



New Season Outlook 2018-19

© Beef + Lamb New Zealand Economic Service | September 2018
P18017 | ISSN 2230-5777





© 2018 Beef + Lamb New Zealand Limited also referred to as B+LNZ, B+LNZ - Economic Service and the Economic Service.

All rights reserved. This work is covered by copyright and may not be stored, reproduced or copied without the prior written permission of Beef + Lamb New Zealand Limited.

Beef + Lamb New Zealand Limited, its employees and Directors shall not be liable for any loss or damage sustained by any person relying on the forecasts contained in this document, whatever the cause of such loss or damage.

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 Burt: 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

Contents

CONTENTS	1	BEEF & VEAL EXPORTS	18
EXECUTIVE SUMMARY – OUTLOOK 2018-19	2	BEEF – INTERNATIONAL SITUATION	20
ECONOMIC CONDITIONS	2	OVERVIEW	20
LAMB AND MUTTON	2	UNITED STATES	20
BEEF	2	NORTH ASIA	22
LIVESTOCK NUMBERS	2	BRAZIL	22
WOOL	3	AUSTRALIA	23
SHEEP AND BEEF FARMS	3	CATTLE PRICES – FARM-GATE	24
ECONOMIC CONDITIONS	4	BEEF PRODUCTION	25
GLOBAL GROWTH PROSPECTS	4	CATTLE SLAUGHTER	25
NEW ZEALAND	5	CATTLE WEIGHTS	25
CONSUMER PRICES	6	BEEF PRODUCTION	25
INTEREST RATES	6	WOOL	26
EXCHANGE RATES	7	EXPORTS	26
TRADE AGREEMENTS	8	PRICES	26
EXCHANGE RATE SENSITIVITY – 2018-19	9	PRODUCTION	27
LIVESTOCK NUMBERS	10	CLIMATIC CONDITIONS	28
SHEEP	10	AUTUMN 2018 SUMMARY	28
BEEF CATTLE	10	OUTLOOK – AUGUST TO OCTOBER 2018	29
DAIRY CATTLE	10	FARM REVENUE, EXPENDITURE & PROFIT – NEW ZEALAND	30
LAMB & MUTTON EXPORTS	11	REVENUE	30
LAMB	11	EXPENDITURE	31
MUTTON	12	FARM PROFIT BEFORE TAX	31
LAMB & MUTTON – INTERNATIONAL SITUATION	13	FARM REVENUE, EXPENDITURE & PROFIT – REGIONAL	32
OVERVIEW	13	NORTH ISLAND SUMMARY	32
AUSTRALIA	13	SOUTH ISLAND SUMMARY	32
CHINA	14	REGIONAL COMMENT – NORTH ISLAND	33
EUROPEAN UNION	15	NORTHLAND–WAIKATO–BAY OF PLENTY	33
LAMB & SHEEP PRICES – FARM-GATE	16	EAST COAST	33
LAMB	16	TARANAKI–MANAWATU	34
MUTTON	16	REGIONAL COMMENT – SOUTH ISLAND	35
LAMB & MUTTON PRODUCTION	17	MARLBOROUGH–CANTERBURY	35
LAMB	17	OTAGO–SOUTHLAND	35
MUTTON	17		



Executive Summary – Outlook 2018-19

Economic Conditions

Uncertainty and breakdown of trade relationships hang over the recent global economic upswing. However, global economic growth is forecast at 3.9 per cent for 2018 and 2019. Recovery expectations of developed economies have become less synchronised as 2018 has progressed and the rate of expansion may have peaked in some major economies.

New Zealand's outlook is for continued stability and growth to still perform well at just under three per cent, however, the global economy has improved and growth rates are catching up relatively. The pickup in other markets may make them relatively attractive for investing capital after a prolonged period of stability and growth in New Zealand.

As the New Zealand economy has recently performed steadily and with relatively high interest rates compared most major trading partners, the NZD has remained high. However, currencies for some advanced economies have strengthened and there are indications that others will in the short-term.

