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# Mid-Season Update 2017-18

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Beef + Lamb New Zealand PO Box 121 Wellington 6140 New Zealand Phone: 04 473 9150 Fax: 04 474 0800 E-mail: econ@beeflambnz.com

Contact: Andrew Burtt: 04 474 0842 *Chief Economist* 

Rob Davison: 04 471 6034 Executive Director

Rob Gibson: 04 471 6037 Senior Agricultural Analyst

Ben Hancock: 04 494 9508 Senior Agricultural Analyst

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# Executive Summary – Outlook 2017-18

Mid-Season Update 2017-18



# Economic Conditions Lar

In 2018, global growth is expected to rise further after stronger than expected growth in 2017 – over 3 per cent. Growth has been widespread globally with over half of global economies picking-up. Investment in advanced economies, increased manufacturing productivity from Asia and greater consumer confidence has strengthened to support the global momentum. Inflation and wage growth have not followed economic growth, remaining muted.

New Zealand's economic growth remained strong in the year ending March 2018 and is expected to accelerate in the following 12 months – at 3.5 per cent. Strong tourism and stimulus from the new government's policies are major drivers of this growth.

For the year to September 2018, 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 the strengthening of other economies while New Zealand remains steady after previously performing relatively strongly.

### Lamb

Total lamb receipts under the USD0.69 exchange rate scenario are expected to be up 15 per cent to \$3.01 billion FOB in 2017-18. This would be the first time lamb exports exceed \$3 billion, in nominal terms.

The decrease in total receipts is driven by a forecast \$9,842 FOB per tonne for lamb meat – up 14 per cent – due to expected stronger in-market prices and easing NZD, while export volumes rise slightly by 0.7 per cent.

The number of lambs for export, processed in 2017-18 is forecast to increase 1.3 per cent from the previous season to 19.5 million head. This partly due to more lambs being carried over from the previous season due to good grass availability.

Total mutton export receipts are expected to total \$602 million FOB, up 11 per cent on the previous season. The average value of mutton is expected to increase 24 per cent to \$6,500 FOB per tonne, driven by limited mutton supply from New Zealand and Australia. New Zealand's mutton exports are forecast to be down 7.3 per cent.

The farm-gate prices for lambs are expected to average \$122 per head or 661cents per kilogram, which is up 15 per cent from the previous season. The annual farm-gate mutton price is estimated at \$100 per head or 394 cents per kilogram for the 2017-18 season.

# Beef

Total beef and veal receipts are expected to decrease 1.1 per cent to \$3.23 billion FOB in 2017-18, with lower volume driving the decrease.

Co-product exports are expected to rise by 1.2 per cent.

An easing NZD and relatively steady in-market prices will contribute to a higher average beef value per tonne in 2017-18 – up 3.2 per cent. Increased global production is expected to drive international trade competition, but demand from Asia and North America, particularly China, will help to accommodate this increased supply.

In the year ending in September 2018, export cattle processed is estimated at 2.35 million head, down 0.6 per cent compared with 2016-17, but a rise in the proportion of bulls in the total cattle processing. This reflects a further drop from record high numbers processed in 2014-15, particularly for cull cows as the dairy herd contracted. For 2017-18, export beef production is estimated at 590,000 tonnes carcase weight, a 1.3 per cent decrease on 2016-17 as the dairy and beef herds stabilise.

At the mid-exchange rate estimate of USD0.69, the average cattle price estimated at 529 cents per kg is 6.9 per cent up on the 495 cents per kilogram for 2016-17.

# **Livestock Numbers**

Sheep numbers at 30 June 2016 provisionally totalled 27.6 million head, down 5.3 per cent on the previous June. This was driven by a decrease in breeding ewes (-5.3%) compared with 30 June 2015.

Beef cattle numbers at 30 June 2016 provisionally totalled 3.47 million head, down 2.1 per cent on the previous June. This was due to a decrease across all beef cattle classes.

Total dairy cattle numbers were provisionally steady at 6.50 million head at 30 June 2016. The farm-gate milk price improved to stabilise the dairy herd after two years of retraction.

### Wool

Total wool exports are estimated to increase 16 per cent to 98,600 tonnes greasy in 2017-18. The strong rise in export volume is not due to significantly greater production on-farm but stock carried over from the 2016-17 season. The outlook for 2017-18 is for wool production to increase by 1.1 per cent. The estimated 1.0 per cent decrease in the overall auction wool price to 391 cents per kilogram greasy is a combination of strong gains for fine wool – up 25 per cent – and large declines for strong wool – down 20 per cent.

### **Sheep and Beef Farms**

Gross farm revenue for the All Classes Sheep and Beef Farm is estimated at \$518,900 for 2017-18. This is up 11 per cent on both, the previous year, and on early forecasts published in the New Season Outlook 2017-18.

Strong prices drive increased revenue for sheep and cattle, which increase on the previous year to \$244,600 (+22%) and \$141,000 (+6.2%) respectively. Combined sheep and cattle revenue make up 74 per cent of gross farm revenue. Wool revenue decreases 4.5 per cent to \$33,600, which moderates the lift in sheep and cattle revenue. The primary driver of this is poor prices for strong wool. Total expenditure for the All Classes Sheep and Beef Farm increases to \$392,600 for 2017-18. This is up 4.6 per cent on the previous year, and up 3.7 per cent on early forecasts published in the New Season Outlook 2017-18.

Expenditure increases in all areas except for interest, which decreases on the previous year. Repairs and maintenance and fertiliser are the two largest increases, up 12 and 13 per cent respectively on the previous year. This largely due to the lift in gross farm revenue, where farms are able to catch up on any deferred expenditure in these two areas. Farm profit before tax for the All Classes Sheep and Beef Farm increases to \$126,300 for 2017-18. This is up 39 per cent on the previous year, and up 40 per cent on early forecasts published in the New Season Outlook 2017-18. This is the highest farm profit since 2011-12 when it was \$160,200.

# **Economic Conditions**

### **Global Growth Prospects**

In 2018, global growth is expected to rise further after stronger than expected growth in 2017 – over 3 per cent. Growth has been widespread globally with over half of global economies picking up. Investment in advanced economies, increased manufacturing productivity from Asia and greater consumer confidence has strengthened to support the global momentum. Inflation and wage growth have not followed economic growth, remaining muted.

Global growth is anticipated to be moderated through 2018 and 2019 as lending conditions normalise in advanced economies and the investment-led acceleration diminishes. Agricultural prices are expected to stay steady while energy and minerals level off after large gains in 2017.

Oil prices have risen to around USD66 per barrel in January 2018 – up 24 per cent. Rising oil prices were driven by accelerated global growth and the continued agreement between the Organization of the Petroleum Exporting Countries (OPEC) and other oil producers to limit production. US production was affected by large weather events and uncertainty in the Middle East have aided higher oil prices.

US economic growth is expected to improve in the year ending March 2019 after improving in the year to March 2018. In December 2018, President Trump signed into law tax reform legislation that is expected to create short-term stimulus, driven by investment. US consumer confidence is high on the back of inflation-adjusted wages improving faster than the average since 2014, the unemployment is rate at its lowest since 2000 and there have been strong gains in the share market and house prices. A weaker USD and improved global demand has supported exports, despite the protectionist stance of the Trump administration.

In China for 2017, growth accelerated for the first time since 2010 – above the government's target of

Table 1

6.5 per cent -- driven by an export recovery in the December quarter. The move away from inefficient investment in China to a consumptionled economy will continue in 2018.

Chinese economic growth is forecast down to 6.4 per cent for the year ending March 2019, which reflects the downside risks, such as the US presidential administration's strong intention to reverse the growing trade deficit with China. Easing import demand by China will contribute to moderating global trade growth and continuing slowdown of China will be partially offset by other commodityimporting emerging markets and developing economies (EDME). Uncertainty and slow progress in the Brexit process negotiations has weighed on UK economic growth. The original end of the negotiation process was set for March 2019 and could have a significant influence on European economic growth over the next 12 months.

After five months, Angela Merkel's Christian Democrats formed a new coalition government following the September 2017 election – after members of the Social Democratic Party voted to approve the coalition on 4 March 2018. However, Germany's economy, along with other EU economies, performed strongly in 2017 to maintain the economic growth improvements.

Annual Average % Change, March Year								
	2014	2015	2016	2017	2018f	2019f		
	%	%	%	%	%	%		
US	+1.8	+3.1	+2.3	+1.6	+2.2	+2.5		
UK	+2.4	+3.0	+2.1	+1.8	+1.5	+1.4		
Euro zone	+0.5	+1.4	+1.9	+1.8	+1.9	+1.7		
Japan	+2.6	-0.4	+1.3	+1.3	+1.6	+1.3		
China	+7.6	+7.2	+6.8	+6.8	+6.8	+6.4		
South Korea	+3.3	+3.0	+2.9	+2.8	+3.1	+2.9		
Australia	+2.4	+2.7	+2.4	+2.3	+2.4	+2.8		
Trading Partners	+4.0	+3.7	+3.4	+3.3	+3.5	+3.5		
New Zealand	+2.5	+3.4	+2.4	+2.9	+2.9	+3.5		

**Economic Growth** 

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

> grow at 2.8 per cent in the year ending March 2019 with improving business investment and signs of unemployment rates reducing further, driving wage increases. Japanese economic growth in the year ending March 2018 was stronger than expected. While growth is forecast to be moderated in the year ending March 2019, the growth forecast is stronger than previous forecasts as some of the momentum from 2017 is carried forward and due to better external demand. Japanese exports grew 12 per cent in the year to January 2017 despite the strong Japanese yen.

Australia's economy is expected to

Brazil came out of recession in 2017 – growing at 1.0 per cent – due to improved commodity prices and easier lending conditions. Brazilian economic growth is expected to accelerate over 2018, however, elections in October 2018 may present some downward risk.

# **New Zealand**

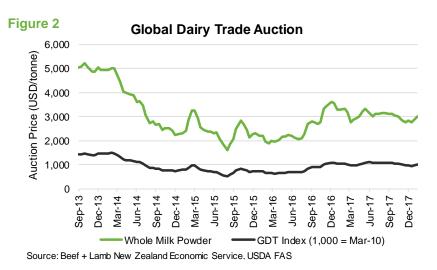
New Zealand's economic growth remained strong in the year ending March 2018 and is expected to accelerate in the following 12 months – at 3.5 per cent. Strong tourism and stimulus from the new government's policies are major drivers of this growth.

Queenstown and Auckland have benefitted from the continued strong tourism sector though some capacity limitations have risen, driving investment into new hotel developments.

A decrease in the number of people moving to New Zealand has reduced net migration, led by fewer student visas and the government signalling policies to manage immigration while the number of permanent residencies approved remained stable. A net migration reduction could tighten domestic spending and labour availability but soften housing demand past 2018.

Construction capacity is a constraint on the sector but there is strong activity in residential, non-residential and infrastructure construction. Despite housing market activity softening in recent months there is still strong demand. Housing and business investment borrowing slowed in 2017, partly due to the election and new government.

Lending in the agriculture sector remains muted as reduction of debt is a priority. International dairy prices have been hindered by a rise in global milk production. However, DairyNZ forecasts the final pay-out will be above the estimated average breakeven price of NZD5.20 per kg of milksolids.

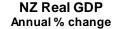


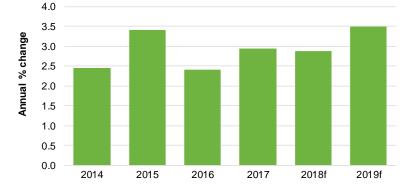
The dairy sector has been the focus of environmental pressure during the 2017 general election campaign and potential government policies.

