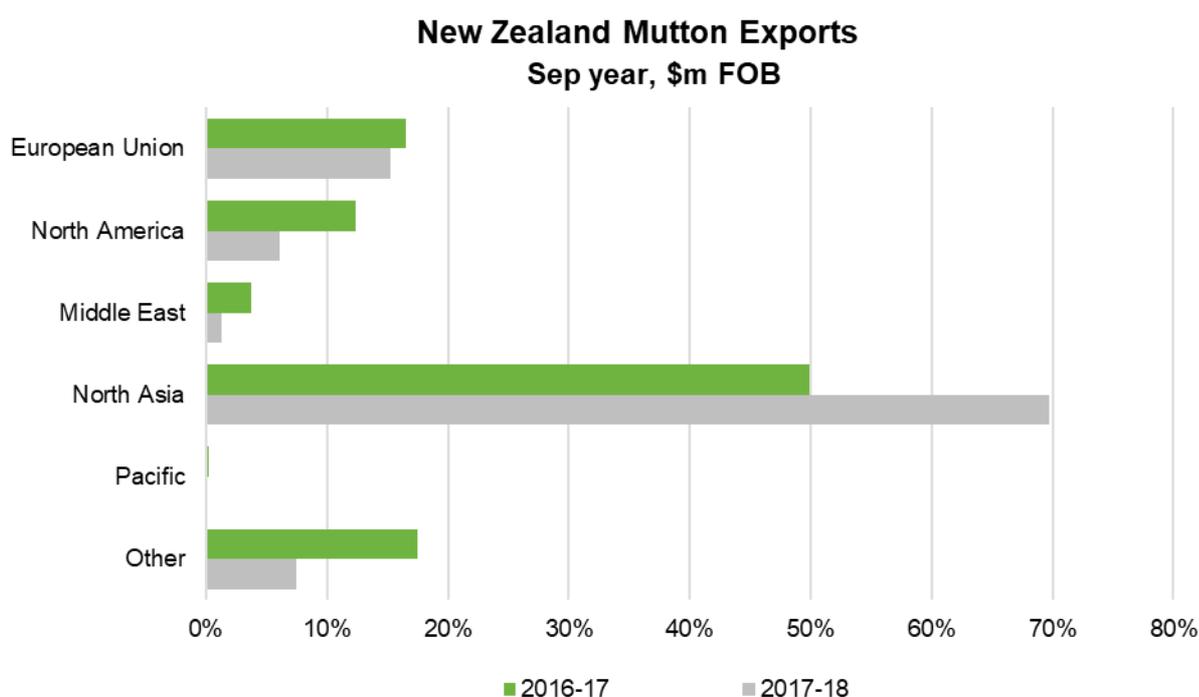
Table 7

Sep Year	Lamb meat			Co-Products \$m FOB	Total Lamb \$m FOB	Lamb Meat %
	000 tonne	\$ / tonne	\$m FOB			
2014-15	302	8,470	2,559	256	2,815	91%
2015-16	303	7,907	2,397	187	2,584	93%
2016-17	295	8,603	2,538	168	2,706	94%
2017-18	313	10,086	3,156	199	3,355	94%
2018-19e	306	10,360	3,169	224	3,393	93%
2018-19e % change	-2.2%	+2.7%	+0.4%	+12.8%	+1.1%	

e estimate | Source: Beef + Lamb New Zealand Economic Service, Statistics New Zealand

Mutton

Figure 7



Source: Beef + Lamb New Zealand Economic Service, New Zealand Customs, New Zealand Meat Board

2018-19

It is expected that the average value of mutton will increase by 5.3 per cent to \$6,800 FOB per tonne. Total mutton exports are forecast to drop 13.4 per cent as the reductions in the ewe flock effectively end in response to improved prices for lambs and a favourable growing season for most in the country.

Returns from co-products are expected to be down 9.4 per cent to \$139 million FOB as returns from offals are expected to decrease by 10.9 per cent, and skins by 4.1 per cent. This will maintain mutton meat at 80 per cent of the total mutton export receipts.

2017-18

In 2017-18, New Zealand's total mutton exports were up 18 per cent on the previous season to 96,200 tonnes shipped weight. The average value of New Zealand's total mutton exports increased 23 per cent to \$6,500 FOB per tonne, with total value of mutton exported at \$625 million FOB, up 46 per cent. The net year-on-year increase in mutton value was \$196 million, with exports to North Asia increasing by \$220 million and reductions in North America and the Middle East offsetting these gains by \$23 million. The EU imported an additional \$24 million of mutton, with all markets other than those previously mentioned contracting by \$28 million.

New Zealand's exports of mutton to North Asia increased by over 60 per cent from 2016-17, accounting for 76 per cent of the total mutton exports. North Asia was the only market to increase by volume. Shipments to the EU declined by almost 8 per cent, however the total value of the mutton exported increased by 34 per cent.

The value of mutton offals and skins increased by 28 per cent, with most of this value increase coming from offals.

Table 8

Sep Year	Mutton meat			Co-Products \$m FOB	Total Mutton \$m FOB	Mutton Meat %
	000 tonne	\$ / tonne	\$m FOB			
2014-15	86	5,214	447	157	604	74%
2015-16	83	4,581	380	132	512	74%
2016-17	81	5,247	424	120	544	78%
2017-18	94	6,460	606	154	760	80%
2018-19e	81	6,801	553	139	692	80%
2018-19e % change	-13.4%	+5.3%	-8.8%	-9.4%	-8.9%	

e estimate | Source: Beef + Lamb New Zealand Economic Service, Statistics New Zealand

Lamb and Mutton – International Situation

Overview

A combination of population expansion and growth in household wealth continue to drive international demand for sheepmeat, particularly in developing nations. When compared to other meat proteins such as beef, pork and poultry, lamb remains a relatively expensive niche product and a small proportion of meat consumption. Global growth in the production of sheepmeat is well below those of other meats, and is expected to make up less than five per cent of the global meat supply over the next ten years. China, Australia, and New Zealand have the greatest influence on the global sheepmeat trade, with Australia and New Zealand being the two leading global exporters, and China being the world's largest importer, producer and consumer of ovine meat.

Australia

Drought continues to influence Australian sheep farmer decision making, with the ongoing dry conditions reducing feed reserves and driving an increase in price for supplements. 2017-18 was a record year for sheepmeat exports from Australia, and a sharp fall is expected in 2018-19 provided adequate rainfall is received.

Due to tight feed conditions, ewe scanning results were below average after mating, with barren ewes quickly being sent for processing. Annual mutton production is expected to fall to 188,000 tonnes carcass weight, down 16 per cent. The Australian ewe flock is expected to reduce to 65.3 million head at June 2019, down from 67.7 million head a year earlier (-3.7%).

Australian lamb production in 2019 is expected to decline by 7 per cent to 475,000 tonnes compared to 2018's record result, with exports trending higher as international prices outperform the domestic market. The average lamb carcass weight, which is expected to be one per cent lighter at 22.4kg per head, is the main driver for the reduced lamb production.

Exports of Australian lamb increased to 55 per cent of total lamb production in 2017-18, up from 44 per cent in 2016-17. As domestic prices reached record levels, local consumption eased, however Australia is still one of the largest global consumers of sheepmeat per head.

The average export value per tonne for sheepmeat is expected to be supported by the strong international demand and tighter supply because Australia and New Zealand account for approximately 90 per cent of international sheepmeat trade, excluding intra-EU trade. The concurrent decline of ovine meat production from these two countries will underpin world values for this product.

In 2019, the definition of a lamb in Australia will change to align with New Zealand's definition. The change will be to "any young sheep under 12 months of age or which do not have incisor teeth in wear", according to Meat & Livestock Australia (MLA). While this will have little impact on total numbers processed, a higher proportion of the total will meet the lamb classification than currently occurs.

China

China is a powerhouse of sheepmeat consumption and production, devouring about 32 per cent of global production and generating 30 per cent of global production.

China's sheep population is around 170 million head, of which about 70 per cent is on farms with fewer than 100 sheep. However, there is a growing trend of "mega farms", which currently hold only around five per cent of China's sheep population. Currently remote rural areas such as Inner Mongolia are the traditional sheep farming areas in China. Often, subsistence agriculture is practiced and production is variable and highly dependent on markets and weather conditions.

One of the Chinese government's objectives is to eradicate poverty, and it sees sheep production as a way of achieving this. It is expected that the government will increasingly become involved with enterprises and grant larger subsidies to progressive producers.

China is expected to move away from smaller farms towards "mega farms" in which sheep are housed completely inside and are fed a total mixed ration based on silage. Populations on these "mega farms" are often in the tens of thousands with expansion to units containing hundreds of thousands of sheep currently in the short term pipeline. The Chinese government is also spending considerable effort on improvements to genetics, health, nutrition and cropping.

African Swine Fever (ASF) has decimated pig production, with a short-term spike in production from affected producers that will eventually lead to a shortage as the disease is brought under control and farmers are able to re-stock farms. ASF, along with an increased middle class in China, has popularised the eating of sheepmeat in China, and the expansion on "mega farms" has shorted the local market, forcing up prices and increasing imports of sheepmeat.

European Union

The UK produces around 40 per cent of the EU sheep meat, and, as Brexit advances, sheepmeat production from this country continues to decline, with production down around four per cent. However, for some of the other EU members, production increased. The number of lambs processed in Ireland and Spain was up two per cent and Spanish sheepmeat production was up three per cent.

The volume of New Zealand lamb exported to the EU increased by five per cent from 2017 to 2018. The value of these exports jumped by 19 per cent or just over \$2,000 per tonne FOB. Sheepmeat exports to the EU from New Zealand reduced by 8 per cent, however the average value was up 45 per cent to \$11,845 NZD per tonne.

North America

North America is the third largest market for New Zealand, both by value and volume. The average US per capita consumption of lamb is low at around 0.4kg. Compared to 2017, lamb sales into North America increased by 19 per cent in value in 2018, a lift of over \$2,700 per tonne. Volume to this market eased by three per cent or about 1100 tonnes.