Lamb and Mutton

For 2018-19, lamb meat export receipts are forecast at \$3.11 billion FOB, unchanged on 2017-18 – the only two seasons to have surpassed \$3 billion.

The average FOB value per tonne is forecast to increase by 1.2 per cent due to strengthening of currencies for New Zealand's red meat trading partners, which more than offsets easing of in-market prices in 2018-19.

The volume of lamb meat shipped is projected to decrease by 1.7 per cent due to slightly fewer lambs available for export, partly offset by a minor rise in average carcase weight.

At the mid exchange rate of USD0.67, the forecast average lamb price of 712 cents per kg for 2018-19 is up 0.5 per cent from the estimated 2017-18 inflation-adjusted record price of 708 cents per kg.

The total value of mutton exports is forecast to decline 15 per cent to \$466 million FOB despite a 2.2 per cent increase of average FOB value per tonne, due 17 per cent decline in volume.

At the mid exchange rate of USD0.67, the annual average mutton price is forecast at 430 cents per kg in 2018-19, an increase of 3.2 per cent on the estimated inflation-adjusted record price of 417 cents per kg for 2017-18 – which has shot up by 45 per cent.

Beef

Total beef and veal receipts are expected to total \$3.42 billion FOB in 2018-19.

New Zealand beef and veal exports are forecast to decrease by 3.1 per cent to 415,000 tonnes shipped weight. Under the USD0.67 exchange rate assumption, the average FOB value per tonne is expected to decrease 2.8 per cent, despite the more favourable exchange rate.

For 2018-19, the number of cattle processed for export is forecast to decline by 3.0 per cent to 2.51 million head. This forecast decrease follows from a 9.6 per cent increase in 2017-18, due to large increase of cows and bulls. The mix of cattle classes is expected to remain relatively steady in 2018-19.

At USD0.67, the estimated 2018-19 average annual farm-gate price for P steer/heifer (270-295kg) is 525 cents per kg. For M Cow (170-195kg), which includes a large component of cull dairy cows, it is 398 cents per kg, and for M bull (270-295kg) it is 503 cents per kg.

Livestock Numbers

Total sheep numbers at 30 June 2018 totalled 27.3 million head, down 0.8 per cent on the previous June. This was driven by fewer breeding ewes for all regions, moderated by a lift in total hogget numbers.

The decline in the number of breeding ewes was driven by strong prices for cull ewes. In lower North Island regions this was further encouraged by the labour component associated with sheep, which led to farmers favouring cattle and deer.

Total beef cattle numbers at 30 June 2018 totalled 3.68 million head, up 1.9 per cent on the previous June. This was predominantly driven by the South Island where strong prices encouraged farmers to maintain or lift herd sizes.

Total dairy cattle numbers lifted slightly to 6.60 million head at 30 June 2018 due to a decrease in the number of cows and heifers. The South Island now contains 40 per cent of the New Zealand dairy herd, up from 35 per cent 10 years ago.



Wool

The 2018-19 outlook for wool exports is to decline 2.2 per cent on 2017-18, which was bolstered by an element of carry-over stocks from the 2016-17 season.

Total wool receipts are estimated to rise 4.1 per cent to \$565 million due to the higher FOB value per tonne. The average export receipts at FOB is expected to lift 6.4 per cent to \$5,760 per tonne. The estimate is for auction wool prices to be up 4.3 per cent on 2017-18, to average 414 cents per kg greasy.

Sheep and Beef Farms

Gross farm revenue for the national All Classes Sheep and Beef Farm is estimated to average \$545,900 per farm for 2018-19, up 0.7 per cent on the previous year largely from increased revenue for sheep, wool, and cash crop.

Sheep revenue increases to \$263,600 largely due to a lift in lamb prices. This offsets fewer lambs sold overall, the number of which is down due to a smaller lamb crop. Fewer breeding ewes at open – particularly in North Island regions – is the leading reason for the lamb crop being down on the previous year.