### **Consumer Prices**

In general terms, total inflation (including food and energy) eased in the year ending March 2018 across all of New Zealand's trading partners, helped by energy prices. A moderate rise in inflation was driven by energy and food prices in advanced economies, tempered by low wage growth and core price inflation, advancements in technology, and international competition and competition within the markets. In the year ending March 2019, inflation is expected to continue at moderate levels with slight rises due to fuel prices. The New Zealand consumer price index (CPI) increased by 1.8 per cent for the year to March 2018, which is within the Reserve Bank of New Zealand (RBNZ) 1 to 3 per cent target range. Manufactured goods prices have not been as strong as expected and traded goods are expected to be restrained despite the increases in oil and food prices.







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

The RBNZ is expected to keep the official cash rate (OCR) on hold for the remainder of 2018 and into next year. Inflation is expected to reach 2.1 per cent in the year ending in March 2019. Planned construction activity is expected to be strong – driven by government policies – and tight sector capacity will keep construction costs up.

T-LL-O

Housing demand will lower as government-led residential construction becomes available, Canterbury rental prices have eased as the housing supply has come to market after the post-earthquake rebuild. Government spending and minimum wage increases will support the rise in inflation.

#### **Interest Rates**

Historically, financial conditions of major economies remain very accommodative of borrowing but many have begun to move central bank interest rates up as economic momentum picks up.

The US Federal Reserve (US Fed) has appointed Jerome Powell to Chairman as the successor to Janet Yellen. The US Fed raised interest rates three times over 2017 with the final hike in December to between 1.25 and 1.5 per cent. This was following sustained improvement of the US economy and expected, and now passed, tax legislation reforms. The US Federal Reserve Open Markets committee was optimistic

Table 2		Consum	er Prices			
	Annual	Average % C	Change, Marc	h Year		
	2014	2015	2016	2017	2018f	2019f
	%	%	%	%	%	%
US	+1.4	+1.2	+0.4	+1.6	+2.0	+2.1
UK	+2.3	+1.1	+0.1	+1.1	+2.7	+2.7
Euro zone	+1.0	+0.2	+0.1	+0.7	+1.5	+1.4
Japan	+0.9	+3.0	+0.2	-0.1	+0.5	+0.8
China	+2.6	+1.7	+1.7	+1.9	+1.9	+2.0
South Korea	+1.2	+1.2	+0.7	+1.3	+2.0	+1.8
Australia	+2.6	+2.1	+1.5	+1.5	+2.0	+2.3
Trading Partners	+2.0	+1.5	+2.0	+3.5	+1.8	+1.9
New Zealand	+1.3	+0.9	+0.3	+1.1	+1.8	+2.1

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

Table 3	Sh					
	2014 %	2015 %	2016	2017	2018f	2019f
			%	%	%	%
US	0.1	0.0	0.1	0.3	1.0	1.2
UK	0.3	0.4	0.5	0.3	0.2	0.6
Euro zone	0.2	0.2	0.0	-0.3	-0.3	0.0
Japan	0.1	0.1	0.1	0.1	0.1	0.2
Australia	2.8	2.7	2.2	1.9	1.7	2.0
New Zealand	3.0	3.6	2.6	2.0	1.9	2.3

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



regarding the economy with few major threats. There are expectations for three rate hikes in 2018.

China's central bank, the People's Bank of China (PBOC), last raised short-term interest rates modestly by 0.05 percentage points at the beginning of December 2017 - the first since March 2017. This has been seen as a measure to minimise risks from debt-driven stimulus, encourage firms and investors to decrease debt levels and minimise capital going offshore.

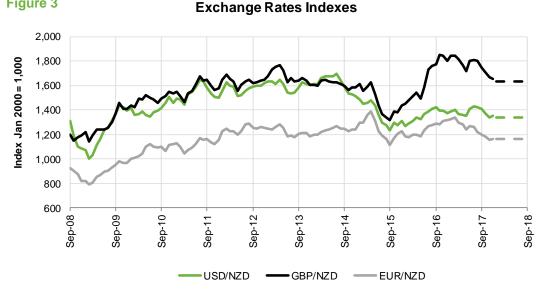
The Bank of England (BoE) raised interest rates to 0.5 per cent in November 2017 - the first rise in over a decade - but one, possibly two hikes, are expected in 2018. The European Central Bank (ECB) is unlikely to increase interest rates in 2018 despite the European economy picking up and BoE rates starting to rise. The Bank of Japan (BoJ) has signalled that monetary policies will stay accommodative for lending as weak growth and low inflation persists.

The RBNZ cut the OCR by 0.25 percentage points three times in calendar 2016 (March, August and November) to 1.75 per cent but no change since and it is likely that the OCR will remain steady into 2019.

# **Exchange Rates**

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

#### Figure 3



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

For the year to September 2018, 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 GBP. This mainly reflects the strengthening of other economies while New Zealand remains steady after previously performing relatively strongly.

Figure 3 indicates a significant portion of the gains in the 2016-17 September year annual average exchange rate occurred during the year ending September 2016 – after the June 2016 Brexit referendum – which had come off a lower base in the first half of the season.

#### Table 4 NZ Dollar Exchange Rates Annual Average

		uge	
Sep Year	USD	GBP	EUR
2015-16	0.69	0.48	0.62
2016-17	0.71	0.56	0.65
2017-18f	0.69	0.51	0.59
2017-18f % change	-2.8%	-8.9%	-9.2%

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

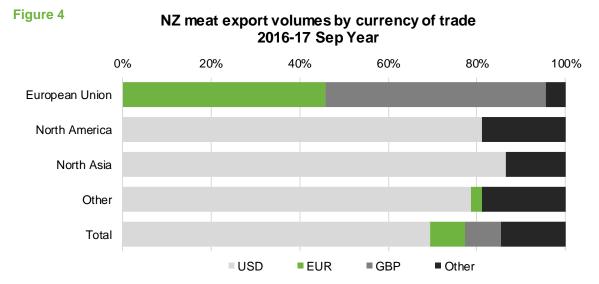
The forecast shows the GBP and EUR strengthening from the New Season Outlook 2017-18 publication in which the previous forecast was based on the NZD averaging USD0.69, GBP0.55 and EUR0.62.

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

> Figure 4 shows the New Zealand meat (beef, veal, lamb and mutton) export volumes by currency in which the trade is denominated. In the year ending September 2017, 70 per cent of meat export volumes were reported as being traded in USDdenominated 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 2016-17, 37 per cent of lamb exports were to the European Union and 35 per cent was to North Asia. Whereas for beef, 52 per cent was exported to North America and 34 per cent to North Asia.

In 2016-17, 46 per cent of the meat exports to the EU were traded in EUR and 50 per cent in GBP, and 81 per cent of the meat exports to North America were traded in USD. Nearly 85 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 as the Chinese currency (the yuan) depreciates against the USD.



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

# Exchange Rate Sensitivity – 2017-18

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 2017-18 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  $\pm 5$ 

and ±10 per cent in the exchange rates for the USD, GBP and EUR. In 2017-18, the NZD is expected to weaken against New Zealand's major trading currencies, 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 0.69 to 0.76 - and the associated cross rates against the GBP and the EUR decreases the average lamb price received by farmers by 12.5 per cent.

Alternatively, when the NZD depreciates by 10 per cent - from 0.69 to 0.62 against the USD - the

farm-gate lamb price increases by 15.2 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.

Table 5			NZD	Exchange Rat	tes		
						Exchange Rate Change	from USD 0.69
						to USD 0.62	to USD 0.76
USD	0.62	0.65	0.69	0.72	0.76	-10%	+10%
GBP	0.46	0.49	0.51	0.54	0.56	-10%	+10%
EUR	0.53	0.56	0.59	0.62	0.65	-10%	+10%
			Farm-G	ate Prices Rec	eived		
				\$ / head			
Lamb	141	131	122	114	107	+15.2%	-12.5%
Mutton	119	109	100	92	84	+19.3%	-15.8%
Steer/Heifer	1,808	1,694	1,592	1,500	1,416	+13.5%	-11.1%
Cow	997	934	878	827	781	+13.5%	-11.1%
Bull	1,908	1,788	1,681	1,583	1,494	+13.5%	-11.1%
All Beef	1,507	1,413	1,327	1,250	1,180	+13.5%	-11.1%
				¢ / kg			
Lamb <sup>1</sup>	761	708	661	618	578	+15.2%	-12.5%
Mutton <sup>1</sup>	470	430	394	361	332	+19.3%	-15.8%
Steer/Heifer	655	613	576	543	513	+13.5%	-11.1%
Cow	501	469	441	415	392	+13.5%	-11.1%
Bull	631	591	555	523	494	+13.5%	-11.1%
All Beef	600	563	529	498	470	+13.5%	-11.1%
Fine <sup>2</sup>	1,542	1,437	1,343	1,257	1,179	+14.9%	-12.2%
Medium <sup>2</sup>	733	683	638	598	561	+14.9%	-12.2%
Crossbred <sup>2</sup>	289	270	252	236	221	+14.9%	-12.2%
All Wool <sup>2</sup>	362	337	315	295	277	+14.9%	-12.2%

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



Total sheep numbers at 30 June 2017 were provisionally 27.4 million head, decreasing 0.8 per cent on the previous season. This was due to a decrease in breeding ewes (-2.4%) which was moderated by a lift in hoggets carried over balance date compared with the previous season.

North Island sheep numbers decreased 1.3 per cent (174,000 head) to 13.5 million. Overall, a decrease in breeding ewe numbers was moderated by a lift in ewe hoggets to ram. East Coast was the only region that did not decline due to a lift in the number of hoggets carried over 30 June 2017 with some flock rebuilding occurring on farms that were negatively affected by facial eczema in 2016.

South Island sheep numbers decreased slightly (-0.3%) to 13.9 million. This was due to a lift in sheep numbers in Marlborough-Canterbury offsetting a decrease in numbers outside this region, particularly Southland where breeding ewe numbers decreased for the third consecutive year to 2.6 million.

Total beef cattle numbers at open 1 July for 2017-18 were provisionally 3.61 million head, up 2.1 per cent on the previous season. This was driven by an overall increase in breeding cows and weaners in the both the North and South Islands.

North Island beef cattle numbers were almost static (+0.4%) at 2.52 million head. The number of trade stock that were on hand due at 30 June increased in all regions in response to strong beef prices, and the number of breeding cows and heifers, and weaners increased in most regions. North Island carries 70 per cent of the beef cattle herd and 60 per cent of the dairy herd.

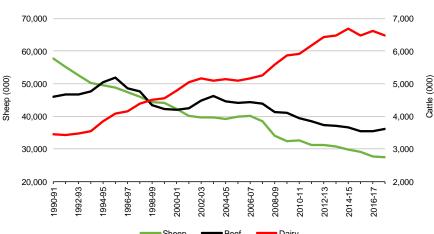
South Island beef cattle numbers increased 6.2 per cent to 1.09 million head. This increase occurred for all regions, the exception being the number of trading cattle in Southland which decreased. The South Island carries 30 per cent of the beef cattle herd and 40 per cent of the dairy herd.

Total dairy cattle numbers at open 1 July 2017-18 were 6.47 million head, down 2.2 per cent. A decrease in the number of cows and heifers in North and South Islands underpinned the overall decline. The North Island contains about 60 per cent of total dairy cattle, down from 67 per cent in 2008-09 (10 years earlier).