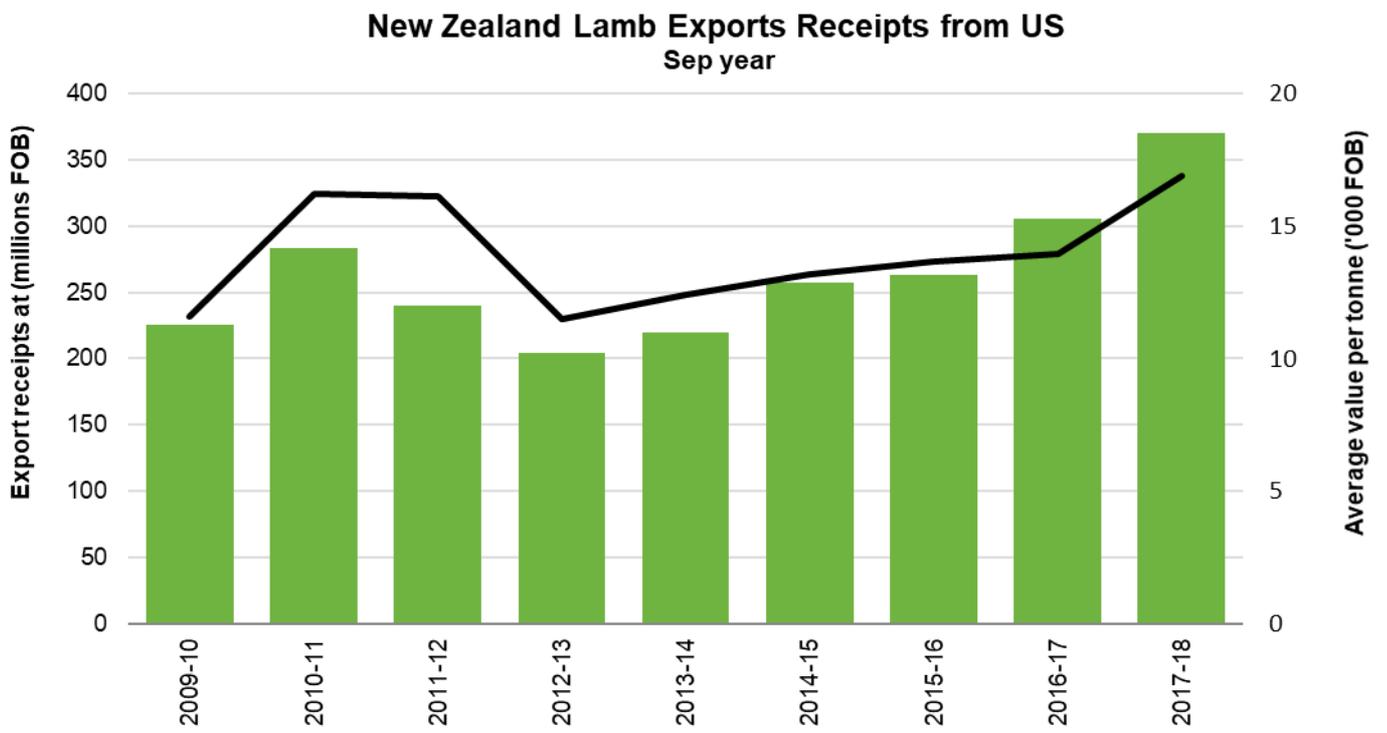
The average value of lamb exports to the US surged 17 per cent, or over \$2,900 per tonne, with volumes virtually static on the year before.

Figure 8



Source: Beef + Lamb New Zealand Economic Service, New Zealand Customs

Figure 9

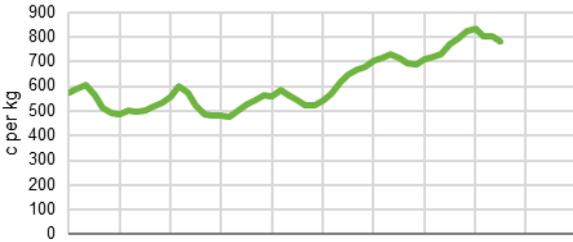


Source: Beef + Lamb New Zealand Economic Service, New Zealand Customs

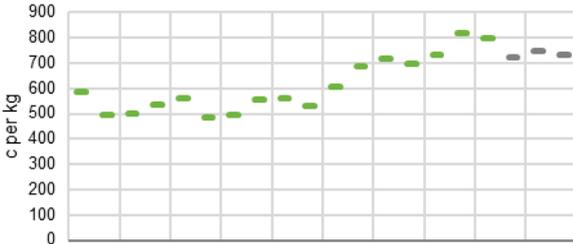
Lamb Price – Farm-gate

Figure 6

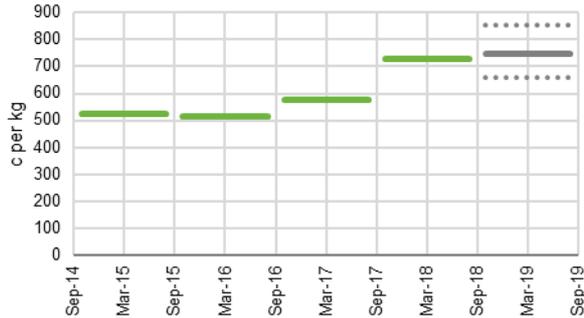
Monthly



Quarterly



Annual



Source: Beef + Lamb New Zealand Economic Service

Table 9

All Class Weighted Schedule

Year ending September - Annual average

	Lamb		Mutton	
	\$ per head	c per kg	\$ per head	c per kg
2010-11	118	667	57	229
2011-12	114	623	92	382
2012-13	85	457	95	371
2013-14	100	556	61	243
2014-15	94	514	77	303
2015-16	93	517	67	269
2016-17	106	580	57	226
2017-18	134	722	74	288
2018-19e	139	745	115	444

e estimate | Source: Beef + Lamb New Zealand Economic Service

Table 10**All Class Lamb Price Sensitivity Analysis**

Exchange Rate	Lamb price		
	\$ per head	c per kg	
Low NZD			
USD	0.59		
GBP	0.46	160	852 High
EUR	0.52		
Mid NZD			
USD	0.66		
GBP	0.51	139	745 Mid
EUR	0.58		
High NZD			
USD	0.73		
GBP	0.56	123	657 Low
EUR	0.64		

Source: Beef + Lamb New Zealand Economic Service

Figure 6 shows monthly, quarterly and annual average prices for the all classes lamb to the end of September 2019.

Three exchange rate scenarios are provided in the outlook for 2018-19 because of the volatility in exchange rates. The three scenarios use annual average exchange rates of USD0.59, USD0.66 and USD0.73 and the associated cross rates against the GBP and the EUR.

At the mid-exchange rate of USD0.66, the forecast average lamb price of 745 cents per kilogram for 2018-19 is an increase of four per cent from the 2017-18 price of 722 cents per kilogram. The farm-gate price benefits from good in-market prices despite the forecast depreciation of the NZD against all the major trading currencies.

If the NZD depreciated in 2018-19 to average USD0.59 instead of USD0.66 then the farm-gate lamb price, with all other things being equal, would rise to 852 cents per kilogram, i.e. an 18 per cent increase compared with 2017-18. However, using the high exchange rate scenario of the NZD appreciating to average USD0.73, with all other things being equal, the lamb price would average 657 cents per kilogram, a 9 per cent fall on the average for the previous season. The different exchange rate scenarios in Table 10 highlight the leveraged effect of the exchange rate on the lamb price to farmers.

Monthly and quarterly prices are used to indicate the variation in prices within the season. Historical data shows that prices tend to rise during the December quarter and then gradually decrease as the season progresses and as the number of livestock processed increases. By the end of the season, when numbers start to reduce again, prices tend to increase. In addition to historical quarterly prices, Figure 6 provides a forecast of the seasonal pattern of lamb prices in 2018-19.

Strong gains in the farm-gate price for lamb over late 2017 consolidated into 2018, and prices are expected to remain steady for 2018-19. Tighter supplies of both lamb and mutton, combined with good growing conditions for much of the summer resulted in delayed processing and strong competition between processors for the stock that has been coming forward.

At the mid-exchange rate of USD0.66, the annual average mutton price is estimated at 444 cents per kilogram in 2018-19, an increase of 54 per cent on 2017-18.

The strong prices for lamb and mutton in 2017-18 carried over into the start of 2018-19. Farmers have taken the opportunity to bring a higher number of young replacements into their flocks and cull more, older ewes as the price differential between these two classes of stock is at historically low levels.

Lamb and Mutton Production

Lamb

Table 11

Sep Year	Export Lamb Production			
	Lamb Crop million head	Slaughter million head	Carcase Weight kg	Production 000 tonne bone-in
2014-15	25.8	21.2	18.1	384.2
2015-16	24.6	19.9	18.3	364.9
2016-17	24.1	19.2	18.6	358.3
2017-18	24.7	19.9	18.6	368.9
2018-19e	23.2	19.0	19.0	360.6
2018-19e % change	-6.0%	-4.4%	+2.2%	-2.2%

e estimate | Source: Beef + Lamb New Zealand Economic Service, Statistics New Zealand, New Zealand Meat Board

The lamb crop for spring 2018 estimated at 23.2 million was down 6.0 per cent (-1.5m) on the final spring 2017 figure of 24.7 million from Statistics New Zealand (SNZ). Within the 23.2 million lamb crop, the number of lambs from hoggets, which is estimated at 1.1 million, is down on the previous spring's 1.3 million. The overall smaller lamb crop reflects the decline in the ewe flock (-3.6%) and the breeding ewe lambing percentage averaging 129.0 per cent, down 2.6 percentage points on the previous spring's 131.6 per cent, which is a record high.

The number of breeding ewes that were mated in autumn 2018 decreased by 2.1 per cent as higher international sheepmeat prices encouraged farmers to cull older ewes. The mating condition of ewes was generally good and lambing weather was mostly benign with the exception of a severe storm on the eastern North Island in mid-September 2018.

The number of lambs tailed in the North Island decreased an estimated 8.5 per cent to 11.1 million (-1.0m), reflecting fewer breeding ewes and a 4.2 percentage point decrease in the overall ewe lambing percentage – to 128.1 per cent.

The South Island lamb crop, which is estimated at 12.0 million, decreased 3.6 per cent on the previous spring. This reflects fewer ewes and the island's overall ewe lambing percentage down slightly at 129.8 per cent (-1.1 percentage points).

The number of lambs to be processed in export-approved premises in 2018-19 is forecast to decrease 4.4 per cent from the previous season to 19.0 million head. Good pasture levels on farms, elevated pricing and continued strong competition between processors are encouraging farmers to grow lambs to heavier weights. Ewes have been culled and more hoggets retained, reducing the expected total number of lambs processed. It is also expected that farmers will carry increased numbers of lambs over balance date for processing in early the following spring.

Export lamb production is expected to fall by 2.2 per cent to 360,600 tonnes carcass weight in the year ending September 2019. The fall in the number of lambs processed is partly offset by a record high average carcass weight approaching 19kg per head.

The outlook for 2019-20 is for a small decline in the number of lambs processed (around 1%) and a similar small decline in the average carcass weight (around 1%) resulting in a decrease in export lamb production of around two per cent.