Wool revenue increases to \$37,600 largely due to a lift in volumes sold and an increase in the average price, which increases largely due to increases in all wool grades except for fine wool. The average fine wool price is forecast to decrease from record levels in the previous year.

Cattle revenue decreases 3.7 per cent to \$142,500 due to a decrease in price. This more than offsets a small lift in the number of cattle sold, which is boosted by more cattle carried over balance date, particularly in South Island regions.

Total expenditure for the All Classes Sheep and Beef Farm is estimated to increase 1.8 per cent to average \$416,200 per farm for 2018-19. Increased expenditure occurs for everything except repairs and maintenance (-1.0%), feed and grazing (-3.9%) and interest (-4.0%).

Interest expenditure decreases due to reduction in term liabilities, and lower average interest rates on term liabilities. Term liabilities on average are \$851,700 per farm, or \$1,330 per hectare. This is up from ten years earlier when term liabilities were \$624,700 per farm, or \$949 per hectare.

Repairs and maintenance, which decreases to \$34,700, reached record high levels in 2017-18 possibly due to gross revenue reaching a new record level. Fertiliser expenditure increases 1.4 per cent to \$55,700 due to a small lift in total volume applied.

Farm Profit before Tax for the All Classes Sheep and Beef Farm for 2018-19 is forecast to average \$129,700 per farm, down 2.8 per cent on the previous year.

After adjusting for inflation, Farm Profit before Tax is down 4.9 per cent on 2017-18 to \$97,800 per farm in 2004-05 terms. This compares with \$131,100 per farm for 2011-12, which was the highest since the early 1970s, and is similar to 2001-02 when real Farm Profit before Tax was \$126,900 per farm.



Economic Conditions

Global Growth Prospects

Uncertainty and breakdown of trade relationships hang over the recent global economic upswing. However, global economic growth is forecast at 3.9 per cent for 2018 and 2019 by the International Monetary Fund (IMF). Recovery expectations of developed economies have become less synchronised as 2018 has progressed and the rate of expansion may have peaked in some major economies.

For the year ending March 2018, growth has increased across most of New Zealand's major trading partners except for the UK where growth declined by 0.4 percentage points. Lack of clarity as the end of the two-year Brexit process approaches in March 2019 hangs over the UK, hindering business investment and job growth.

Tightening of monetary policy in the US and other developed economies has created pressure for emerging market and developing economies (EMDEs) as capital is drawn away by higher interest rates in more stable economies, and raising loan repayment costs due to relatively stronger currencies in developed nations, particularly the USD. There is concern that the fall of the Argentinian peso and Turkish lira may drag down other emerging economies.

The 2019 outlook for the US economy is for growth to continue at a reasonable rate, helping to drive global economic expansion. Tax cuts,

increased spending and steady inflation support this forecast. Part of the increased spending comes from the aid package of up to USD12 billion announced in July to assist producers of products affected by the US-China trade war. Details of the farm aid package were released in August 2018.

US trade relations have been a significant source of global economic uncertainty and some decoupling of the synchronised global economic recovery. The relationship between the US and China – the world's two largest economies – has deteriorated into a trade war, as defined by one nation raising tariffs in retaliation to tariff hikes by another and ensuing escalation. The US trade relationships with many significant economies, neighbours and traditional alliance partners, such as Canada, Mexico, the EU, Japan and South Korea, have been tested. Even out-of-step imposition of sanctions on a non-ally, Iran, has caused tensions with traditional US partners.

Economic growth in China has been relatively stable and appears to be at suitable levels for authorities for ongoing rebalancing of the economy towards consumption activity rather than being led by investment. Growth is expected to ease slightly in the short-term as the economy transforms and the financial sector becomes regulated further. The US-China trade war and protectionism by trading

partners presents risk to Chinese growth.