Table 6			ock numbe Ilion head	ers	
	Breeding Ewes	Hoggets	Total Sheep	Beef Cattle	Dairy Cattle
30 June 2016	18.14	8.56	27.58	3.53	6.62
30 June 2017p	17.70	8.78	27.37	3.61	6.47
16-17 to 17-18 % change	-2.4%	2.6%	-0.8%	2.1%	-2.2%

p provisional

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



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

### Figure 5

# Lamb and Mutton Exports

# Lamb

#### 2017-18

Total lamb receipts under the USD0.69 exchange rate scenario are expected to be up 15 per cent to \$3.01 billion FOB in 2017-18. This would be the first time lamb exports exceed \$3 billion, in nominal terms. Largely driven by a forecast \$9,800 FOB per tonne for lamb meat – up 14 per cent.

In 2017-18, the volume of New Zealand lamb exports is expected to increase slightly – by 0.7 per cent. A record national average lambing percentage partially offset fewer breeding ewes, however, this, and a slight drop in the average carcase weight, would be offset by a greater portion of the lamb crop available for processing (see Lamb and Mutton Production below).

The average value of lamb meat exports is projected to rise 15 per cent as the value per tonne gains made in the second half of the 2016-17 season have held into the peak processing period of 2017-18. Tighter international supply, strong demand, and improved in-market prices have been key drivers, supported by an easing NZD. The proportion of total lamb exports from meat was 95 per cent – up 0.8 percentage points. Receipts from coproducts are expected to be up slightly (0.7%) to \$169 million FOB, reflecting a continuing low export demand for offal and lamb skins.

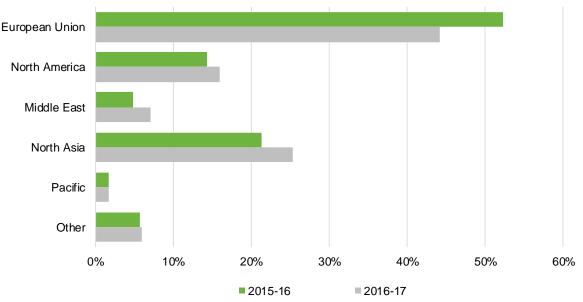
The volume of lamb exported over the first four months of the 2017-18 meat export season increased year-on-year by 13 per cent. Dry conditions in the December quarter 2017 and strong farm-gate prices encouraged higher

Figure 6

processing numbers. The start of the 2016-17 season was cooler but with better grass availability, which reduced the number of lambs processed.

The fast start to the 2017-18 season yet with relatively similar volumes to the previous season leaves 2.1 per cent fewer lambs available for the January to September period of the current season.

# New Zealand Lamb Exports Sep year, \$m FOB



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

#### 2016-17

In the year ended September 2017, total lamb receipts (meat and co-products) decreased 4.7 per cent to \$2.71 billion FOB.

Total New Zealand lamb meat exports were down 2.7 per cent to 295,000 tonnes shipped weight in the year ending September 2017. However, the average value was up 8.8 per cent to \$8,602 FOB per tonne for 2016-17.

Receipts from co-products dropped 10 per cent to \$168 million FOB, following a fall of 27 per cent in 2015-16. Lamb skins accounted for about half of 2016-17 total co-product receipts at \$84 million – down 14 per cent. Total receipts for offals also contributed to lower co-product returns, which were down 6.1 per cent to \$84 million. The proportion of lamb export value as meat, not from co-products, rose 1.1 percentage points to 94 per cent of total lamb value. Within the 2.7 per cent decrease in total lamb meat exports, the proportion of total exports to the EU fell 5.0 percentage points to 37% – 105,600 tonnes (-16%) – and fell to 44 per cent of lamb receipts. Despite the FOB value per tonne to the EU increasing by 4.5 per cent to \$10,700, the FOB value per tonne across all markets was up 8.9 per cent to \$8,900 and up 23 per cent to North Asia to \$6,400 – the second largest market.

Lamb exports to North America rose to 33,000 tonnes in 2016-17, which is 10 per cent of total lamb exports, worth \$270 million, or 15 per cent of total receipts.

Table 7

#### New Zealand Lamb Exports

		Lamb meat		Co-	Total	Lamb
Sep Year	000 tonne	\$ / tonne	\$m FOB	Products \$m FOB	Lamb \$m FOB	Meat %
2013-14	307	8,163	2,504	275	2,779	90%
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	8,602	2,538	168	2,706	94%
2017-18e	297	9,842	2,924	169	3,094	95%
2017-18e % change	+0.7%	+14.4%	+15.2%	+0.7%	+14.3%	

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

# Mutton

### 2017-18

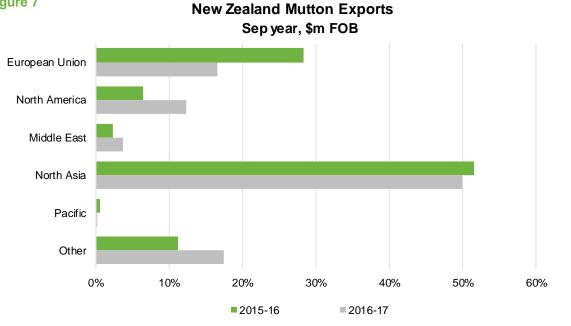
For 2017-18, total mutton exports are expected to drop 7.3 per cent following the decrease in production due to a 2.4 per cent drop in ewe numbers.

The average value of mutton is expected to increase 24 per cent to \$6,500 FOB per tonne. Limited mutton supplies from New Zealand and Australia drove improvements in the value per tonne FOB during the 2016-17 season, which has carried over into 2017-18 with international mutton supply even lower.

Returns from co-products are expected to be down 6.0 per cent to \$113 million FOB as returns from offals are expected to decrease by 8.3 per cent, while skins stay steady.

Overall, mutton export receipts are expected to total \$602 million FOB, up 11 per cent on the previous season. Total mutton receipts were last over \$600 million in 2014-15, when there was 14 per cent more mutton exported and mutton meat was 74 per cent of the total mutton export receipts.





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

Table 8	New Zealand Mutton Exports						
		Mutton meat		Co-	Total	Mutton	
				Products	Mutton	Meat	
Sep Year	000 tonne	\$ / tonne	\$m FOB	\$m FOB	\$m FOB	%	
2013-14	94	5,017	472	128	600	79%	
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%	
2017-18e	75	6,527	489	113	602	81%	
2017-18e % change	-7.3%	+24.4%	+15.3%	-6.0%	+10.6%		

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

## 2016-17

In 2016-17, New Zealand's total mutton exports were down 2.5 per cent on the previous season at 80,900 tonnes shipped weight.

The average value of mutton exports increased 15 per cent to \$5,247 FOB per tonne in 2016-17. The value of mutton meat exports

reached \$424 million FOB, up 12 per cent, reflecting the tight supply from the two largest mutton exporting markets, Australia and New Zealand, and strong demand from North Asia, particularly China and Malaysia. Export receipts from mutton coproducts decreased 9.4 per cent to \$120 million FOB, due to skins dropping by 26 per cent. Overall total mutton receipts were \$544 million FOB for 2016-17, up 6.3 per cent on 2015-16.

North Asia is a major driver of New Zealand mutton trade, accounting for 50 per cent of mutton export returns in 2016-17, up 7.5 per cent to \$214 million. China still has a large influence, because approximately half of mutton exports were destined for China in 2016-17. A 7.3 per cent increase in revenue from mutton exports to China was driven by a 23 per cent rise of the average FOB per tonne – to \$4,700 – more than offsetting a 13 per cent decline in exports.

Mutton exports to Malaysia grew by 67 per cent to make it the second largest mutton market (up from fourth), driven by a 34 per cent increase in value per tonne – to \$5,600 – to raise the revenue from this market by 123 per cent to \$54 million.

# Lamb Price – International Situation

### Overview

Global demand for sheepmeat remains strong due to tight availability from Australia and New Zealand. which are the dominant suppliers for international sheep trade. Growth in Chinese consumer demand continues to outpace their domestic production. driving import demand. The weak GBP after the UK referendum to leave the EU in June 2016 has benefitted UK sheepmeat exports. These are mostly destined for other EU countries. Returns for New Zealand sheepmeat exports to the US continue to grow and demand from the EU is expected to stabilise, but there is strong competition from other meat types.

### Australia

The Australian national flock is forecast to continue to keep growing to 71.4 million head for the year ending June 2018 – up 2.5 per cent – according to Meat & Livestock Australia (MLA). This would be the second year of flock growth after a period of flock reductions in response to poor pasture conditions. The flock rebuild has occurred at a slower rate than previously expected due to disruptions such as dry winter conditions in some areas, but growth is expected to continue in 2018-19.

Lamb production in 2018 is forecast to be steady at 514,000 tonnes due to a one per cent reduction in the number of lambs processed to 22.5 million head being offset by a one per cent increase in average lamb carcase weight with improved pasture conditions. Fewer lambs are expected to be processed as more are retained to join the breeding flock, lowering lamb availability despite a larger flock.

A drop in Australian mutton production is also forecast as part of flock rebuilding with better pasture conditions – down by 6 per cent to 177,000 tonnes – due to decreasing number available for slaughter (-5%) and lighter carcase weights (-2%).

Australia has a proportionally larger domestic lamb market than New Zealand, with about 44 per cent of lamb production sold domestically. Therefore, a reduction in production

#### Figure 8

Tonnes

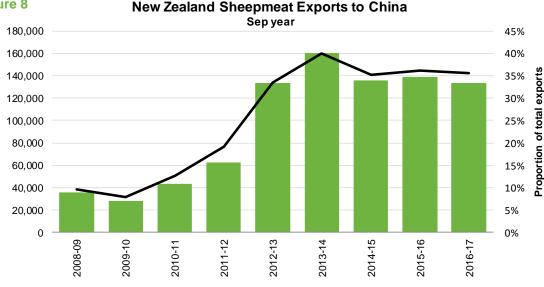
has a comparatively larger effect on change in exports. Australian lamb
exports in 2017-18 are forecast at
241,000 tonnes shipped weight – down 4 per cent. Mutton exports are
expected to be down by 6 per cent, which is in line with the drop in
production as over 90 per cent of mutton is exported.

The average export value per tonne for sheepmeat is expected to be supported by the strong international demand and tighter supply – New Zealand and Australia account for approximately 90 per cent of international sheepmeat trade, excluding intra-EU trade.

### China

While the effect of urbanisation as a driver of meat consumption has weakened, growth of the middle class within major centres is driving demand with a rising preference for higher quality protein sources, and more of it, as part of healthier lifestyles. Strong price rises in 2017 highlighted the sturdy food service demand in urban areas, particularly hotpot restaurants.

Recent reductions of the Chinese national sheep flock in 2016 were driven by drought in some regions and lower prices cooled domestic production in 2017. The current high prices will create interest and



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

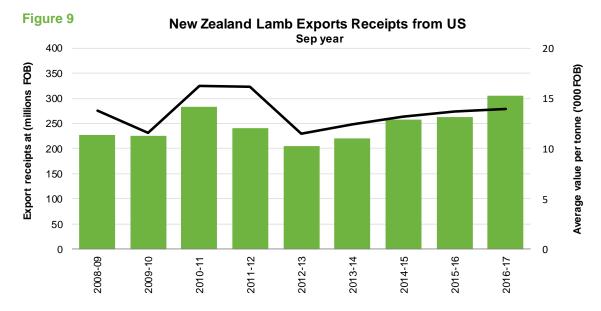
> investment, and foster flock growth. Small-scale farmers have been the producers that have dropped out of the sector, while large consolidated operations continue to grow and invest in improved production systems and the flock will begin to grow again. Continuing high prices will attract more investment and encourage consolidation of production.

A widening gap between Chinese domestic production and demand in 2017 drove price increases (+9%) and helped grow imports (+11%), which is expected to continue to expand in 2018 (+6.7%) and maintain the sheepmeat position in the market in the medium-term as a premium protein source. Per capita consumption fell by 3.8 per cent in 2017 due to higher prices eroding the gains made in 2016 (+3.5%), however, it is expected to pick up again in 2018 - up 1.4 per cent. A growing uppermiddle class drives the growth in total demand, despite the dip in per capita consumption.