Mutton

Table 12

Sep Year	Export Mutton Production		
	Slaughter million head	Carcase Weight kg	Production 000 tonne bone-in
2014-15	4.1	25.0	102.1
2015-16	3.8	25.1	96.4
2016-17	3.6	25.7	92.2
2017-18	4.0	25.8	102.5
2018-19e	3.3	26.8	88.8
2018-19e % change	-16.8%	+4.1%	-13.4%

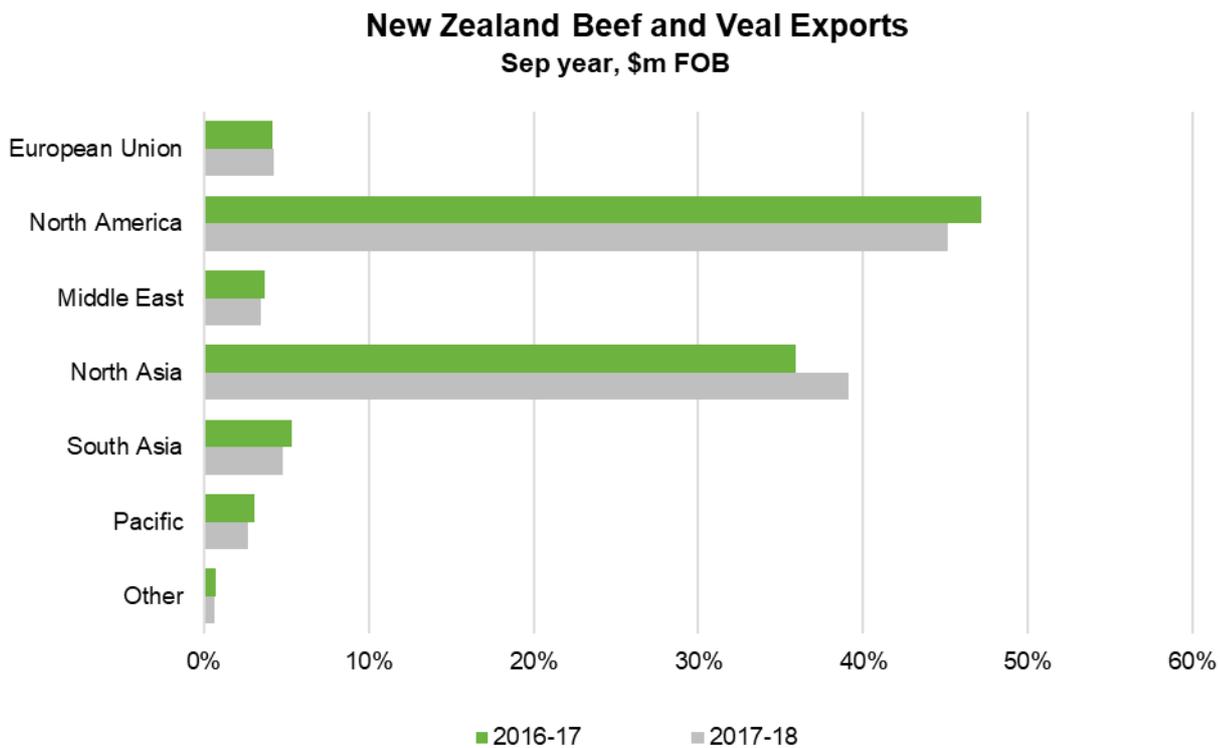
e estimate | Source: Beef + Lamb New Zealand Economic Service,
Statistics New Zealand, New Zealand Meat Board

The number of adult sheep processed in export-approved premises for the year ending September 2019 is estimated to decrease 16.8 per cent to 3.3 million head. Strong sheepmeat prices encouraged a heavy cull of ewes in 2017-18, with good on-farm pasture conditions enabling higher carcass weights. For the year to September 2019, carcass weights are expected to average 26.8kg, which is a historically high level. This increase in carcass weight does little to offset the anticipated decrease in the number of ewes processed, and production for 2018-19 is expected to drop 13 per cent to 88,800 tonnes carcass weight.

The outlook for 2019-20 is for a further, but much smaller, decline in the number of adult sheep processed (-2%) and a decrease in average carcass weight, which result in 4-5 per cent decrease in mutton production.

Beef and Veal Exports

Figure 7



Source: Beef + Lamb New Zealand Economic Service, New Zealand Customs, New Zealand Meat Board

2018-19

In the year ending September 2019, New Zealand beef and veal meat exports are expected to decrease 2.4 per cent to 421,000 tonnes shipped weight. This represents the ongoing decline from record high export volumes in 2014-15 and is driven by limited availability of beef cattle following dry conditions in some regions, and stabilisation of the dairy herd. Despite the declining trend in recent seasons, the 2018-19 beef and veal export forecast is still a historically high volume.

The average value of beef and veal meat exports is forecast to decrease 3.2 per cent to \$6,900 FOB per tonne in 2018-19. The forecast weakening of the New Zealand currency against currencies of New Zealand's major beef export markets somewhat offsets the slightly weaker in-market prices for frozen product – which is over 90 per cent of exports – while in-market prices of chilled exports dip slightly. Over 80 per cent of New Zealand's beef exports are traded in USD and the NZD is expected to depreciate by 5.7 per cent.

The value of co-product exports from beef and veal is expected to be unchanged in 2018-19 to \$552 million FOB.

Overall, total beef and veal export receipts are expected to decrease 4.7 per cent to \$3.455 billion FOB in 2018-19. Total beef and veal export earnings are expected to soften slightly, due to a lower volume of product and a reduction in average value per tonne.

2017-18

New Zealand total beef and veal export returns (including co-products) were \$3.096 billion FOB in 2017-18 – up 14 per cent. The increase in total returns was due to strengthening value per tonne and an increase in volume. The price was driven by higher prices from the US and increased volume into China.

The average value in 2017-18 increased to \$7,124 per tonne, up 2.6 per cent. This was historically strong as the price per tonne had not exceeded \$6,000 prior to 2014-15. The firm prices were driven by continued demand in the US and rising demand in China, which together account for 87 per cent of beef exports.

The volume of beef and veal exports in 2017-18 increased 11 per cent to 434,639 tonnes shipped weight.

The value of co-product (including hides and offal) exports lifted by 0.1 per cent to \$551 million FOB. The receipts achieved from co-products accounted for 16 per cent of the total value received from beef and veal exports.

North America remains the largest regional market for New Zealand's beef exports, taking 49 per cent of volume in 2017-18 – down two percentage points. Nearly 90 per cent of the meat sent to the US – 48 per cent of total beef

exports – is lean manufacturing cuts that are intended for blending with higher fat content trimmings. This relationship is complementary to US production and a driver of the strong increase of average value per tonne of exports in 2017-18 which increased by 2.1 per cent in value and strengthened 6.8 per cent by volume.

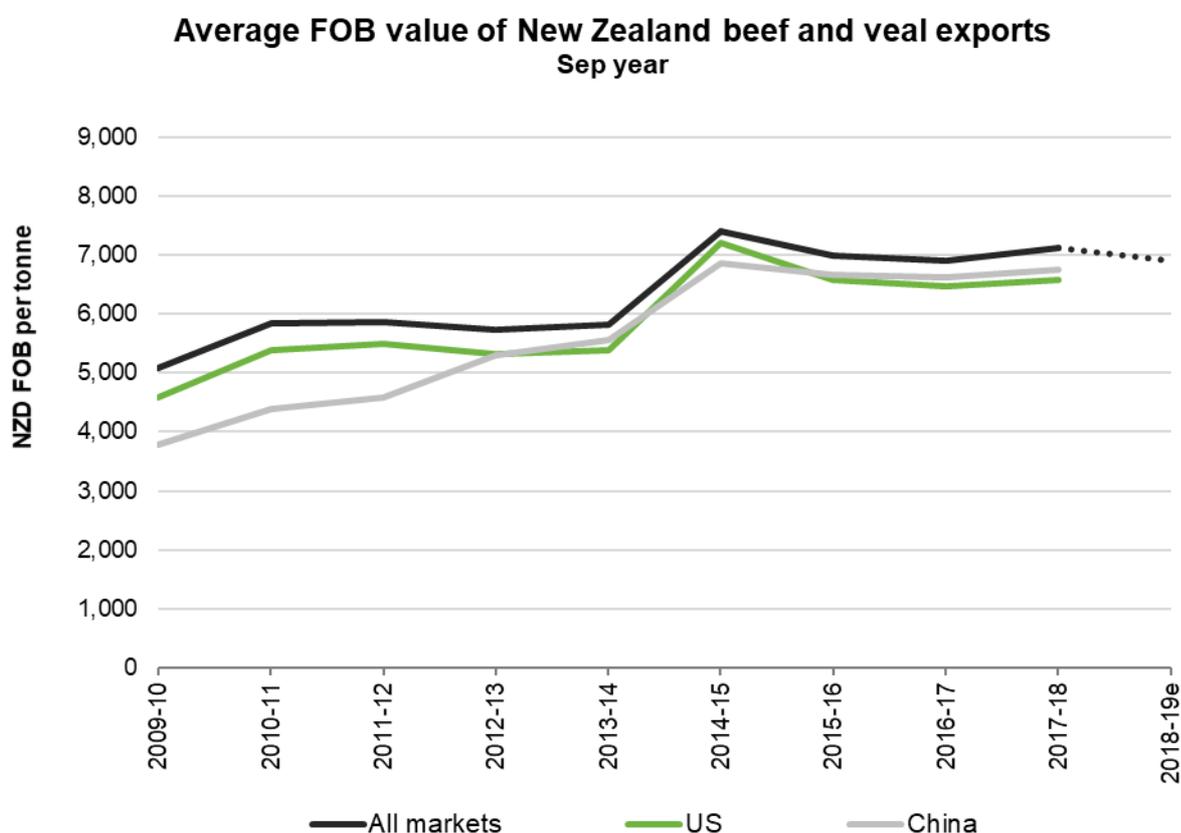
The proportion of total beef exports to China increased 20.4 percentage points in 2017-18 to 38 per cent, with the actual volume increasing by 28,371 tonnes, the total volume exported being 167,237 tonnes. The share of total beef exports to China has grown gradually in recent seasons. Approximately two-thirds of exports to China are secondary cuts, which receive a higher average value per tonne at FOB than manufacturing cuts. The average value of beef and veal exported to China increased by 3 percent to \$7,237 per tonne.

Table 13

Sep Year	New Zealand Beef and Veal Exports			Co-Products \$m FOB	Total Beef \$m FOB	Beef Meat %
	Beef and Veal Meat 000 tonne	\$ / tonne	\$m FOB			
2014-15	432	7,395	3,193	594	3,787	84%
2015-16	423	6,996	2,962	562	3,524	84%
2016-17	396	6,898	2,729	533	3,262	84%
2017-18	431	7,123	3,073	551	3,624	85%
2018-19e	421	6,898	2,903	552	3,455	84%
2018-19e % change	-2.4%	-3.2%	-5.5%	+0.1%	-4.7%	

e estimate | Source: Beef + Lamb New Zealand Economic Service, Statistics New Zealand

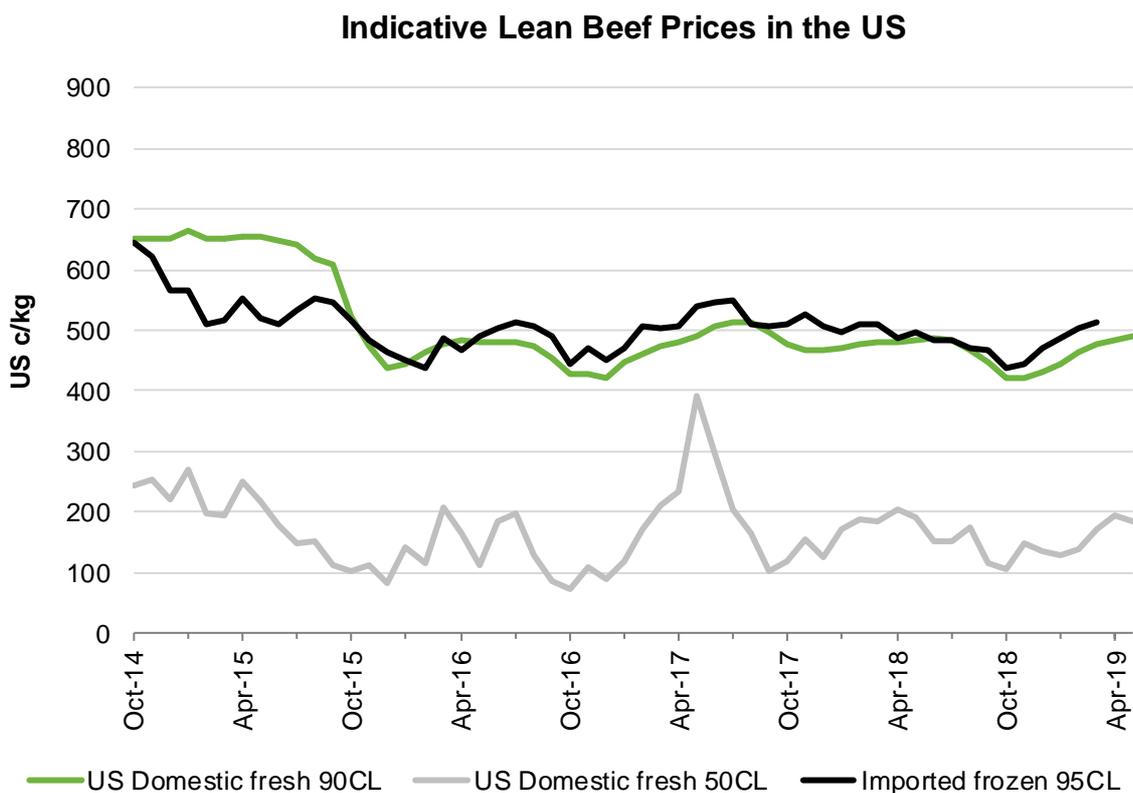
Figure 8



Source: Beef + Lamb New Zealand Economic Service, New Zealand Customs

Beef - International Situation

Figure 9



Source: Beef + Lamb New Zealand Economic Service, USDA AMS

Figure 9 shows indicative import prices for frozen 95CL (95% chemical lean) bull beef in the US in USD compared with US domestically produced fresh or chilled 90CL and 50CL. The USD is significant for New Zealand beef exports because North America and North Asia receive over 85 per cent of beef export volumes and the vast majority of trade is in USD for these markets.

Overview

In line with global beef consumption (which is predicted to swell by 1.2% per annum for the next three years) all major beef exporters are forecast to increase production, with the exception of Australia and India. Demand is growing as wealth improves for many middle class households, driving the ability to increase meat consumption. Customers are continually seeking to improve the type of meat that they eat and are concerned with traceability, animal welfare, food safety, sustainability, and the origin of the product. Total global production for 2019 is expected to be 57.2 million tonnes.

United States

The US is a driving force of beef production and consumption; it has a large herd, a huge feed grain supply and an organised feedlot industry that, when combined with the large scale processing, storage and shipping is able to contest markets effectively with other international producers.

US beef production is forecast to break records in 2019. Production will grow again in 2019, up by 3.6% to a record 11.5 million tonnes, of which almost 12 per cent will be exported. This is a record at 1.38 million tonnes of beef exports, a growth of 3 per cent year on year. The expansion of the US cow herd has begun to slow and it is expected that by 2020 beef production growth will have halted. Between 2015 and 2019 the US cow herd has increased by around 3 million head. The domestic market has strengthened as increased household incomes increase and unemployment falls, leading more affluent consumers to choose the more expensive animal protein of beef over other cheaper meats such as poultry and pork.

In 2018 the US export of beef increased by 10 per cent by volume, with gains being made in all of its top three export destinations; Japan up 6.6 per cent, South Korea up 35 per cent and Mexico up 7 per cent. The most outstanding gains in exports of US beef was to China, where exports increased by 134 per cent.

Nearly half of New Zealand's beef and veal exports went to North America in 2018, a rise in volume of 6.8% over the previous year. The value of the beef shipped also increased, by 2.1 per cent. North America remains New Zealand's biggest customer of export beef.

In 2012 the ABC News coined the term "pink slime" for a product that is manufactured by Beef Products Inc (BPI). The product, called lean finely textured beef, is beef trimmings, heated to 43°C, then spun in a centrifuge to remove the melted fat, the remaining meat is then exposed to gaseous ammonia or citric acid and the product flash frozen to -9°C. It is used as a filler for ground beef and/or to reduce the overall fat content of ground beef. BPI sued the ABC News for false claims about the product, seeking \$1.9b in damages, in 2017 ABC News settled the lawsuit for \$177m. In 2108 BPI made a submission for reclassification of its product, and in December 2018 the USDA Food Safety and Inspection Service (USDA FSIS) announced the products reclassification as simply "ground beef". It was determined by the USDA FSIS that the product meets the regulatory legal description of ground beef.

North Asia

The volume of exports to North Asia increased by over 20 per cent year on year to 2017-18, with an additional 28,371 tonnes shipped to the region. Exports to North Asia for 2017-18 totalled 167,237 tonnes. Per tonne pricing also increased strongly, lifting by 24 per cent, an increase of \$234 per tonne to \$7,237 per tonne. North Asia took 39 per cent of New Zealand's Beef exports by value and 38 per cent by volume.

Beef consumption in China continues to grow with increasing household wealth and a growing Chinese upper-middle class. There is also an effect from the African Swine Fever (ASF) as consumers shun pork despite government assurance that pork is safe to eat. Food safety concerns are high amongst consumers in China and several schools and businesses are no longer serving pork in their cafeterias due to ASF. In country commentary around changing beef preparation patterns is becoming apparent, with an increasing number of outlets grilling beef as opposed to the traditional method of boiling or slow cooking beef.

As with sheep, China is moving away from small scale farmers to larger industrial type operations. Currently 93 per cent of cattle in China come from farmers who run less than 100 head of cattle. Typically, these farms have a considerable breeding component and tend to supply calves to larger scale beef finishing operations. China expects a contraction of its beef herd by 3 per cent in the 2019 year as smaller farmer liquidate stock on the back of high prices. This is expected to lead to a 1 per cent lift in production to 6.5 million tonnes. China has a high cost of production for its locally produced beef and the country is importing increasing quantities of the product. Total beef consumption in China is expected to lift to 8.1 million tonnes, an increase of 4 per cent. Live shipments of cattle into China is expected to exceed 150,000 for the 2019 year, with only around 15,000 head coming from New Zealand (being a mix of both beef and dairy origin).

For 2018 New Zealand exports of beef into China by volume increased 25 per cent and prices strengthened by 29 per cent. In contrast, New Zealand's other main export markets for this region remained static or declined, with Taiwan remaining steady, and a decline in value to Korea and Japan of 6 per cent and 7 per cent respectively, and a reduction in volume of 7 per cent and 22 per cent respectively.

Australia

Extreme climatic conditions have impacted and continue to impact on Australian beef production. Drought in many southern areas of Australia have pushed up feed prices and constrained the reproductive performance of cattle in these regions. Severe flooding in northern Queensland had a devastating effect on cattle in this area, it is estimated that between 300,000 and 500,000 head of cattle perished in the flooding that occurred in February 2019. A majority of the cattle that come from this area are typically destined for live cattle export. Live cattle exports are expected to fall to around 900,000 head for 2019, down from 1,139,000 head in the 2018 year. At 24.6 million head in 2019, Australian cattle numbers are expected to be at their lowest for 20 years.

Increasing beef prices domestically have seen consumers shift to other meats such as pork and chicken. For 2019 beef production from Australia is expected to decline to 2.18 million tonnes of beef from 2.31 million tonnes in 2018. Higher numbers are expected to be processed, however lower forecast carcass weights at 276 kilograms per head reduce the overall tonnage.

European Union

European beef farmers faced tough conditions in 2018, and these continue into 2019 as tight margins eroded producer profits. Dry northern European on farm conditions meat feed was scarce, and supplementary feed expensive. This drove a liquidation of cattle, with a structural decline in the EU herd reported. Increased numbers of stock being processed oversupplied markets and depressed prices further. Most of the excess beef was absorbed by the domestic market, however exports from the EU to non-member nations increased to four per cent of production, having been steadily increasing from one per cent since 2010. The EU beef industry continues to suffer from scandals within its industry, following the mad cow disease (BSE) outbreak and the mixing of horse meat with beef, January 2019 saw the exposure of a Polish processing plant that was illegally processing downer and sick cattle for distribution into the EU as well as for export – further tarnishing the image of beef. New environmental

regulations are putting additional pressure on the EU beef supply as dairy farmers in the Netherland cull herds in response to the Dutch limits on phosphate emissions.

Beef imports into the EU grew by about ten per cent in 2018, with various quota restrictions impeding further imports. The south American countries of Brazil and Argentina gained the most in terms of volume of beef entering the EU, with Brazil providing mostly lower valued corned beef and frozen boneless beef, and Argentina higher value boneless chilled beef.

Brazil

As the Brazilian economy surges by 2.5 per cent GDP growth with reducing unemployment and softening inflation rates, domestic demand for locally produced beef has strengthened. Good pasture growing conditions and cheaper feed costs have seen per head production increase, with total beef production forecast to increase by 3 per cent to 10.2 million tonnes for the 2019 year.

Cattle production in Brazil continues to grow, underpinned by government programmes to improve cattle production through imported genetics, and supported pasture improvement and degraded pasture recovery.

Herd expansion and improved genetic has led to a 2 per cent rise in calf production forecast in 2019.

Cattle Prices – Farm-gate

Figure 10

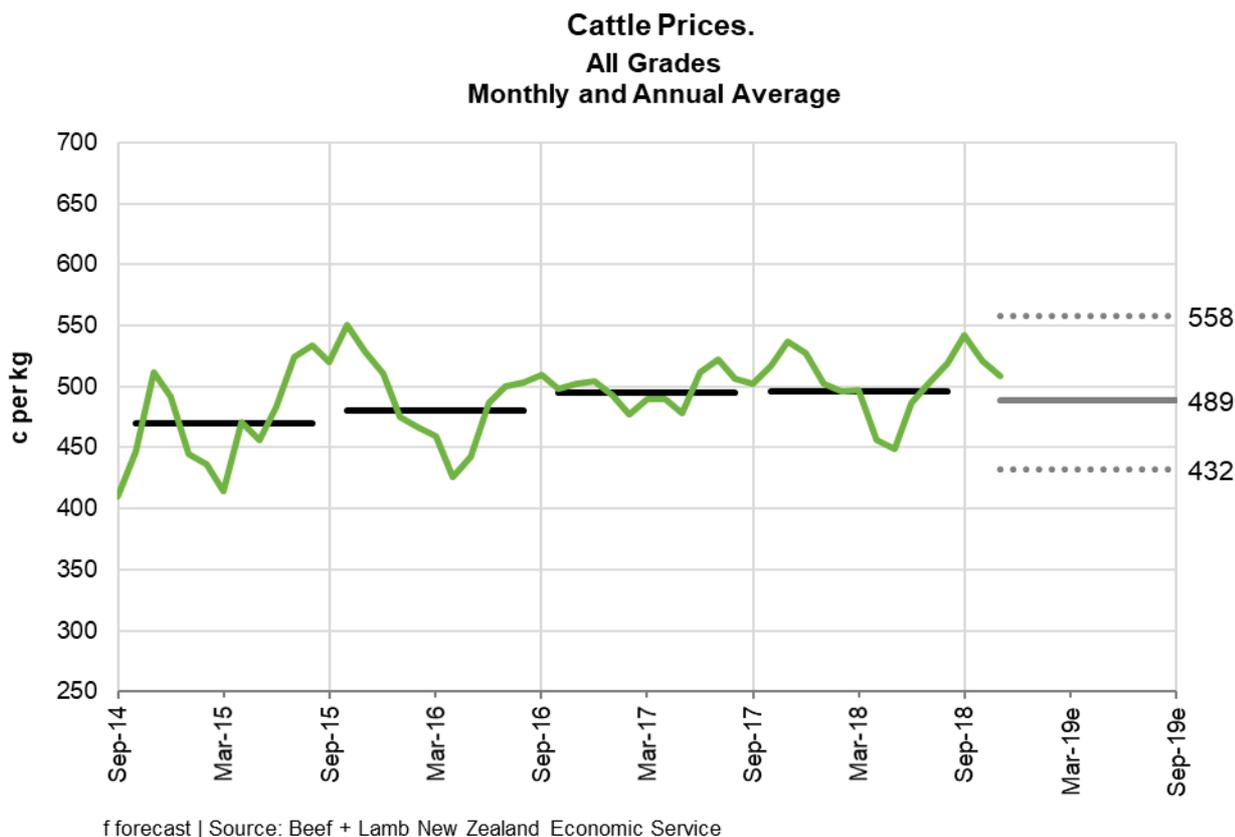


Figure 14 shows the monthly and annual average cattle prices paid to farmers for all grades to September 2019.