Pork and poultry have suffered recently as a result of disease and production issues, reducing competitiveness with sheepmeat. While the novelty of sheepmeat is beginning to lessen, it is still relatively new to the mainstream market and consumed at a lower rate per person than other red meats.

### **European Union**

Sheepmeat production increased moderately by 2.6 per cent in 2017,



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

the second season of higher production after falling 25 per cent in the decade to 2014. A slight rise in UK processing and improved carcase weights drove the increase, along with Ireland, Romania and Germany. An increase is forecast again in 2018 – up by 1.6 per cent – supported by a rise in the adult sheep slaughtered.

Total EU imports of sheepmeat were down 12 per cent as product from New Zealand went to other markets, particularly North Asia and the US. New Zealand exports dominate the EU market – over 80 per cent of EU sheepmeat imports. The weaker GBP following the June 2016 Brexit referendum contributed to the decline of imports. EU imports are expected to be relatively steady in 2018 as European economies begin to pick up but import value per tonne remains less competitive than other markets.

Farm-gate prices fell 4.3 per cent in 2017 with lighter lambs falling further than heavy lambs due to the weak GBP, but are expected to stabilise in 2018. Price-recovery will be restrained by competition with other animal proteins. Sheepmeat has long been a minority animal protein as a proportion of consumption and has been declining marginally, but retains the highest price per volume for producers.

#### **United States**

The US was the third largest market for New Zealand lamb exports in 2016-17 – taking 7.7 per cent of total exports – and, of the ten largest markets, had the third highest average value per tonne at FOB – NZD14,000 per tonne at FOB. Despite low lamb consumption per capita (0.4kg per capita in 2016), there has been steady growth in the volume of lamb exported to the US and the average value per tonne at FOB, driving the growth in total receipts from lamb exports to this market in recent seasons to NZD306 million at FOB in 2016-17.

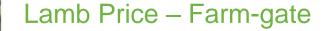


Figure 10 shows monthly, quarterly and annual average prices for the all grades lamb to the end of September 2018.

Three exchange rate scenarios are provided in the outlook for 2017-18 because of the volatility in exchange rates. The three scenarios use annual average exchange rates of USD0.62, USD0.69 and USD0.76 and the associated cross rates against the GBP and the EUR.

At the mid-exchange rate of USD0.69, the forecast lamb price of 661 cents per kilogram for 2017-18 is a jump of 16 per cent from the 2016-17 price of 572 cents per kilogram. Despite the forecast depreciation of the NZD against all the major trading currencies, though still historically strong, the schedule price benefits from good in-market prices.

If the NZD depreciated in 2017-18 to average USD0.62 instead of USD0.69 then the lamb price, with all other

#### Table 9

#### All Class Weighted Schedule Year ending September - Annual average

Tour onling coptombol 7 million atologo						
	Lam	ıb	Mutton			
	\$ per head	c per kg	\$ per head	c per kg		
2009-10	81	461	57	229		
2010-11	118	645	92	382		
2011-12	114	609	95	371		
2012-13	85	474	61	243		
2013-14	100	548	77	303		
2014-15	94	519	67	269		
2015-16	93	509	57	226		
2016-17	106	572	74	288		
2017-18e	122	661	100	394		

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

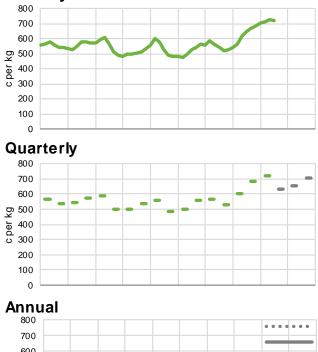
things being equal, would rise to 761 cents per kilogram, i.e. a 32 per cent increase compared with 2016-17.

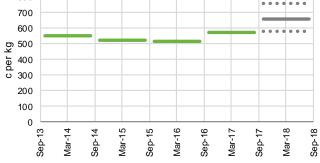
However, using the high exchange rate model with the NZD appreciating to average USD0.76, with all other things being equal, the lamb price would be 578 cents per kilogram, still a 0.5 per cent rise on the average for the previous season. The different exchange rate scenarios in Table 9 highlight the leveraged effect of the exchange rate on the lamb price to farmers.

Monthly and quarterly prices are used to better express the variation in prices within season. Historical data shows that prices tend to rise during the December quarter and then gradually decrease as the season progresses and as slaughter numbers increase. By the end of the season, when slaughter numbers start to reduce again, prices tend to go up. In addition to historical quarterly prices, Figure 10 provides a forecast of the seasonal pattern of lamb prices in 2017-18.

#### Figure 10







Source: Beef + Lamb New Zealand Economic Service



#### Table 10

Generally, the farm-gate lamb price

for the June quarter stays relatively steady with the March quarter. However, the June 2017 guarter jumped 14 per cent on the March 2017 quarter, which was followed by another strong rise for the September 2017 quarter – up 13 per cent. The smaller lamb crop and tighter mutton supplies combined with the improved pasture availability in 2016-17 created a "grass market", where production-side pressure to sell livestock is lessened. Reduced competition in the export market contributed livestock prices remaining firm due to lower production in New

Zealand and Australia.

on 2016-17.

NZD.

At the mid-exchange rate of USD0.69,

The strong prices for lamb and mutton in 2016-17 have carried over into the start of 2017-18 despite the dry start to the current season. These

farm-gate prices are supported for the remainder of the season by the reduced the availability due to higher numbers processed in the December quarter, an easing risk of dry conditions in many regions, coupled with tight international supply,

improved in-market prices and weaker

the annual average mutton price is estimated at 394 cents per kilogram in 2017-18, an increase of 37 per cent

All Class Lamb Price Sensitivity Analysis								
	Lamb price							
	\$ per head	c per kg						
0.62								
0.46	141	761	High					
0.53								
0.69								
0.51	122	661	Mid					
0.59								
0.76								
0.56	107	578	Low					
0.65								
	0.62 0.46 0.53 0.69 0.51 0.59 0.76 0.56	Lamb \$ per head 0.62 0.46 0.53 141 0.53 0.69 0.51 0.59 122 0.76 0.56 107	Lamb price           \$ per head         c per kg           0.62         141         761           0.46         141         761           0.53         122         661           0.59         122         661           0.76         107         578					

Source: Beef + Lamb New Zealand Economic Service

# Lamb and Mutton Production

#### Lamb

The total number of lambs tailed in the spring of 2017 was provisionally down 1.6 per cent (0.4 million head) on the previous spring to 23.6 million head. The 2017 lamb crop was influenced by a decrease in the number of breeding ewes.

The ewe lambing percentage for spring 2017 is estimated at 127.2 per cent, a new record average for New Zealand. The fewer breeding ewes was due to the lingering effects of a deeper cull in 2015-16 in anticipation of forecast dry summer conditions and a facial eczema outbreak in northern regions. Mating conditions were generally good and lambing weather was mostly benign with the exception of a snow event in the high country during November 2017.

The 2017-18 number of lambs to be processed in export-approved premises is forecast to increase

1.3 per cent from the previous season to 19.5 million head. However, lambs processed in the December quarter were up 13 per cent, leaving an estimated 2.2 percent fewer available for the remainder the season.

The increase in lambs processed from 2016-17, which had a larger lamb crop, is partly due to more lambs being carried over from one production season into the next due to good grass availability. Then, the timing of processing the current lamb crop in our forecast for the current season is closer to an historical average, which reduces the number carried over into the September quarter in the current season. However, provisional data for on-farm losses in 2017-18 are down.

North Island export lamb processing is estimated to increase 2.8 per cent to 9.55 million head compared with 2016-17, a decrease of 263,000. South Island export lamb processing

Table 11 **Export Lamb Production** Lamb Crop Slaughter Carcase Production million Weight 000 tonne million head head ka bone-in Sep Year 2013-14 25.0 20.3 18.3 371.5 2014-15 25.8 21.2 18.1 384.2 2015-16 24.6 19.9 18.3 364.9 2016-17 24.0 18.6 358.3 19.2 2017-18e 23.6 19.5 18.5 360.8 2017-18e % change -1.6% +1.3% -0.6% +0.7%

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

is estimated to marginally decrease 0.2 per cent to 9.95 million head compared with 2016-17, a decrease of 15,000.

Export lamb production is expected to grow slightly by 0.7 per cent to 360,800 tonnes carcase weight in the year ending September 2018, due to a slight decrease in average carcase weight (-0.6%) moderating the rise in the number of lambs processed. The estimated average carcase weight is still historically high but follows an exceptional season – 2016-17 – which was the second highest average carcase weight.

### Mutton

The export mutton slaughter for the year ending September 2018 is estimated to decrease 5.8 per cent to 3.4 million head. This represents the third consecutive significant decline (>5%) from elevated production levels during the expansion of the dairy herd.

This would be the fewest adult sheep slaughtered in export premises for a season, but only 0.8 per cent fewer than in 2011-12, when sheepmeat prices were also strong.

For the year to 30 September 2018, carcase weights are expected to average 25.3 kg, down 1.6 per cent following the record average weight reached in 2016-17.

Export mutton production for 2017-18 is expected to drop 7.3 per cent to 85,400 tonnes carcase weight, driven by the fewer adult sheep available and lower carcase weights.

Mutton production for 2017-18 started strong with 15 per cent more processed in the December quarter than the previous season. Combined with a forecasted decrease of 5.8 per cent sheep available for processing for the season, this leaves 17 per cent fewer sheep for the January to September period.

Table 12	Export Mutton Production						
	Slaughter	ughter Carcase Prod					
	million	Weight	000 tonne				
Sep Year	head	kg	bone-in				
2013-14	4.2	25.3	107.0				
2014-15	4.1	25.0	102.1				
2015-16	3.8	25.1	96.4				
2016-17	3.6	25.7	92.2				
2017-18e	3.4	25.3	85.4				
2017-18e % change	-5.8%	-1.6%	-7.3%				

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

# **Beef and Veal Exports**

#### 2017-18

In the year ending September 2018, New Zealand beef and veal meat exports are expected to decrease 4.6 per cent to 378,000 tonnes shipped weight. This represents the ongoing decline from record high

export volumes in 2014-15 and is driven by limited beef cattle availability following dry conditions in some regions and stabilisation of the dairy herd. Despite the declining trend in recent seasons, the 2017-18 beef and veal export forecast is still a historically high volume. The average value of beef and veal meat exports is forecast to increase 3.2 per cent to \$7,117 FOB per tonne in 2017-18. Strengthening currencies of New Zealand's major beef export markets drive the increased value per tonne on the back of relatively stable in-market prices for frozen product – 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 2.8 per cent.

The value of co-product exports from beef and veal is expected to rise 1.2 per cent in 2017-18 to \$539 million FOB.

Overall, total beef and veal export receipts are expected to decrease 1.1 per cent to \$3.23 billion FOB in 2017-18. Beef and veal export returns remain relatively strong, despite the lower volume driving the decrease, and have remained over \$3 billion since first passing this mark in 2014-15.