Farm-gate prices have remained consistent since the 2014-15 season as demand from China supported price in and volumes. Demand is expected to remain consistent into 2019, with a softening NZD smoothing any ripples from reduced offshore price decline.

Three exchange rate scenarios are used in the 2018-19 outlook to cover possible exchange rate variability. The three scenarios use annual average exchange rates of USD0.59, USD0.66 and USD0.73 and the associated cross rates against the GBP and EUR. At USD0.66, the estimated average cattle price is 489 cents per kilogram, down 8.2 per cent on the average price of 529 cents per kilogram in 2017-18. The 2018-19 farm-gate price is forecast to remain steady as currencies of trading partners firm, particularly the USD, and in-market prices soften.

The three exchange rate scenarios highlight the leveraged effect the exchange rate has on the New Zealand cattle price paid to farmers. When the exchange rate moves from USD0.66 to USD0.73 (+10%), cattle prices decrease by 11.6 per cent. Alternatively, when the NZD depreciates from USD0.66 to USD0.59 (-10%), the cattle prices increase by 14.1 per cent.

Beef Production

Table 14

Export Cattle Slaughter Composition

Sep Year	000 head				
	Steer	Heifer	Cow	Bull	Total
2013-14	559	407	931	438	2,335
2014-15	558	453	1,187	483	2,682
2015-16	515	436	1,101	464	2,516
2016-17	524	441	937	461	2,363
2017-18	535	454	1,026	542	2,556
2018-19e	554	467	1,007	548	2,575
2018-19e % change	+3.6%	+2.8%	-1.8%	+1.0%	+0.7%

e estimate | Source: Beef + Lamb New Zealand Economic Service, New Zealand Meat Board

Table 15

Export Cattle Carcase Weights

Sep Year	kg / head				
	Steer	Heifer	Cow	Bull	Total
2014-15	302	234	197	298	243
2015-16	308	238	195	304	246
2016-17	314	243	199	305	253
2017-18	312	241	197	301	251
2018-19e	308	238	198	302	251
2018-19e % change	-1.3%	-1.2%	+0.4%	+0.4%	+0.0%

e estimate | Source: Beef + Lamb New Zealand Economic Service, New Zealand Meat Board

Table 16

Export Beef Production Composition

Sep Year	000 tonne bone-in				
	Steer	Heifer	Cow	Bull	Total
2014-15	169	106	234	144	652
2015-16	158	104	215	141	619
2016-17	164	107	186	141	598
2017-18	167	110	202	163	642
2018-19e	171	111	199	165	646
2018-19e % change	+2.2%	+1.5%	-1.4%	+1.3%	+0.7%

e estimate | Source: Beef + Lamb New Zealand Economic Service, New Zealand Meat Board

Cattle Processing

In the year to September 2019, the number of cattle processed is estimated at 2.58 million head, up slightly (+0.7%) compared with 2017-18. Within this, the number of cull cows processed is forecast to decrease 1.8 per cent from the high level in 2017-18. The dairy cow herd is expected to stabilise (+0.5%) in the year to 30 June 2019 with few, if any, new dairy farms having started in the spring of 2018. However, the forecast numbers are still historically strong with the five-year average for the number of cows processed prior to 2006-07 was 763,000 head.

The number of heifers processed in 2018-19 is expected to increase by 2.8 per cent to 467,000 head, following a 3.0 per cent increase in 2017-18. Steers are expected to follow a similar trend as heifers, the number processed in 2018-19 is estimated to increase 3.6 per cent after increasing by 2.1 per cent in 2017-18.

The number of bulls processed in 2018-19 is estimated to increase by 1.0 per cent to 548,000 head, following an increase of over 17 per cent in 2017-18. This reflects improved beef market signals since 2014-15 and the bull calf retentions over this period.

Cattle Weights

The overall average cattle slaughter weight for 2018-19 remains static due to marginally lighter steer and heifer average carcass weights.

Beef Production

For 2018-19, export beef production is estimated at 646,000 tonnes carcass weight, which is similar to 2017-18.

Outlook for 2019-20

The outlook for 2019-20 is for the total number of adult cattle processed to be unchanged from 2018-19 at around 2.58m head, and likewise for changes in the number of each class of cattle (steers, heifers, cows, bulls), which are expected to be very small.

As a result, export beef production is also expected to be almost unchanged from 2018-19 – at around 647-648,000 tonnes – as a result of small changes in the numbers and average carcass weights of each class.

Exports

Fine wool has performed somewhat better than many expected, however, coarse wool prices have not recovered. Exports for 2018-19 were forecast to decrease 2.2 per cent to 97,300 tonnes clean and the average export value was forecast to increase by 8 per cent. However, exports in the first 10 months of the wool season (i.e. for July 2018 to April 2019) totalled 75,000 tonnes clean, down 9.9 per cent on 2017-18, while the average value was up 10.6 per cent due to double-digit increases in the average value of exports of wools finer than 32 microns.

Table 17

June Year	Auction Price	Wool Exports		
	\$ / kg clean	FOB \$ / kg clean	000 tonnes clean	\$m FOB
2014-15	5.95	6.82	118.0	805.0
2015-16	6.64	7.38	103.0	760.1
2016-17	5.18	6.16	84.8	522.1
2017-18	5.38	5.41	100.2	542.5
2018-19e	5.57	5.84	93.7	547.2
2018-19e % change	+3.6%	+7.9%	-6.5%	+0.9%

e estimate | Source: Beef + Lamb New Zealand Economic Service, New Zealand Wool Services International Ltd, Statistics New Zealand

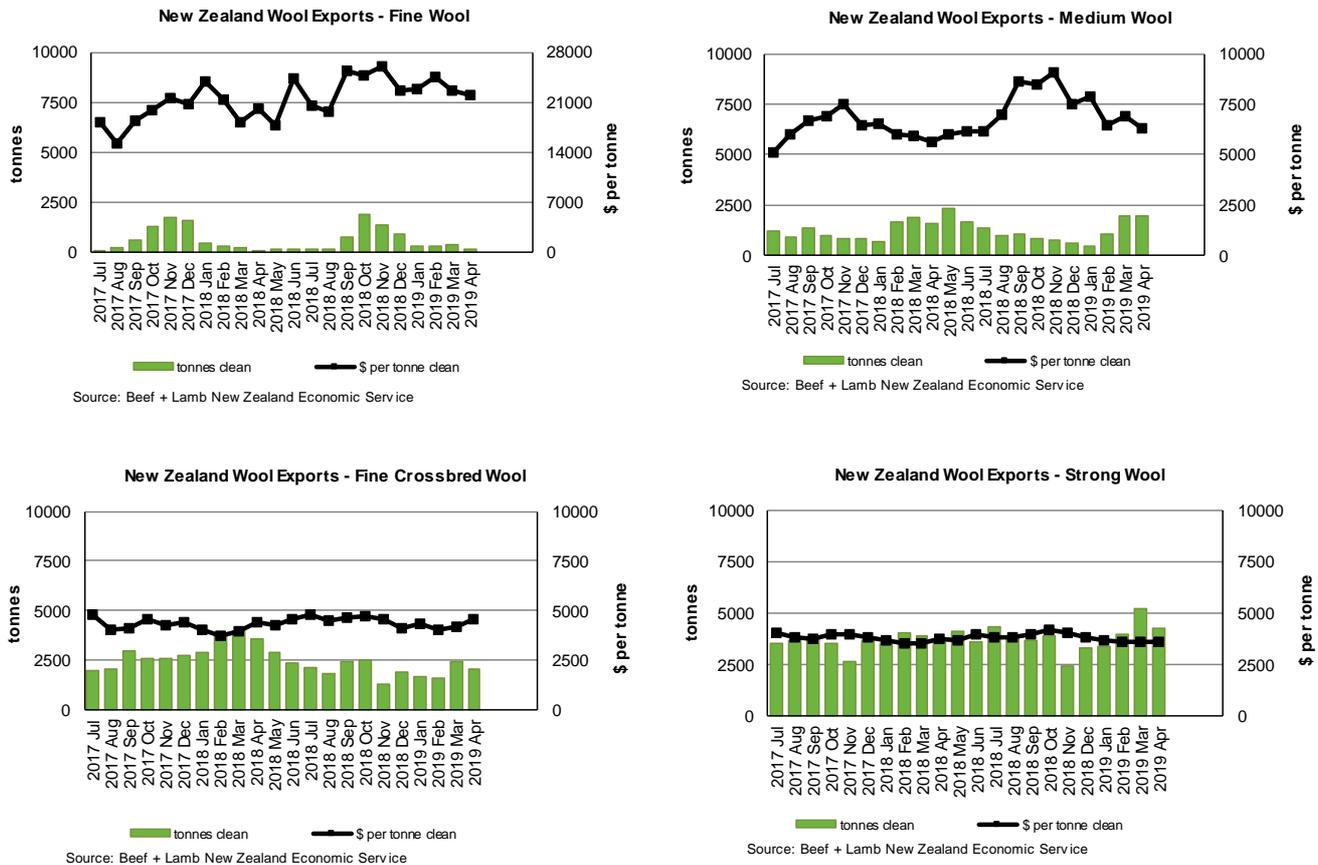
Prices

Fine wool continues to demand a premium with the season average auction price forecast to surge by nearly 60 per cent, increasing to 1,696 cents per kilogram greasy from 1,074 cents per kilogram greasy.

Strong wool continues to be the poor cousin to fine wools with the average value of exports almost unchanged from 2017-18 and the price for this segment little changed from the already-low level in 2017-18. Volumes of wool exported from New Zealand were 18.3 per cent higher in 2017-18 than they were in the previous year but are expected to fall in 2018-19.

* Although there is no levy on wool, the Economic Service conducts basic analysis of wool because it contributes to sheep and beef farm revenue.

Figure 11



Nearly 50 per cent of all wool was exported to China in the 2017-18 year, a 40 per cent increase on 2016-17. The value of the wool exported to China in 2017-18 was \$270m FOB, a 22 per cent increase on the year prior. The EU was the other main export market for New Zealand wool. Almost 30 per cent of the New Zealand wool exports in 2017-18 were to the EU, although the volume increased 2.4 per cent and the average value dropped 7.2 per cent.

Production

Table 18

Wool Production

June Year	Sheep million head	Shorn 000 tonnes greasy	Slipe 000 tonnes greasy	Total 000 tonnes greasy	Shorn Wool* kg / head greasy
2014-15	29.8	137.0	16.9	153.8	4.60
2015-16	29.1	135.1	16.5	151.6	4.64
2016-17	27.6	126.9	16.5	143.4	4.60
2017-18	27.5	123.0	16.2	139.3	4.47
2018-19e	27.3	122.6	15.2	137.8	4.50
2018-19e % change	-1.0%	-0.3%	-6.6%	-1.1%	+0.7%

*excludes wool on sheepskins

e estimate | Source: Beef + Lamb New Zealand Economic Service, Statistics New Zealand

For 2018-19, total wool production is estimated to decrease 1.1 per cent to 137,800 tonnes greasy reflecting total shorn wool production being unchanged, and slipe wool production down 6.6 per cent. A slight drop in sheep numbers – down 1.0 per cent – is not offset by the small increase in wool shorn per head.

Outlook for 2019-20

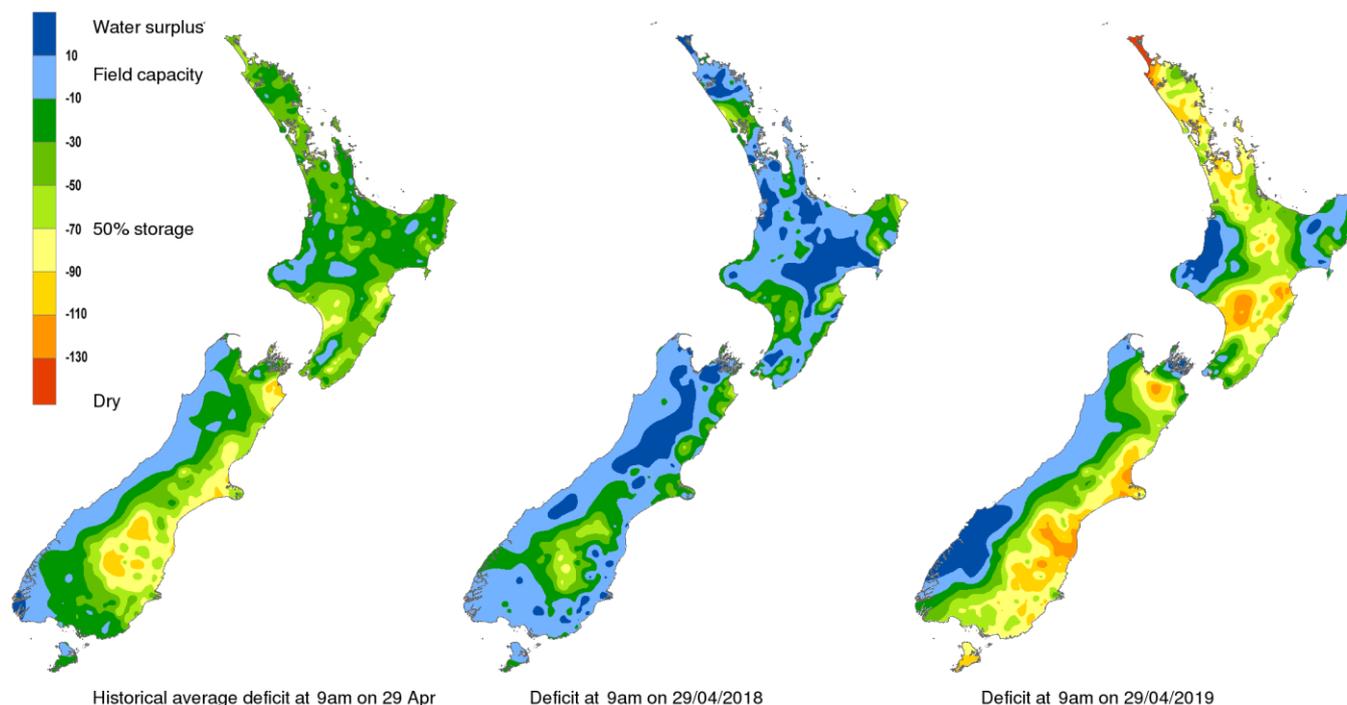
The initial outlook for 2019-20 is for the volume of production to be little different from 2018-19 as sheep numbers are forecast to be little-changed.

Continuing low strong-wool prices coupled with increased shearing costs will encourage producers to continue practices such as limiting second shearing and shearing three times in two years unless the shearing is justified for animal welfare or flock management reasons.

Climatic Conditions

Figure 12

Soil moisture deficit (mm) at 9am on 29/04/2019



Source: National Institute of Water and Atmospheric Research (NIWA)

Summer 2018-19

It was New Zealand's third-warmest summer on record.

Temperature

The national average temperature for the summer were 17.9°C, this was 1.2°C above the 1981-2010 average for NIWA's seven station temperature series. The highest temperature was 38.4°C, observed at Hanmer Forest on 31 January, this was Hanmer Forest's warmest temperature on record (data since 1906). Key drivers for the higher temperatures were the lack of southerlies and above average sea temperatures, causing a marine heatwave for some areas.

Rainfall

Hawkes Bay and Gisborne had above average normal rainfall with more than 120% above normal, mostly coming from an easterly or north-easterly direction. Northland, Taranaki, Nelson, Tasman and the West Coast as well as parts of Marlborough, Manawatu-Whanganui, Otago and Southland Rainfall had below normal rainfall. Tauranga and Hamilton had 36 consecutive dry days – their third-longest dry spells on record.

Sunshine

High sunshine hours were recorded around the country with the stations near Nelson both recorded 355 hours for the month of January which is a new record for the sunniest month in the South Island.

Soil moisture

Apart from Taranaki (where there were drier than normal soils) the rest of the country had normal to above normal soil moisture conditions for the early part of summer. However a warm, dry January and February rapidly depleted soil moisture levels. Thunderstorms were a frequent occurrence during December and a storm on 24-25 December caused widespread slips and flooding, disrupting holiday plans for many North Islanders. The Ministry for Primary Industries classified a medium scale adverse event in Tasman on 8 February due to large wild fires and persistent dryness. Continued dry weather led to meteorological drought conditions (as defined by the NZ Drought Index) to appear in Nelson, Tasman and the Buller District.

Outlook – May to June 2019

A central Pacific El Niño event continued during through the autumn as the ocean and atmosphere remained weakly coupled. Sea surface temperatures warmed across the equatorial Pacific during March and El Niño is expected to continue during the upcoming period. More westerly winds are expected; the result of higher pressures in the northern Tasman Sea and lower pressures than normal south of the country.

Temperature

May and June 2019 temperatures are forecast to be above average for all regions of New Zealand with high confidence (60–70% chance). As autumn progresses however, frosts may occur from time to time in cooler locations.

Rainfall

May and June 2019, rainfall totals are forecast to be normal to below normal across the country (60 to 75% chance).

Soil moisture

May and June 2019 soil moisture levels and river flows are forecast to be normal or below normal (70 to 80% chance) across the country with the exception of the western and southern regions of the South Island. The outlook for the western and southern regions of the South Island is for a 50% chance of above normal soil moisture level and river flows or a 50% chance of normal to below normal soil moisture level and river flows.

Source: National Institute of Water and Atmospheric Research (NIWA)

Farm Revenue, Expenditure and Profit – New Zealand

Table 19

Sheep and Beef Farm Revenue and Expenditure

	Weighted Average All Classes ¹				Forecast			Forecast % Change			
	2014-15	2015-16	2016-17	Provisional	2018-19	2018-19	2018-19	2017-18 to 2018-19			
				2017-18	USD 0.62	USD 0.69	USD 0.75	USD 0.62	USD 0.69	USD 0.75	
Revenue											
Wool	51,395	54,136	36,240	36,200	40,700	35,700	31,600	+12.4%	-1.4%	-12.7%	
Sheep	209,679	183,709	204,793	263,800	333,500	288,800	252,300	+26.4%	+9.5%	-4.4%	
Cattle	125,098	125,930	139,455	153,900	171,800	149,900	132,100	+11.6%	-2.6%	-14.2%	
Dairy Grazing	31,995	29,009	27,229	28,800	28,000	28,000	28,000	-2.8%	-2.8%	-2.8%	
Deer + Velvet	3,401	3,819	4,588	4,800	5,900	5,200	4,600	+22.9%	+8.3%	-4.2%	
Goat + Fibre	47	51	14	0	0	0	0				
Cash Crop	50,108	45,669	46,178	50,600	47,300	47,300	47,300	-6.5%	-6.5%	-6.5%	
Other	17,085	17,218	20,702	17,300	18,500	18,500	18,500	+6.9%	+6.9%	+6.9%	
Total Gross Revenue	\$ per farm	488,808	459,541	479,199	555,400	645,700	573,400	514,400	+16.3%	+3.2%	-7.4%
Expenditure											
Fert, Lime & Seeds	66,421	64,995	59,738	70,300	73,700	72,700	71,900	+4.8%	+3.4%	+2.3%	
Repairs & Maintenance	32,395	32,747	31,234	35,600	36,400	35,900	35,500	+2.2%	+0.8%	-0.3%	
Interest & Rent	65,823	68,017	65,754	65,400	62,500	62,700	62,900	-4.4%	-4.1%	-3.8%	
Other Expenses	214,214	221,754	222,595	241,400	256,100	251,400	247,500	+6.1%	+4.1%	+2.5%	
Total Expenditure	\$ per farm	378,853	387,513	379,321	412,700	428,700	417,800	+3.9%	+2.4%	+1.2%	
Farm Profit Before Tax²	\$ per farm	109,955	72,028	99,878	142,700	217,000	150,700	96,600	+52.1%	+5.6%	-32.3%
EBITRm³	\$ per farm	179,641	143,678	169,276	212,131	284,400	217,821	163,500	+34.1%	+2.7%	-22.9%
Real (2004-05\$) Farm Profit³		87,400	57,100	78,000	109,900	164,200	114,000	73,100	+49.4%	+3.7%	-33.5%
Index of Real Farm Profit		1,193	779	1,065	1,499	2,240	1,556	997	+49.4%	+3.8%	-33.5%
Fertiliser Use kg per SU		21.3	24.6	25.7	23.7	26.3	25.9	25.6	+10.8%	+9.3%	+8.1%
Prices											
Wool auction	¢ per kg clean	579	595	663	519	635	557	493	+22.3%	+7.3%	-4.9%
All wool ⁵	¢ per kg greasy	374	401	444	332	346	304	269	+4.1%	-8.6%	-19.1%
Lamb	\$ per head	100	94	93	106	141	122	107	+32.1%	+14.6%	+0.3%
Mutton	\$ per head	77	67	57	74	119	100	84	+61.3%	+35.1%	+13.7%
Prime Steer/Heifer	¢ per kg	409	513	531	539	655	576	513	+21.5%	+7.0%	-4.9%

1. The Weighted Average All Classes Sheep and Beef Farm for 1 July 2017 was 630 effective hectares with stock numbers of 2,600 sheep, 340 beef cattle and 20 deer, totalling 3,970 stock units.

2. Farm Profit before Tax is required to meet personal drawings, taxation payments, debt repayments and the purchase of capital items.