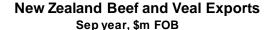
#### 2016-17

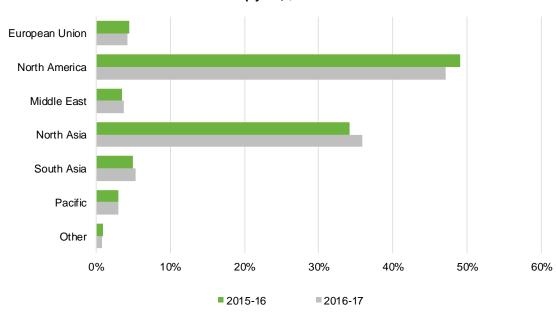
New Zealand total beef and veal export returns (including co-products) were \$3.26 billion FOB in 2016-17 – down 1.1 per cent. The decrease in total returns was due to easing value per tonne and volume after records set in 2014-15 at \$3.79 billion, driven by higher prices from the US and increased volume, particularly from the dairy sector retraction but also due to the high prices.

The average value in 2016-17 dipped to \$6,898 per tonne, down 1.4 per cent. This was still 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 nearly two-thirds of beef exports.

The volume of beef and veal exports in 2016-17 fell 6.6 per cent to 396,000 tonnes shipped weight. However, this drop was due to elevated slaughter in 2014-15 and 2015-16 due to the high number of cows processed as the dairy sector retracted after an extended period of herd growth. Beef and veal exports in 2016-17 were still historically high.

Figure 11





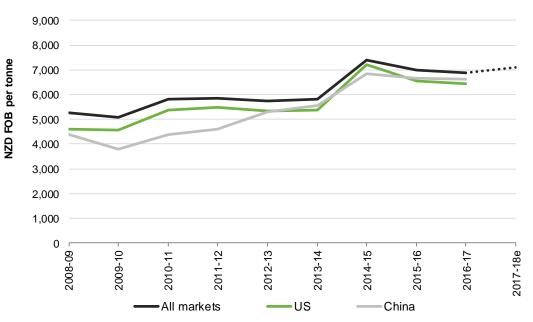
Source: Beef + Lamb New Zealand Economic Service, New Zealand Customs, New Zealand Meat Board

> The value of co-product (including hides and offal) exports fell by 5.2 per cent to \$533 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 52 per cent of volume in 2016-17 – 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 2014-15.

The proportion of total beef exports to China increased two percentage points in 2016-17 to 19 per cent, however, the actual volume stayed steady at 71,000 tonnes due to the smaller total volume exported. The share of total beef exports to China has grown gradually in recent seasons, after jumping to 10 per cent in 2012-13 – from one per cent in the previous season. Approximately two-thirds of exports to China are secondary cuts, which receive a higher average value per tonne at FOB than manufacturing cuts.





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

Table 13	New Zealand Beef and Veal Exports							
_	Beef	and Veal Mea	it	Co-	Total	Beef		
				Products	Beef	Meat		
Sep Year	000 tonne	\$ / tonne	\$m FOB	\$m FOB	\$m FOB	%		
2013-14	390	5,827	2,274	530	2,804	81%		
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%		
2017-18e	378	7,117	2,687	539	3,225	83%		
2017-18e % change	-4.6%	+3.2%	-1.6%	+1.2%	-1.1%			

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



# **Beef - International Situation**

depreciating against the USD on

average by 13 per cent over that

season. Despite the average US

in-market price of imported 95CL

decline in NZD terms.

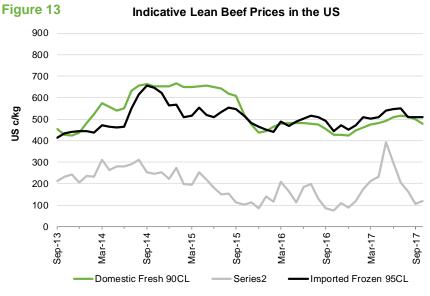
rising by 2.2 per cent in 2016-17, a

4.3 per cent appreciation of the NZD

against the USD drove a 4.6 per cent

Figure 13 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.

In 2014-15, the annual average in-market beef price for US imported frozen 95CL increased 20 per cent compared with the previous season, while the same price in NZD increased 36 per cent. This was due to the NZD



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

Overview

Globally, total beef and veal production is forecast to grow for the third year in a row in calendar 2018 – up two per cent – driving a three per cent rise in international trade of beef and veal. Stronger production from large producers, such as Brazil, US, Australia and Argentina, will drive the increased international supply and competition, but the widening gap between Chinese domestic production and consumption will be important for role in demand.

### **United States**

Growth of beef production in the US was strong in 2017 – up 3.8 per cent – the second year of higher production after falling in 2014 and 2015. Production is forecast to grow further in 2018 by 5.9 per cent to 12.6 million tonnes. The US national herd has continued to grow and maturing of the herd is translating through to more livestock available for processing.

Despite the strong rise in production, producer and wholesale prices were firm in 2017, supported by strong consumer demand. Consumption per capita increased by 2.3 per cent in 2017. However, prices are expected to ease in 2018 even though per capita consumption is expected to increase by 4.0 per cent as there is often a six-month delay for prices to feed through the chain. Margins will still be satisfactory to encourage some herd expansion as feed costs remain low and good grass availability.

A 12 per cent increase of export volume at higher value per tonne – up 4.1 per cent – also helped to accommodate the higher US production. A majority of the increased export volume was to Asia, with large increases to the three largest markets – Japan (+32%), Korea (+10%) and Hong Kong (+27%). The US does not have a Free Trade Agreement with Japan so was affected by the Japanese 'snapback' tariff provision, which raised tariffs on imports of frozen beef from 38.5 per cent to 50 per cent (see North Asia below).

New Zealand beef and veal exports to the US in 2016-17 were down 10 per cent by volume and 1.7 per cent in average value per tonne compared with 2015-16, all moving in the same direction as exports across all markets.

### **North Asia**

The growth in the Chinese demand for beef continued in 2017, setting a new record for imports across all channels. Chinese beef imports are forecast to grow further in 2018 as domestic consumption growth (+1.9%) outpaces the growth in production (+1.4%), which is supported by a stronger yuan (CNY, the Chinese currency).

The strong demand for beef from a growing Chinese upper-middle class is supporting international prices as

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> global production has risen, particularly in second tier cities rather than larger cities where the market is more mature. Direct imports overtook beef through indirect 'grey' channels in 2017 as more countries gained access to the Chinese market.

Beef production in China is transitioning from smaller producers to more efficient larger herds as regulatory pressure encourages smaller farmers to exit the sector. As the beef sector shifts to larger and more efficient farms, improvements in animal management and genetics are expected to help production in the medium-term. A contraction of the dairy herd due to oversupply is expected to have ended in 2017.

New Zealand's beef exports to China were stable for the 2016-17 season with little change in volume or average value per tonne, however, there were decreases across all markets. The share of total exports that went to China rose two percentage points to 19 per cent of New Zealand beef exports.

Taiwan, Korea and Japan are the largest markets behind the US and China, accounting in total for 15 per cent of New Zealand's beef and veal exports. Australia and the US have increased their export focus in North Asia increasing competition. However, import prices are expected to remain firm and Japanese and Taiwanese imports grew in 2017 and are expected to grow further in 2018, while Korean imports are expected to be relatively stable but at historically high levels.

In August 2017, Japan enacted a safeguard on frozen beef imports until the end of March 2018. Tariffs on frozen beef were raised from 38.5 per cent to 50 per cent due to a 17 per cent year-on-year increase of beef imports in one quarter. These increased tariffs did not affect Australia because of that country's Economic Partnership Agreement (EPA) with Japan. Outside of the safeguard being enacted, Australia has about a 10-percentage-point tariff advantage over New Zealand.

However, in January 2018, negotiations for the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) were concluded in Tokyo and the agreement was signed in March 2018 in Chile. A significant advantage would be reduction of tariffs on beef exports to Japan from 38.5 percent to 9 percent over 16 years, immediately removing Australia's current tariff advantage over New Zealand, and exemption from future beef import tariff safeguards.

#### Australia

In the year to 2017, the cattle herd increased by 3.0 per cent to 25.7 million after a period of contraction. The number of cattle processed fell by 16 per cent as retentions increased due to herd rebuilding, improved carcase weights offset the fewer cattle processed to moderate the fall in production to 12 per cent.

Production in 2017-18 is forecast to increase 12 per cent with more capability of a larger herd (+3.5%) making more cattle available for slaughter 9.5 per cent and coming off low production in the previous season. An increase in production and easing prices in export markets is expected to lead to a decrease in saleyard prices but they are expected to remain at historically strong.

The total Australian beef and veal export volume in 2017-18 is forecast to be up 16 per cent to 1.1 million tonnes as production picks up. Exports are expected to remain below 2015-16 due to lower production in the 2016-17 season flowing through to a fall in exports – down 17 per cent.

### **European Union**

The EU beef cow herd was estimated at 12.3 million head in 2017, and forecast to increase slightly in 2018 by 0.5 per cent. Total net EU beef and veal production is forecast to be 7.85 million tonnes in 2018 – down slightly (-0.6 %). The state of the EU dairy sector plays an important role in beef production because approximately two-thirds of the breeding cows are in the dairy sector. Restructuring of the dairy sector in response to low returns has driven increased beef production but there are signs that this is easing due to improved dairy prices.

Total consumption of beef and veal in the EU is forecast to be stable in 2018, marginally decreasing by 0.2 per cent to 7.90 million tonnes. Beef and veal imports are forecast to rise sharply by 12 per cent in 2018. However, imports are a minor share of total consumption so the large percentage increase of imports to make up for the lower intra-EU production in actual volume is relatively minor.

#### Brazil

In 2017, the Brazilian beef sector had some major challenges, largely stemming from corruption scandals, that included central government leaders and the world's largest meat company, processing scandals that affected exports, and issues with regulatory compliance for exports in some markets. However, the economy began to pick up after two years of recession and lower costs of production.

Feed costs are expected to remain low in 2018 and improving stability around the sector will help improve production, which is estimated to be up 3.6 per cent. A stronger economy will help to drive improved domestic consumption, which is forecast to rise 3.8 per cent, and accommodate the higher production. The real (the Brazilian currency) is expected to remain relatively weak despite the economy picking up will improve export competiveness, supporting a 24 per cent increase in exports.



# Cattle Prices – Farm-gate

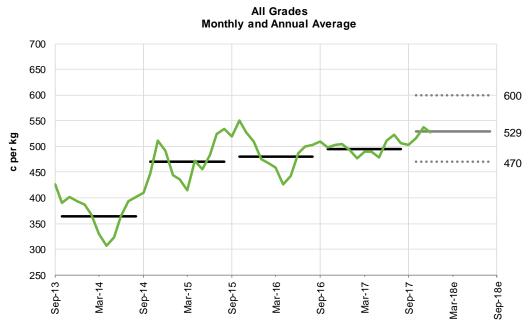
Figure 14 shows the monthly and annual average cattle prices paid to farmers for all grades to September 2018.

Farm-gate prices have remained strong after large gains were made in the 2014-15 season, as the continuing tight supplies and a reduction of the proportion of cull cows processed as the contraction of the dairy herd wound down. Demand in major export markets is expected to remain firm and when combined with their economies picking and currencies strengthening will help to improve farm-gate prices.

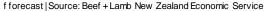
Three exchange rate scenarios are used in the 2017-18 outlook to cover possible exchange rate variability. The three scenarios use annual average exchange rates of USD0.62, USD0.69 and USD0.76 and the associated cross rates against the GBP and EUR. At USD0.69, the estimated average cattle price is 529 cents per kilogram, up 6.9 per cent on the average price of 495 cents per kilogram in 2016-17. The 2017-18 farm-gate price is forecast to rise as currencies of trading partners strengthen, particularly the USD, and firm in-market prices.

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 USD0.69 to USD0.76 (+10%), cattle prices decrease by 12 per cent. Alternatively, when the NZD depreciates from USD0.69 to USD0.62 (-10%), the cattle prices increase by 15 per cent.