3. Earnings before Interest, Tax, Rent and Managers Salary

4. Deflated by June year Consumer Price Index.

5. All shorn wool sales (auction 53% and private 47%) net of charges and freight.

Source: Beef + Lamb New Zealand Economic Service, Sheep and Beef Farm Survey

Revenue

Gross farm revenue for the All Classes Sheep and Beef Farm is estimated at \$573,400 per farm for 2018-19. This is up 3.2 per cent on the previous year, and up five per cent on earlier forecasts published in the New Season Outlook 2018-19. The largest driver of the increase is sheep revenue, which increases 9.5 per cent to \$288,800 due to prices remaining stronger for longer than originally expected, and good growing conditions contributing to heavier carcass weights. On average, sheep revenue contributes half of gross farm revenue.

Cattle revenue, which is the second largest contributor to gross farm revenue, decreases 2.6 per cent to \$149,900 per farm for 2018-19. This is the result of softening international prices. The cattle account contributes 26 per cent of the total gross farm revenue for 2018-19.

Wool revenue decreases 1.4 per cent to \$35,700 for 2018-19 due to prices for strong wool continuing to decline and a reduction in volumes sold. Wool revenue contributes to just 6.2 per cent of the total gross farm revenue for 2018-19.

Dairy grazing revenue contributes 4.9 per cent of the gross farm income at \$28,000. This is a reduction of 2.8 per cent on the previous year as alternative species provide more attractive returns to graziers and the risk of bringing *Mycoplasma bovis* onto farms discourages some from grazing others' livestock.

The cash cropping account reduces 6.5 per cent to \$47,300 per farm for 2018-19. This is due to reduced yields and prices, despite an increased area planted. The cash crop account contributes around 8.2 per cent of total gross revenue for 2018-19.

Aggregate Sheep and Beef Farm Revenue at the farm-gate is \$6.5 billion in 2018-19, up 3.2 per cent on 2017-18. Gross farm revenue is spent buying farm goods and services, paying tax, reducing debt and on personal living expenses.

Expenditure

Total expenditure for the All Classes Sheep and Beef Farm increases to \$422,700 per farm for 2018-19. This is up 2.4 per cent on the previous year, and up 1.6 per cent on early forecasts published in the New Season Outlook 2018-19. Increased expenditure occurs for all areas of sheep and beef farms except for interest, which is forecast to decrease 5.6 per cent to \$48,800 per farm for 2018-19. At 5.0 per cent per annum, average term interest rates are estimated to be at their lowest level since records began. In the last 10 years, average term liabilities have increased from \$624,700 per farm in 2009-10 to a forecast \$827,000 in 2018-19. In today's economic environment, interest expenditure represents less than 12 per cent of total farm expenditure.

Shearing expenses increased by over 10 per cent to \$22,000 for 2018-19, despite a reduction in sheep numbers and fewer sheep shorn, which is a reflection of increasing shearing wages. On-farm wage inflation was 5.5 per cent to 2018-19.

Spending on repairs and maintenance expenditure was maintained at 8.5 per cent of total farm expenditure for 2018-19. Increased revenue prompts a lift in spending, particularly on farms that have previously deferred expenditure in this area. This level of repairs and maintenance spending is over 10 per cent higher than the average for the previous five years.

Fertiliser expenditure increases 3.4 per cent for 2018-19. This is driven by a lift in price and with a slight decrease in volume applied compared with the previous season as more high analysis fertilisers are used. Fertiliser expenditure represents 14 per cent of total farm expenditure. Lime applications are expected to increase by 1.3 per cent for 2018-19, with costs increasing four per cent to average \$69 a tonne applied.

Fuel, and feed and grazing expenditure increase to \$12,105 (+8.9%) and \$21,822 (+0.7%) for 2018-19. Standing charges were down slightly (-1.4%) on the previous year.

Farm Profit before Tax

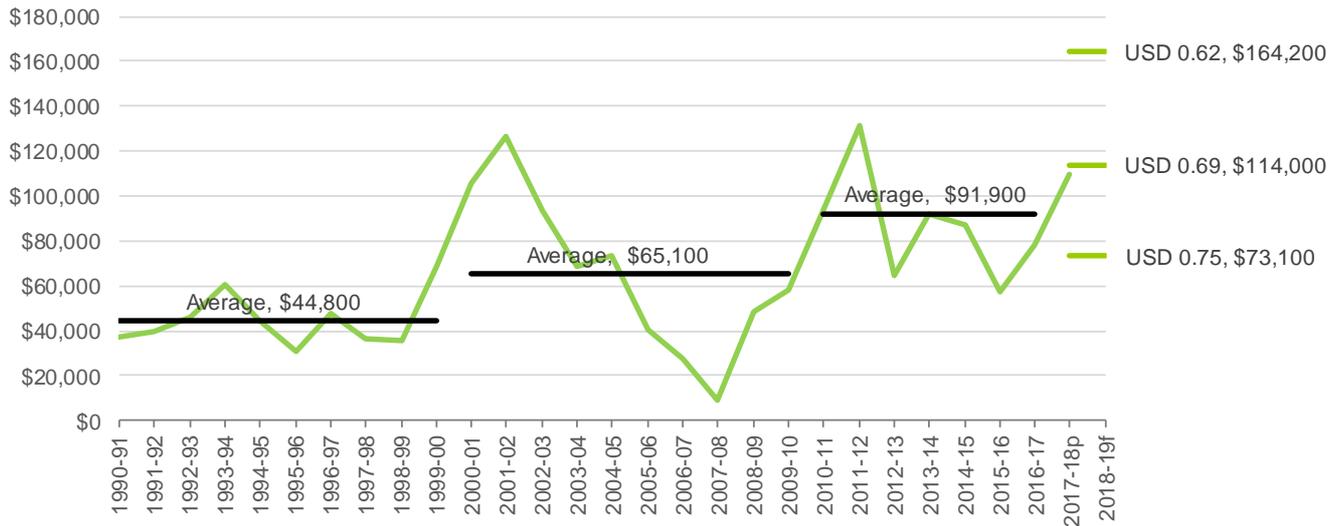
Figure 13 **Error! Reference source not found.** shows the trend in Farm Profit before Tax in inflation-adjusted, 2004-05 dollar terms. This shows the steep fall in profitability from 2001-02 to a 50-year low in 2007-08, which was followed by a recovery that was underwritten by improved international prices that exceeded the negative effect of the strengthening NZD. In inflation-adjusted terms, the profit of \$131,100 per farm for 2011-12 was the highest since the early 1970s and similar to 2001-02 when real Farm Profit before Tax was \$126,900 per farm.

Three forecast scenarios are shown in Figure 13 **Error! Reference source not found.** **Error! Reference source not found.**

1. At the lower exchange rate (USD0.62):
 - a. Inflation-adjusted Farm Profit before Tax is \$164,200 per farm – a 49 per cent increase on \$109,900 for 2017-18.
 - b. In nominal terms, i.e. without adjusting for inflation, Farm Profit before Tax is \$217,000, a 52 per cent increase on \$142,700 for 2017-18.
2. At the mid exchange rate (USD0.69):
 - a. Inflation-adjusted Farm Profit before Tax is \$114,000 per farm – a 3.7 per cent increase on 2017-18.
 - b. In nominal terms, Farm Profit before Tax is \$150,700 – up 5.6 per cent on 2017-18.
3. At the higher exchange rate (USD0.75):
 - a. Inflation-adjusted Farm Profit before Tax is \$73,100 per farm – a 34 per cent decrease on 2017-18.
 - b. In nominal terms, Farm Profit before Tax is \$96,600– 32 per cent decrease on 2017-18.

Figure 13

**All Classes Sheep and Beef Farm
Per Farm Inflation-Adjusted¹ Profit before Tax**



p provisional | f forecast | ¹Adjusted to 2004-05 \$ terms
Source: B+LNZ Economic Service | Sheep and Beef Farm Survey

Farm Revenue, Expenditure and Profit – Regional

Table 20

Regional Summary

All Classes Sheep and Beef Farm - \$ Per Farm

Region	2016-17	2017-18p	2018-19f				Stock Units	Hectares	SU/ha
	Profit	Profit	Revenue	Expenditure	Profit	EBITRm ¹			
Northland-Waikato-BoP	100,451	125,400	453,900	329,700	124,200	174,700	3,300	350	9.4
East Coast	93,525	146,000	576,300	433,600	142,700	228,500	4,800	560	8.6
Taranaki-Manawatu	90,169	164,400	534,700	375,900	158,800	228,400	4,200	490	8.6
North Island	97,268	142,200	515,700	377,400	138,300	205,200	4,000	450	8.9
Marlborough-Canterbury ²	99,011	150,100	738,900	575,900	163,000	245,200	4,200	930	4.6
Otago/Southland ²	107,450	132,200	516,100	351,300	164,800	215,000	3,700	720	5.2
South Island²	102,812	143,300	638,300	473,700	164,600	232,000	4,000	850	4.7
New Zealand	99,878	142,700	573,400	422,700	150,700	217,800	4,000	640	6.3

p provisional, f forecast | Exchange rate used in forecast year USD/NZD 0.69

¹ Earnings before Interest, Tax, Rent and Managers Salary

² Effective area is inflated by High Country Farms, which average 7,500 hectares per farm.

Source: Beef + Lamb New Zealand Economic Service | Sheep and Beef Farm Survey

North Island Summary

Gross farm revenue increases 3.8 per cent to average \$515,700 per farm for 2018-19. This reflects increased revenue from the sheep and deer accounts and reductions in all other areas of gross farm revenue (i.e. cattle, wool, crop, and grazing).

Sheep revenue increases 9.2 per cent to \$256,300 largely due to more lambs being available for sale, and above average sales prices. The number of lambs available for sale was up due to good ewe lambing during spring 2018 for most of the island. On average, sheep revenue represents 50 per cent of gross farm revenue for North Island Sheep and Beef Farms.

Cattle revenue decreases 3.3 per cent to \$189,300. This is due to softening prices, and the number sold being similar to or less than the previous year. In some regions, cattle are replacing sheep due to their low labour requirement and strong returns. Cattle revenue represents 37 per cent of gross farm revenue.

Total farm expenditure increases 8.4 per cent to \$422,700 per farm for 2018-19, largely due to a lift in gross farm revenue. The amount spent on fertiliser increases, however the tonnage applied decreases due more high analysis fertiliser being applied. Shearing expenditure increases despite fewer sheep shorn, and less second shearing.

Term liabilities – on average – decreased from around \$792,000 per farm to \$772,000. Total interest expenditure has decreased from \$48,200 to \$45,000, largely due to a decrease in interest rates. Interest expenditure represents 13 per cent of total farm expenditure.

Farm Profit before Tax at \$138,300 per farm for 2018-19, reduces 3.7 per cent compared with 2017-18. This is one of the highest profits, on average, for North Island farms in the 2000s, which is positive for the industry.

The North Island has 44 per cent of the sheep flock, 59 per cent of the beef cattle herd and 60 per cent of the dairy cattle herd.

South Island Summary

Gross farm revenue increases 4.5 per cent to average \$638,300 per farm for 2018-19 largely due to a lift in revenue from sheep (+9.8%).

Despite the poor mating in the year prior, most areas in the South Island had a better lambing than expected, with many lambs making their way north to better pastures as drought affected the lower South Island. Sheep revenue contributes 51 per cent of gross farm revenue.

Cattle revenue declined one percent for 2018-19 and was the second highest contributor to gross farm income in the South Island at 17 per cent.