Figure 14



**Cattle Prices** 



# **Beef Production**

#### Table 16 Export Cattle Slaughter Composition

	000 head						
Sep Year	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		
2017-18e	516	423	925	483	2,348		
2017-18e % change	-1.4%	-4.0%	-1.3%	+4.8%	-0.6%		

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

#### Table 15 Export Cattle Carcase Weights

	kg / head						
Sep Year	Steer	Heifer	Cow	Bull	Total		
2013-14	305	236	199	301	250		
2014-15	302	234	197	298	243		
2015-16	308	238	195	304	246		
2016-17	314	243	199	305	253		
2017-18e	308	238	199	303	251		
2017-18e % change	-1.9%	-1.8%	+0.3%	-0.8%	-0.7%		

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

### Table 14 Export Beef Production Composition

	000 tonne bone-in						
Sep Year	Steer	Heifer	Cow	Bull	Total		
2013-14	170	96	186	132	584		
2014-15	169	106	234	144	652		
2015-16	158	104	215	141	619		
2016-17	164	107	186	141	598		
2017-18e	159	101	184	146	590		
2017-18e % change	-3.4%	-5.7%	-1.0%	+3.9%	-1.3%		

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

### **Cattle Slaughter**

In the year to September 2018, the number of cattle processed is estimated at 2.35 million head, down slightly (-0.6%) compared with 2016-17. This reflects a stabilisation after easing from a record high number of head processed in 2014-15. The makeup of the classes of cattle processed is expected to shift as the dairy and beef herds stabilise. High international beef prices and low dairy prices led farmers to reduce their herds across the 2014-15 and 2015-16 seasons.

In the year to September 2018, the number of cows processed is estimated to be 925,000 head, declining 1.3 per cent after falling 15 per cent in 2016-17. However, the forecast numbers are still historically strong. The dairy sector went through a sustained period of expansion from 2006-07 with greater cow and heifer retention until the herd began to contract in 2014-15. The five-year average for the number of cows processed prior to 2006-07 was 763,000 head.

The number of heifers processed in 2017-18 is expected to decrease 4.0 per cent to 423,000 head, following a 1.1 per cent increase in 2016-17. Steers are expected to follow a similar trend as heifers, the number processed in 2017-18 is estimated to decrease 1.4 per cent after increasing by 1.7 per cent in 2016-17. The forecast drop in heifer and steer numbers reflects a reduction in the beef breeding cow herd after deeper cull in anticipation of dry El Niño 2015-16 summer conditions.

Bulls processed in 2017-18 are estimated to increase 4.8 per cent to 483,000 head, following a slight dip – down 0.6 per cent – in 2016-17. This reflects improved beef market signals since 2014-15 as the bull calf retentions occurred over this period.

### **Cattle Weights**

For 2017-18, the overall cattle weight is projected to average 251 kilograms per head carcase weight. This increase of 0.7 per cent or two kilograms per head indicates a stabilisation of the dairy and beef herds. Grass availability was generally good in 2016-17, reducing pressure on farmers to sell and producing improved finishing weights. Average carcase weights dipped in 2014-15 (243kg) and 2015-16 (246kg) as more dairy cows were processed due to the herd contraction, and to a lesser degree beef cow herd in 2015-16, increasing the share of cows in the total cattle processed and lowering the average carcase weight.

### **Beef Production**

For 2017-18, export beef production is estimated at 590,000 tonnes carcase weight, a 1.3 per cent decrease on 2016-17. This is driven by fewer and lighter steers, heifers and cows processed. However, more bulls are forecast to be processed and partially offset the decline in total beef production.

# $\mathsf{Wool}^1$

# Exports

Wool exports for 2017-18 are estimated to increase 16 per cent to 98,600 tonnes clean. While an increase is estimated, this is following a large decrease in the 2016-17 season (-18%), which was driven by a 22 per cent fall in auction price. The average auction price is expected to remain at a low level for 2017-18 – only recovering 1.1 per cent.

The strong rise in export volume – albeit still lower than previous seasons – is not due to significantly greater production on-farm but inventories carried over from the 2016-17 season because of the weak farm-gate prices. The rise in exports is the driver of the estimated 10 per cent increase of total wool export revenue, more than offsetting the 5.1 per cent decrease in price per kg at FOB – to \$5.84 per kg. China remains the largest single market for New Zealand wool exports – taking 40 per cent in 2016-17. However, total wool exports fell by 20 per cent in 2016-17 and China had taken 51 per cent of wool exports in the previous season, driven by a decline in demand from China.

Over the first seven months of the 2017-18 season – from July 2017 to January 2018 – the volume exported to China increased – up 24 per cent – which accounts for nearly two-thirds of the total volume increase. However, this is still below two seasons earlier at the same stage of the season – down 5.0 per cent.

### Prices

The weighted average all-wool auction price for 2016-17 is estimated to increase slightly (+1.0%) on the previous season.

Fine wool prices are expected to continue to perform strongly at auction – up 25 per cent. The increase in fine wool prices more than offset the further decline in strong wool prices – down 20 per cent – following a large decline in 2016-17 (-29%). However, the production of fine and strong wool does not occur within the same flock, so the all-wool weighted average increase of 1.0 per cent would not bear resemblance to an individual farm.

Fine wool is generally produced on South Island high country farms, which have more focus on wool production. The diverging trends for fine and strong wool prices highlights the differing export market demand.

#### Table 18 Season Average Auction Wool Prices

cents / kg greasy								
June Year	Fine	Medium	Strong	All Wool				
2013-14	1,000	549	384	431				
2014-15	915	606	407	443				
2015-16	997	725	445	494				
2016-17	1,074	608	315	387				
2017-18e	1,343	638	252	391				
2017-18e % change	+25%	+5.0%	-20%	+1.0%				

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

#### Table 17 Raw Wool Exports and Auction Prices

	Auction Price	Auction Price Wool Exports					
	\$ / kg	FOB \$ / kg	000 tonnes	\$m FOB			
June Year	clean	clean	clean				
2013-14	5.79	6.29	116.5	732.8			
2014-15	5.95	6.82	118.0	805.0			
2015-16	6.64	7.38	103.0	760.1			
2016-17	5.19	6.16	84.8	522.1			
2017-18e	5.25	5.84	98.6	575.5			
2017-18e % change	+1.1%	-5.1%	+16.2%	+10.2%			

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

<sup>1</sup>Although there is no levy on wool, the Economic Service conducts basic analysis of wool because it contributes to sheep and beef farm revenue.



For 2017-18, total wool production is estimated to increase 1.1 per cent to 140,400 tonnes greasy reflecting a slight increase in total shorn wool - up 0.9 per cent – and slipe wool production – up 2.7 per cent. A slight drop in sheep numbers – down 0.8 per cent – moderates the 1.7 per cent increase of wool shorn per head.

Continuing low strong-wool prices 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. Some deferred shearing from the previous season has contributed to the increase in wool shorn per head, however, remaining below two seasons earlier.

Table 19	W	lool Produ	ction		
	Sheep million	Shorn 000 tonnes	Slipe 000 tonnes	Total S 000 tonnes	horn Wool* kg / head
June Year	head	greasy	greasy	greasy	greasy
2013-14	30.8	140.9	18.3	159.2	4.58
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	123.5	15.4	138.8	4.48
2017-18e	27.4	124.6	15.8	140.4	4.55
2017-18e % change	-0.8%	+0.9%	+2.7%	+1.1%	+1.7%

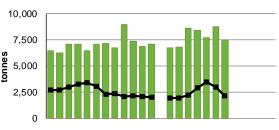
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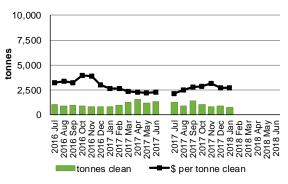
\*excludes w ool on sheepskins

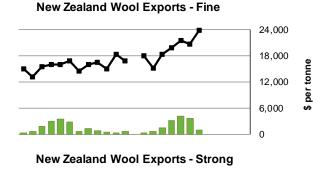
e estimate | Source: Beef + Lamb New Zealand Economic Service, Statistics New Zealand

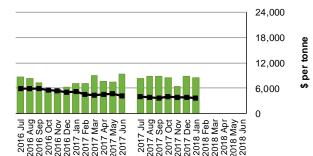




**New Zealand Wool Exports - Medium** 



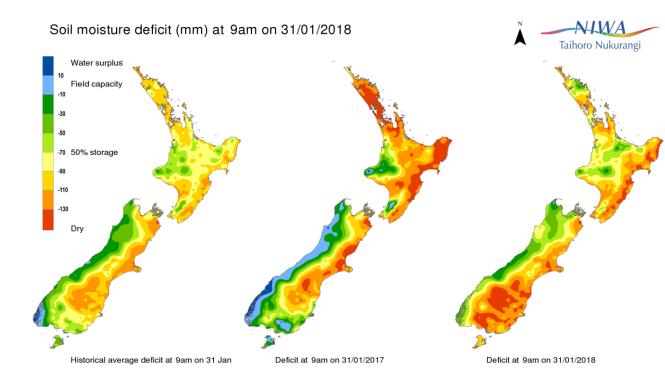




Source: Beef + Lamb New Zealand Economic Service

# **Climatic Conditions**

Mid-Season Update 2017-18



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

# Spring 2017

Figure 16

Equal second warmest spring on record for New Zealand.

#### Temperature

Spring temperatures were well above average (+1.20°C) in Central Otago, the Southern Lakes and Fiordland. Above average (+0.51°C to +1.20°C) for most remaining areas of the country.

#### Rainfall

Rainfall was below normal (50-79%) in Auckland, Kapiti Coast, Wellington and much of the South Island. Rainfall was well above normal (+149%) in Tauranga, and above normal (120-149%) in parts of Northland and Waikato.

#### Sunshine

Spring sunshine was above normal (110-125%) for much of the South Island. In the North Island, sunshine was above normal in western areas from Taranaki to the Kapiti Coast.

Spring sunshine was typically near normal for remaining areas of the North Island.

#### Soil moisture

As of 1 December, soils were significantly drier than normal for the time of year across a large portion of the South Island, particularly in the west, as well as the lower and western North Island. Soil moisture was slightly below normal or near normal in Central Otago, the Central Plateau, Gisborne, Coromandel Peninsula, and northern Northland.

# Outlook – March to May 2018

The consensus from international models is for the tropical Pacific to rapidly transition to an El Niño Southern Oscillation (ENSO) neutral state over the next three months (69% chance from March – May 2018). ENSO-neutral remains the most likely outcome over the winter season (June – August 2018), and a transition towards El Niño becomes increasingly likely thereafter (45% chance for El Niño conditions to emerge over the September – November 2018 period).

#### Temperature

March – May 2018 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

March – May 2018, rainfall totals are forecast to be above normal in the North Island and in the north of the South Island (45 to 50% chance) and about equally likely to be near normal (35 to 40% chance) or above normal (35 to 40% chance) in the west and east of the South Island.

#### Soil moisture

March – May 2018 soil moisture levels and river flows are forecast to be above normal (45 to 55% chance) in the north and west of the North Island and the north and east of the South Island. In the east of the North Island and the west of the South Island, soil moisture levels and river flows for the March – May 2018 period are about equally likely to be near normal (35 to 40% chance) or above normal (35 to 40% chance).

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



#### Revenue

Gross farm revenue for the All Classes Sheep and Beef Farm is estimated at \$518,900 for 2017-18. This is up 11 per cent on both, the previous year, and on early forecasts published in the New Season Outlook 2017-18. The largest driver of this is increased sheep revenue which increases 22 per cent to \$244,600 due to stronger prices compared to the 2016-17. Sheep revenue contributes 47 per cent of gross farm revenue.