On average, cash cropping revenue contributed 14 per cent of the total gross revenue for South Island sheep and beef farms. For 2018-19, cash crop revenue was down 6.4 per cent on the year prior.

Wool revenue gained 3.1 per cent to average \$52,500 per farm due to an increase in the fine wool price. The increase was also driven by a slight lift in the volume of wool shorn, although actual volumes sold were less than the year before due to wool held over balance date.

Deer and dairy grazing revenue increase 4.2 per cent and 6.2 per cent respectively, although they only contribute one per cent and six per cent respectively of the total gross revenue.

Total farm expenditure increases 4.5 per cent to \$638,300 per farm for 2018-19, due to an increase in shearing expenses (+13%), as well as ACC levies, Insurance and Rates increasing by 4.6, 2.6 and 4.7 per cent respectively. Interest payments reduced by 4.9 per cent on the back of lower interest rates and lower net borrowings.

Total fertiliser tonnage decreases slightly (-2.2 per cent), however, a 4.7 per cent increase in the per tonne price increases the total expenditure on fertiliser to \$59,440 – a 2.4 per cent increase on the year prior.

Lime applications increase by five tonnes on the year prior, leading to an increased spend on lime of 7.5 per cent.

Term liabilities – on average – reduced from \$946,959 to \$915,832 for 2017-18 to 2018-19. Total interest expenditure during this time decreased 4.9 per cent to \$52,909 due to a decrease in term and overdraft interest rates. Interest expenditure represents 12.4 per cent of total farm expenditure.

Farm Profit before Tax at \$164,600 per farm for 2018-19 is up 14.9 per cent compared with 2017-18. The South Island has 56 per cent of the sheep flock, 41 per cent of the beef herd, and 40 per cent of the dairy herd.

Region Comment – North Island

Northland–Waikato–Bay of Plenty

Gross farm revenue, which is forecast to average \$453,900 per farm for 2018-19, increases 4.8 per cent on 2017-18. This is due to increased revenue from sheep and cattle.

Sheep revenue increases 15 per cent to \$167,300 per farm for 2018-19 due to improved lamb prices. On hard hill country and intensive finishing farms, more lambs born in spring 2018 leads to an increase in numbers sold. On average, sheep revenue contributes 36.9 per cent to gross farm revenue.

Cattle revenue increases 2.3 per cent to \$211,700 per farm for 2018-19. This is due to strong prime cattle prices, while the cattle numbers sold remain the similar to the previous year. On hill country farms, bull beef is the predominant source of income followed by 2-year-old steers. Cattle revenue is at its highest level on record and contributes 46.6 per cent to gross farm revenue.

Total farm expenditure increases 7.1 per cent to average \$329,700 per farm for 2018-19. Wages and shearing expenses increase by 14 and 10 per cent respectively despite fewer sheep being shorn.

Interest expenditure falls as interest rates decline and average term loans are reduced to average just under \$604,000 per farm at the end of 2018-19, down from \$923,000 per farm in 2017-18.

Fertiliser expenditure increases 1.4 per cent to \$54,000 per farm for 2018-19 from a slight lift in the total volume applied to 90.8 tonnes. Fertiliser contributes 23.3 per cent of total farm expenditure.

Farm Profit before Tax reduces one per cent to \$124,200 per farm for 2018-19. Sheep and beef farms in the region average 3,300 stock units on 350 effective hectares for 2018-19, which means the stocking rate averages 9.4 SU/ha.

East Coast

Gross farm revenue is effectively unchanged and only decreases by 0.1 per cent to \$576,300 per farm for 2018-19. This is due to an increase in revenue for all parts of the business, particularly for sheep and cattle, which collectively make up just under 90 per cent of gross farm revenue.

On average, sheep revenue increases 57 per cent to \$326,400 per farm for 2018-19. The sheep account contributes 53 per cent of gross farm revenue. Fewer lambs were sold in 2018-19, which was due to several factors including that fewer lambs were born in the spring of 2018, partly due to a harsh storm over lambing and partly due to fewer ewes mated in the autumn of 2018. There was also an increased retention of hoggets over balance date.

Wool revenue reduces 13 per cent to \$24,600 for 2018-19. This is due to a reduction in the volume of wool sold compounded by a decrease in the farm-gate price for wool. Wool contributes 4.3 per cent of gross farm revenue.

Cattle revenue reduces 7.9 per cent to average \$184,000 per farm for 2018-19. The cattle account contributes nearly one-third of gross farm revenue.

Total farm expenditure increases 0.6 per cent to \$433,600 per farm. The biggest drivers of this were increased expenditure on wages, shearing expenses, and fuel.

Wages and Shearing expenditure increase 7.5 per cent and 4.0 per cent respectively, while fuel increases by 14 per cent to \$10,346 per farm.

Fertiliser expenditure increases 1.9 per cent to \$63,663 per farm and represents 22 per cent of the total working expenses. The total tonnage of fertiliser applied reduces slightly, while the price per tonne increases. Expenditure on lime is expected to increase for 2018-19 to 95 tonnes per farm, up from the five-year average of 53 tonnes.

Farm Profit before Tax declines 2.3 per cent to average \$142,700 per farm for 2018-19. Sheep and beef farms in the region average 4,800 stock units on 556 effective hectares for 2018-19, which means the stocking rate averages 8.6 SU/ha.

Taranaki–Manawatu

Gross farm revenue increases 1.4 per cent to \$534,700 per farm for 2018-19. Revenue from sheep meat rises as beef and wool falls.

Sheep revenue increases 8.9 per cent to \$317,500 per farm for 2018-19 due to strong prices for both ewes and lambs offsetting the fewer head sold. The number of lambs sold per farm is forecast to be down 8.1 per cent on the previous year, largely due to a decrease in breeding ewe numbers, reducing the total number of lambs available for sale. The sheep account contributes 59 per cent of total farm revenue.

Cattle revenue decreases 8.3 per cent to \$148,200 per farm for 2018-19, slightly down on 2017-18, which was a record year. This was largely due to the softening of international beef prices. The cattle account makes up 28 per cent of total gross farm revenue.

Dairy grazing revenue decreases 25 per cent to average \$11,800 per farm for 2018-19. This is due in part to farmers mitigating the risk of *Mycoplasma bovis* spreading onto their properties. Dairy grazing revenue peaked in 2011-12 at an average of \$23,300 per farm and at \$11,800 for 2018-19 represents 2.1 per cent of gross farm revenue.

Total farm expenditure increases 3.6 per cent to \$75,900 per farm for 2018-19. The primary drivers are fertiliser and lime, which increase 17 and 3.6 per cent respectively, due to lifts in volume and value of the products applied.

Repairs and maintenance at \$39,300 per farm is up by 3.4 per cent. Total interest payments decline 5.5 per cent for 2018-19 due to lower average total debt and reduced interest rates. Shearing expenses and wages increase by 14 and 1.8 per cent respectively as changes to shearing rates and wage inflation begin to take effect. Depreciation increases to \$25,500 for 2018-19, which is a new high record and reflects farmers' investments in capital items on the back of several profitable years

Farm Profit before Tax decreased 3.4 per cent to average \$158,800 per farm for 2018-19. Sheep and beef farms in the region averaged 4,200 stock units on 490 effective hectares at the start of 2018-19, which is 8.6 SU/ha. The number of stock units wintered per farm at 1 July 2018 was down 2.8 per cent on the previous July.

Region Comment – South Island

Marlborough–Canterbury

Gross farm revenue increases 2.8 per cent to \$738,900 per farm for 2018-19 largely driven by an increase in revenue from sheep.

Sheep revenue increases 10 per cent to \$293,900 per farm for 2018-19. Good on-farm pasture covers and growing conditions drove a grass market that was underpinned by high farm-gate prices for livestock. Sheep revenue contributes around 39 per cent to gross farm revenue.

Cattle revenue decreased 2.5 per cent to \$137,500 per farm for 2018-19. Softer prices led to reduced revenue for mixed finishing farms (down 21%), while good growing conditions and strong demand for weaner cattle increased high country returns from cattle by 3.7 per cent. Cattle revenue represents 19 per cent of gross farm revenue on average for all farm classes.

Wool revenue increases 3.6 per cent to \$57,000 per farm for 2018-19. This is the result of good fine wool prices, which have a large influence in this region. Wool revenue represents 7.7 per cent of gross farm revenue on average for all farm types.

Cropping revenue is down (-7.1%) to \$158,300 per farm on average. This is predominantly driven by changes in the product mix from mixed cropping and finishing farms. Dairy grazing revenue is up 7.7 per cent to \$56,000 per farm. On average, dairy grazing contributes 7.6 per cent of gross farm revenue.

Total farm expenditure increases 1.3 per cent to \$575,900 for 2018-19. Most expenditure increases with the main exceptions being interest and repairs and maintenance, which are down 8.4 and 8.8 per cent respectively. Spending on fertiliser increased by 1.9 per cent, with the total volumes applied down but prices up.

Farm Profit before Tax increases 8.6 per cent to \$163,000 per farm for 2018-19. Sheep and beef farms in this region average 4,200 stock units on 926 effective hectares at the start of 2018-19, which means the stocking rate averaged 4.6 SU/ha. The number of stock units wintered per farm at 1 July 2018 increased 3.9 per cent compared to the previous July.

Extensive high country and foothill farms inflate the average area of farms in the region. Finishing breeding farms average 400 hectares while high country farms average 8,400 hectares.

Otago–Southland

Gross farm revenue increases 7.9 per cent to \$516,100 per farm for 2018-19. The most significant drivers of this are sheep and cash crop revenue.

Sheep revenue increases 10 per cent to \$363,800 per farm for 2018-19 due to a lift in prices. Overall, there are fewer lambs available for sale due to a small increase in lambing percentage being offset by fewer breeding ewes mated. Within this, a larger-than-normal proportion of lambs born are sold as store lambs for finishing by others, which is most notable on high country and intensive finishing farms. Sheep revenue makes up 71 per cent of gross farm revenue.

Cattle revenue increases 2.8 per cent to \$68,800 for 2018-19. Softer prices are compensated by increased carcass weights due to a much improved growing season over much of the region when compared with 2017-18. Cattle revenue makes up 13 per cent of gross farm revenue.

Wool revenue remained relatively steady with a slight (1%) increase to \$41,900 per farm for 2018-19. While poor prices for strong wool continued, high country farms were not as badly affected due to these farms predominantly producing fine wool. In this region, wool revenue makes up 8.1 per cent of gross farm revenue.

Total farm expenditure increases 1.5 per cent to average \$351,300 per farm for 2018-19. This is driven by increases across multiple areas of expenditure, with the exceptions this being interest, and feed and grazing, which decrease.

Fertiliser volumes are higher compared to the previous year, with the average price per tonne slightly increasing (+1.1%) on the previous year. Interest expenditure decreases 8.8 per cent due to a lower interest rate on term debt, and a reduction in term liabilities.

Repairs and maintenance expenditure increases 5.6 per cent to \$29,600 per farm for 2018-19. Repairs and maintenance is 9.2 per cent of total farm expenditure.

Farm Profit before Tax increases 25 per cent to \$164,800 per farm for 2018-19. Sheep and beef farms in the region average 3,750 stock units on 720 effective hectares, which means the stocking rate averages 5.2 SU/ha. In this region, the average farm size is inflated by high country farms.



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