Cattle revenue, the second largest contributor to gross farm revenue, increases 6.2 per cent to \$141,000 for 2017-18. This is due to strong beef prices and a lift in the number of cattle sold per farm. The cattle account contributes 27 per cent to total gross farm revenue for 2017-18.

Wool revenue decreases 4.5 per cent to \$33,600 for 2017-18 due to prices for strong wool being at their lowest level since 2009-10. Poor prices are moderated by a lift in volumes sold due to a carryover of wool stocks from the previous season. Wool revenue contributes 6.5 per cent to gross farm revenue for 2017-18.

Dairy grazing revenue decreases 1.8 per cent to \$27,200 for 2017-18 due to a decrease in head. *Mycoplasma bovis* continues to

Table 20		Sheep and Beef Farm Revenue and Expenditure										
			We	ighted Aver	age All Cla	sse s <sup>1</sup>						
				F	rovisional		Forecast		Fore	Forecast % Change		
		2013-14	2014-15	2015-16	2016-17	2017-18	2017-18	2017-18		6-17 to 2017		
						USD 0.62	USD 0.69	USD 0.76	USD 0.62	USD 0.69	USD 0.76	
Revenue												
Wool		49,029	51,395	54,136	35,200	38,600	33,600	29,500	+9.7%	-4.5%	-16.2%	
Sheep		215,359	209,679	183,709	200,000	284,400	244,600	212,000	+42.2%	+22.3%	+6.0%	
Cattle		104,267	125,098	125,930	132,800	159,500	141,000	126,000	+20.1%	+6.2%	-5.1%	
Dairy Grazing		29,316	31,995	29,009	27,700	27,200	27,200	27,200	-1.8%	-1.8%	-1.8%	
Deer + Velvet		4,113	3,401	3,819	3,900	5,300	4,600	4,100	+35.9%	+17.9%	+5.1%	
Goat + Fibre		38	47	51	0	0	0	0				
Cash Crop		62,521	50,108	45,669	49,200	50,100	50,100	50,100	+1.8%	+1.8%	+1.8%	
Other		18,212	17,085	17,218	17,300	17,800	17,800	17,800	+2.9%	+2.9%	+2.9%	
Total Gross Revenue	\$ per farm	482,855	488,808	459,541	466,100	582,900	518,900	466,700	+25.1%	+11.3%	+0.1%	
Expenditure												
Fert, Lime & Seeds		61,522	66,421	64,995	60,800	69,200	68,200	67,400	+13.8%	+12.2%	+10.9%	
Repairs & Maintenance		30,175	32,395	32,747	31,900	36,400	35,900	35,500	+14.1%	+12.5%	+11.3%	
Interest & Rent		64,611	65,823	68,017	66,600	65,100	65,300	65,500	-2.3%	-2.0%	-1.7%	
Other Expenses		211,822	214,214	221,754	216,200	227,400	223,200	219,800	+5.2%	+3.2%	+1.7%	
Total Expenditure	\$ per farm	368,130	378,853	387,513	375,500	398,100	392,600	388,200	+6.0%	+4.6%	+3.4%	
Farm Profit Before Tax <sup>2</sup>	\$ per farm	114,725	109,955	72,028	90,600	184,800	126,300	78,500	+104.0%	+39.4%	-13.4%	
EBITRm <sup>3</sup>	\$ per farm	182,887	179,641	143,678	160,953	254,300	195,444	147,400	+58.0%	+21.4%	-8.4%	
Real (2004-05\$) Farm Profi	it <sup>3</sup>	91,800	87,400	57,100	70,800	141,800	96,900	60,200	+100.3%	+36.9%	-15.0%	
Index of Real Farm Profit		1,253	1,193	779	966	1,935	1,323	821	+100.3%	+37.0%	-15.0%	
Fertiliser Use kg per SU		21.3	24.6	25.7	23.2	26.2	25.8	25.5	+12.8%	+11.2%	+9.9%	
Prices												
Wool auction	¢ per kg clean	579	595	663	519	603	525	461	+16.2%	+1.2%	-11.1%	
All wool <sup>5</sup>	¢ per kg greasy	374	401	444	332	318	277	243	-4.3%	-16.6%	-26.8%	
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			513				
	v hei vâ	-+09	515	551	559	655	576	513	+21.5%	+7.0%	-4.9%	

w and Doof Form Devenue and Evenerality

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



cause concern among some farmers particularly in South Island regions when it comes to grazing-in, and purchasing store stock from regions containing infected farms. Revenue from dairy grazing contributes 5.2 per cent of total gross farm revenue for 2017-18.

The cash cropping account increases 1.8 per cent to \$50,100 for 2017-18. This is due to an expected lift in cropping area and improved prices on South Island intensive finishing farms. The cash crop account contributes around 10 per cent of total gross revenue for 2017-18.

Aggregate Sheep and Beef Farm Revenue at the farm-gate is \$5.9 billion in 2017-18, up 11 per cent on 2016-17. Gross farm revenue is spent buying farm goods and services, paying tax, reducing debt and then on personal living expenses.

#### Expenditure

Total expenditure for the All Classes Sheep and Beef Farm increases to \$392,600 for 2017-18. This is up 4.6 per cent on the previous year, and up 3.7 per cent on early forecasts published in the New Season Outlook 2017-18. Increased expenditure occurs for all areas of sheep and beef farms except for interest which decreased.

Interest expenditure decreases 2.8 per cent to \$51,100 for 2017-18. At 5.10 per cent, 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 \$563,300 (2008-09) to \$814,400 (2017-18). In today's economic environment, interest expenditure represents 13 per cent of total farm expenditure.

Repairs and maintenance expenditure increases 12 per cent to \$35,900 for 2017-18. Increased revenue prompts a lift in spending, particularly on farms which have previously deferred expenditure in this area. Repairs and maintenance contributes 9.1 per cent of total gross farm revenue.

Fertiliser expenditure increases 13 per cent for 2017-18. This is driven by a lift in price and volume applied compared with the previous season when tonnes applied dropped to a 3-year low. Fertiliser expenditure represents 14 per cent of total farm expenditure.

Fuel and, feed and grazing expenditure increase to \$10,600 (+6.8%) and \$18,100 (+9.6%) for 2017-18. Standing charges, were down slightly (-0.6%).

#### Farm Profit before Tax

Three forecast scenarios are shown in Figure 17:

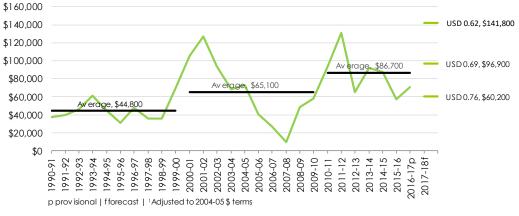
 At the lower exchange rate (USD0.62), inflation-adjusted Farm Profit before Tax is \$141,800, a
 100 per cent increase on \$70,800 for 2016-17. In nominal terms, i.e. without adjusting for inflation, Farm Profit before Tax is \$184,800, a 104 per cent increase on \$90,600 for 2016-17.
 At the mid exchange rate (USD0.69), inflation-adjusted Farm Profit before Tax is \$96,900, a 37 per cent increase on \$70,800 for 2016-17. In nominal terms, Farm Profit before Tax is \$126,300, up 39 per cent on \$90,600 for 2016-17.

3. At the higher exchange rate (USD0.76), inflation-adjusted Farm Profit before Tax is \$60,200, a 15 per cent drop on \$70,800 for 2016-17. In nominal terms, Farm Profit before Tax is \$78,500, a 13 per cent decrease on \$90,600 for 2016-17.

Figure 17 shows the trend in Farm Profit before Tax in inflation-adjusted 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 inflationadjusted terms, the per farm profit at \$131,100 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.

#### Figure 17





Source: B+LNZ Economic Service | Sheep and Beef Farm Survey

# Farm Revenue, Expenditure and Profit – Regional

### **North Island Summary**

Gross farm revenue increases 17 per cent to \$472,000 for 2017-18. This reflects increased revenue from all income sources on the previous year.

Sheep revenue increased 31 per cent to \$219,200 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 near record ewe lambing percentages for spring 2017. Sheep revenue represents 46 per cent of gross farm revenue for North Island Sheep and Beef Farms. Cattle revenue increases 7.2 per cent to \$179,000. This is due to strong prices, and the number sold being similar to or more than the previous year. In some regions, cattle are being replaced by sheep due to their low labour requirement and strong returns. Cattle revenue represents 38 per cent of gross farm revenue.

Total farm expenditure increases 8.4 per cent to \$355,700 for 2017-18, largely due to a lift in gross farm revenue. Fertiliser increases due to some catch-up, particularly in the East Coast where reduced tonnages were applied in the previous season due to wet autumn conditions. Contrary to this, shearing expenditure decreases due to fewer sheep shorn, and less second shearing.

Term liabilities – on average – increased from \$679,500 to \$743,600 for 2013-14 and 2017-18 respectively. However, total interest expenditure during this time has decreased from \$48,300 to \$45,900, largely due to a decrease in term and overdraft interest rates. Interest expenditure represents 14 per cent of total farm expenditure. Sheep and Beef Farm Profit before Tax at \$136,300 per farm for 2017-18, increases 46 per cent compared with 2016-17. This is the highest profit, on average, for North Island farms since 2011-12.

The North Island has 49 per cent of the sheep flock, 70 per cent of the beef cattle herd and 60 per cent of the dairy cattle herd.

#### Table 21

#### Regional Summary All Classes Sheep and Beef Farm - \$ Per Farm

	2015-16	2016-17p	p 2017-18f					
Region	Profit	Profit	Revenue	Expenditure	Profit	EBITRm <sup>1</sup>	Stock Units	Hectares
Northland-Waikato-BoP	85,820	85,100	396,900	288,300	108,600	157,600	3,100	340
East Coast	90,652	101,100	559,900	395,300	164,600	246,000	4,700	550
Taranaki-Manawatu	72,622	95,000	485,300	342,100	143,200	210,400	4,200	490
North Island	86,250	93,700	472,000	335,700	136,300	199,900	3,900	450
Marlborough-Canterbury <sup>2</sup>	42,627	76,400	657,200	554,200	103,000	197,600	4,200	910
Otago/Southland <sup>2</sup>	70,684	97,500	465,300	339,300	126,000	179,800	3,800	730
South Island <sup>2</sup>	56,023	87,200	572,100	456,500	115,600	191,000	4,000	840
New Zealand	72,028	90,600	518,900	392,600	126,300	195,400	4,000	630

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

<sup>1</sup> Earnings before Interest, Tax, Rent and Managers Salary

<sup>2</sup> Effective area is inflated by High Country Farms which average 7,500 hectares per farm for South Island High Country Farms

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

### South Island Summary

Gross farm revenue increases 6.6 per cent to \$572,100 for 2017-18 largely due to a lift in revenue from sheep.

Sheep revenue increased largely due to strong prices, though a larger than normal percentage of lambs were sold store rather than prime. This was most noticeable on high country and finishing breeding farms, many of these being sold to mixed cropping and finishing farms that earn a margin on finishing lambs. Sheep revenue contributes 48 per cent of gross farm revenue.

Cattle and crop revenue – each representing 17 per cent of gross farm revenue – increase 4.1 per cent and 0.1 per cent respectively. Strong prices are the primary driver for increased cattle revenue. The exceptions to this were mixed cropping and finishing farms where cattle revenue decreases. A contributing factor to this is the strong store market, which eroded margins for finishers. Wool revenue was down 8.5 per cent to \$43,300 due to a decrease in the strong wool price. The decreased price offsets a lift in the volume of wool sold which, is a combination of this year's clip, and stocks carried over from the previous year. The impact of this revenue decline does not extend to high country farms, due to these farms being predominantly fine wool producers, with fine wool prices increasing on the previous year.

Total farm expenditure increases 1.6 per cent to \$456,500 for 2017-18. Overall expenditure increases due to a lift in revenue providing opportunity to catch up in most parts of the business – the exceptions being fertiliser and interest which decreased. Fertiliser decreased due to slightly softer prices, which offsets most regions having similar or increased tonnes applied compared to the previous year. Interest decreases due to lower interest rates on term debt. Term liabilities – on average – increased from \$771,400 to \$894,000 for 2013-14 and 2017-18 respectively. However, total interest expenditure during this time decreased 2.7 per cent to \$56,900 due to a decrease in term and overdraft interest rates. Interest expenditure represents 12 per cent of total farm expenditure.

Sheep and Beef Farm Profit before Tax at \$115,600 per farm for 2017-18 is up 33 per cent compared with 2016-17. The South Island has 51 per cent of the sheep flock, 30 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 at \$396,900 for 2017-18, increases 12 per cent on 2016-17. This is due to increased revenue from sheep and cattle.

Sheep revenue increases 21 per cent to \$125,900 for 2017-18 due to improved lamb prices. On hard hill country and intensive finishing farms, more lambs born in spring 2017 leads to an increase in numbers sold. On average, sheep revenue contributes 32 per cent to gross farm revenue.

Cattle revenue increases 7.9 per cent to \$200,200 for 2017-18. 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 50 per cent to gross farm revenue.

Total farm expenditure increases 6.9 per cent to \$288,300 for 2017-18. Increased revenue drives a lift in expenditure for all areas except for animal health (-0.6%), shearing (-2.6%), and interest (-4.2%). Shearing expenditure decreases due to fewer sheep shorn which offsets a small lift in per head shearing expenses compared to the previous year. Interest expenditure decreases due to a slight reduction in term liabilities and a lower interest rate on term debt compared with the previous year.

Fertiliser expenditure increases 13 per cent to \$47,300 for 2017-18 from a 10 per cent lift in volume to 88 tonnes. This volume increase is due to some catch-up following lower than average volumes in the previous year, and an increase in gross farm revenue. Fertiliser contributes 16 per cent of total farm expenditure.

Repairs and maintenance expenditure increases 20 per cent to \$33,100 for 2017-18. On average this is the highest level since recording began, the exception to this being hard hill country farms in 2014-15 when it was higher after the 2013 drought recovery.

Farm Profit before Tax increases 28 per cent to \$108,600 for 2017-18. Sheep and beef farms in the region average 3,100 stock units on 340 effective hectares for 2017-18.

### **East Coast**

Gross farm revenue increases 24 per cent to \$559,900 per farm for 2017-18. This is due to an increase in revenue for all parts of the business, particularly for sheep and cattle which collectively make up 86 per cent of gross farm revenue.

Sheep revenue increases 42 per cent to \$294,000 for 2017-18. This is due to a lift in the price and volume of lambs sold. The volume of lambs sold increased due to strong prices, with a near record lambing percentage for spring 2017 leading to more lambs being available for sale. The sheep account contributes 53 per cent to gross farm revenue.

Wool revenue increases 19 per cent to \$33,900 for 2017-18. This is due to a lift in the volume of wool sold which offsets a decrease in the farm-gate price for wool. Volumes sold increase due to the sale of inventories carried over from the previous year, a small lift in open sheep numbers and wool clip per head. Wool contributes 6.1 per cent of gross farm revenue.

Cattle revenue increases 7.4 per cent to \$188,200 for 2017-18. This is estimated to be a record for the East Coast - up 0.7 per cent on the previous record year (2014-15) – due to strong beef prices and a lift in the number sold. Cattle continue to be a preferred livestock over sheep due to strong returns and the low labour requirement. This is particularly noticeable within the older demographic of farmers. The cattle account contributes 34 per cent to gross farm revenue.

Total farm expenditure increases 12 per cent to \$395,300. The biggest drivers of this were increased expenditure on repairs and maintenance, and fertiliser.

Repairs and maintenance expenditure increases 30 per cent to \$42,900 as farmers look to make up for deferred spending in the previous year – most noticeable on hard hill and hill country farms. Fertiliser expenditure increases 57 per cent to \$64,200, largely due to a lift in volume which follows a lower base in the previous year when wet autumn conditions contributed to reduced tonnage being applied. Repairs and maintenance, and fertiliser make up about 27 per cent of total farm expenditure.

Farm Profit before Tax increases 63 per cent to \$164,600 for 2017-18. Sheep and beef farms in the region average 4,700 stock units on 550 effective hectares for 2017-18.

### Taranaki-Manawatu

Gross farm revenue increases 13 per cent to \$485,300 per farm for 2017-18. This is largely driven by an increase in revenue from sheep.

Sheep revenue increases 24 per cent to \$290,000 for 2017-18 due to strong prices offsetting fewer head sold. The number of lambs sold was down 2.6 per cent on the previous year, largely due to a decrease in breeding ewe numbers, reducing the total number of lambs available for sale. Sheep account contributes about 60 per cent of total farm revenue.

Cattle revenue increases 3.5 per cent to \$123,300 for 2017-18, slightly up on 2014-15 which was a record year. This was largely due to a lift in the average sale price on the previous year. Cattle account makes up 25 per cent of total gross farm revenue.

Dairy grazing revenue decreases 8.8 per cent to \$15,500 for 2017-18. This is due to a small decrease in the number of dairy grazing cattle at open,



# **Region Comment – South Island**

particularly on hill country farms. Dairy grazing revenue peaked in 2011-12 at \$23,300 and for 2017-18 represents 3.2 per cent of gross farm revenue.

Total farm expenditure increases 1.9 per cent to \$342,100 for 2017-18. The primary drivers of this are repairs and maintenance, and fertiliser which increase 5.0 per cent and 13 per cent respectively.

Repairs and maintenance at \$35,500 is up slightly on the its five-year average of \$34,000. The lift in gross farm revenue has provided some farmers with the opportunity to repair old and worn out vehicles and machinery. This expenditure represents around 10 per cent of farm expenditure.

Fertiliser expenditure increases to \$44,200 for 2017-18. This increase is due to a lift in tonnage, which is most notable on hard hill and hill country farms. Increased revenue enables farms to increase expenditure in this area which is up 3.6 per cent on the five-year average and represents 13 per cent of gross farm revenue.

Farm Profit before Tax increases 51 per cent to \$143,200 for 2017-18. Sheep and beef farms in the region averaged 4,200 stock units on 490 effective hectares at the start of 2017-18. The number of stock units wintered per farm at 1 July 2017 was down 2.1 per cent on the previous July.

# Marlborough–Canterbury

Gross farm revenue increases 5.6 per cent to \$657,200 per farm for 2017-18 largely due to an increase in revenue from sheep.

Sheep revenue increases 21 per cent to \$235,500 for 2017-18. On average this is the highest level since 2011-12 and is largely driven by a lift in lamb price. On high country farms, good weather during lambing contributed towards better than average lamb survival, which has led to more lambs available for sale. On hill country farms a lift in the number of lambs for sale was a recovery from the previous year which was negatively impacted by prolonged drought conditions. Sheep revenue around 36 per cent to gross farm revenue.

Cattle revenue increases 1.6 per cent to \$123,400 for 2017-18. Strong prices led to increased revenue – on average – for all farms except for mixed cropping and finishing farms, where cattle revenue decreased 18 per cent. Revenue decrease on these farms was due to some finishers avoiding reduced margins caused by strong store prices. Cattle revenue represents 19 per cent of gross farm revenue on average for all farm types.

Wool revenue decreases 9.1 per cent to \$37,800 for 2017-18. This would be the lowest level since 1998-99 and is driven by a decrease in the strong wool price, which more than offsets a lift in the volume of wool sold. The impacts of low prices for strong wool vary between farm types, for example on high country farms which produce predominantly fine wool, wool revenue increases 9.7 per cent to \$352,200 per farm. Wool revenue represents 5.8 per cent of gross farm revenue on average for all farm types.

Cropping revenue is slightly down (-0.7%) to \$172,100. This is predominantly driven by changes in the product mix from mixed cropping and finishing farms, where cash cropping averages 68 per cent of gross farm revenue but the proportions of land under crop, finishing livestock and non-owned grazing stock vary readily. Dairy grazing revenue is down 8.6 per cent to \$52,900. This driven by fewer dairy grazing cattle at open on hill country and finishing breeding farms. Mycoplasma bovis has the potential to interfere with dairy grazing intentions for sheep and beef farms in this region. On average, dairy grazing contributes 8.0 per cent of gross farm revenue.

Total farm expenditure increases 1.6 per cent to \$554,200 for 2017-18. All expenditure increases except for interest and fertiliser. Interest expenditure decreases due to a lower average interest rate on term debt compared with the previous year. Fertiliser expenditure decreases 1.2 per cent due to softer prices, but with no change in tonnage on the previous year. The average application rate is 125kg per hectare, which is similar to (-0.8%) the five-year average of 126kg per hectare. Fertiliser makes up 11 per cent of total farm expenditure.

Farm Profit before Tax increases 35 per cent to \$103,000 for 2017-18. Sheep and beef farms in this region average 4,200 stock units on 910 effective hectares at the start of 2017-18. The number of stock units wintered per farm at 1 July 2017 increased 1.6 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 7.8 per cent to \$465,300 per farm for 2017-18. The most significant drivers of this outlook are dry climatic conditions and strong prices.

A "medium-scale adverse event" declared in Otago and Southland due to drier than normal conditions had a negative impact on pasture growth rates. The conditions led to farmers adopting various management strategies, which ranged from earlier than normal weaning of lambs and culling of old ewes, to selling more lambs store, to finishing lambs earlier than previous years. Contrary to this, there has been good rainfall received across the region in February.

> Sheep revenue increases 11 per cent to \$311,200 for 2017-18 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 open. Within this, a larger than normal proportion of lambs born are sold store, which is most notable on high country and intensive finishing farms. Sheep revenue makes up 67 per cent of gross farm revenue.

Cattle revenue increases 9.1 per cent to \$68,200 for 2017-18. Strong prices were the primary driver of this, but also a lift in the number sold – except for hill country farms where the number of cattle sold decreases on the previous year. Cattle revenue makes up 15 per cent of gross farm revenue.

Wool revenue decreases 7.9 per cent to \$47,600 for 2017-18. This was due to poor prices for strong wool, which had a negative impact on hill country, finishing and cropping farms. High country farms were not as badly affected due to these farms predominantly producing fine wool, which increased in price on the previous year. In this region, wool revenue makes up 10 per cent of gross farm revenue, but on high country farms only, this is 30 per cent. Total farm expenditure increases 1.5 per cent to \$339,300 for 2017-18. This is driven by increases across multiple areas of expenditure, the exceptions this being animal health, fertiliser and interest expenditure which decreased.

Fertiliser volumes are similar to the previous year, with most farms applying maintenance levels, or less, despite the average price per tonne slightly easing (-0.2%) on the previous year. Interest expenditure decreases 5.6 per cent due to a lower interest rate on term debt, which offsets an increase in term liabilities.

Repairs and maintenance expenditure increases 6.9 per cent to \$28,700 for 2017-18. This is largely due to farmers taking the opportunity to do so while there is a lift in gross farm revenue. Repairs and maintenance is 8.5 per cent of total farm expenditure.

Farm Profit before Tax increases 29 per cent to \$126,000 for 2017-18. Sheep and beef farms in the region average 3,800 stock units on 730 effective hectares. In this region, the average farm size is inflated by high country farms, which average 6,300 hectares, whereas finishing breeding farms average 520 hectares and intensive finishing Farms average 220 hectares.



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