The prospects for EU economic growth have improved recently – driven by consumption, investment and exports – but there are signals that the rate of growth will ease in the short-term. The lack of clarity or progress surrounding the Brexit process has weighed on the UK economy and presents uncertainty for short-term economic growth. Activity eased in France and Germany in 2018 and Italian financial conditions have tightened after a period of political uncertainty.

Japan's economy has benefited from improved private consumption, export demand and business investment, which was backed by decreasing unemployment and rising participation. Growth prospects are expected to soften due to higher oil prices, a consumption tax increase in 2019 dampening private consumption, and fiscal consolidation by government.

The Brazilian economy continues to languish. Economic recovery out of recession continues to be interrupted by recurring political disruptions and scandals. After the impeachment of President Rousseff in 2016, the

Table 1

Economic Growth						
	Annual Average % Change, March Year					
	2015	2016	2017	2018e	2019f	2020f
	%	%	%	%	%	%
US	+3.1	+2.3	+1.6	+2.5	+2.8	+2.6
UK	+3.0	+2.1	+2.0	+1.6	+1.5	+1.5
Euro zone	+1.4	+1.9	+1.8	+2.6	+2.4	+1.9
Japan	-0.3	+1.5	+1.2	+1.6	+1.4	+1.1
China	+7.2	+6.8	+6.8	+6.8	+6.6	+6.4
South Korea	+3.0	+2.9	+2.9	+3.1	+2.9	+2.8
Australia	+2.5	+2.5	+2.4	+2.3	+2.7	+2.8
Trading Partners	+3.7	+3.4	+3.3	+3.7	+3.7	+3.5
New Zealand	+3.7	+3.6	+3.7	+2.9	+2.8	+3.0

Note: "Euro zone" are 15 Member States: Belgium, Germany, Ireland, Greece, Spain, Cyprus, Malta, France, Italy, Luxembourg, the Netherlands, Austria, Portugal, Finland and Slovenia. "Trading Partners" account for about 85% of New Zealand's total merchandise trade. e estimate, f forecast | Source: Statistics New Zealand, NZIER Quarterly Predictions

Brazilian economy began to improve until her replacement, President Michel Temer, became implicated in a corruption investigation with a global meat-producing company, JBS SA. Temer's single-digit support rating and approaching October 2018 elections, and faltering economic recovery indicate that many challenges remain. Former President Luiz Inacio Lula da Silva, who was Rouseff's predecessor, is currently leading in some polls but is unlikely to stand in the elections because he is currently serving a prison sentence for corruption.

New Zealand

New Zealand's outlook is for continued stability and growth to still perform well at just under three per cent, however, the global economy has improved and growth is catching up relatively. The pickup in other markets may make them relatively attractive for investing capital despite

a prolonged period of stability in New Zealand's.

The global uncertainties and concerns highlighted above create risk to New Zealand's growth. Business confidence has been low, however, the New Zealand Institute of Economic Research (NZIER) highlights a correlation with the government in power rather than economic activity. NZIER has commented that trading activity has a correlation with GDP growth, which showed signs of easing in the June quarter but is still positive.

The failure of Ebert Construction, and Fletcher Building withdrawing from 'vertical construction', indicates the risk and lean margins in the construction sector. This limits capacity for large-scale projects and could prolong the current construction demand. Housing demand has stabilised in Auckland, but construction capacity growth is limited,

and house prices are expected to remain high.

The number of New Zealand citizens returning has remained steady but fewer non-citizens arriving and an up-tick in emigration have shifted net migration to under 65,000. The labour market remains tight – acute in some sectors – and NZIER expects increased employment demand to be catered for by increased hours worked by the part-time labour force.

The outlook for the dairy sector has softened in recent months as prices for whole milk powder at the Global Dairy Trade auction eased in the September 2018 quarter. Fonterra revised down its milk price forecast but it is still above DairyNZ's estimated average break-even price of \$5.05 per kg of milksolids.

Figure 1

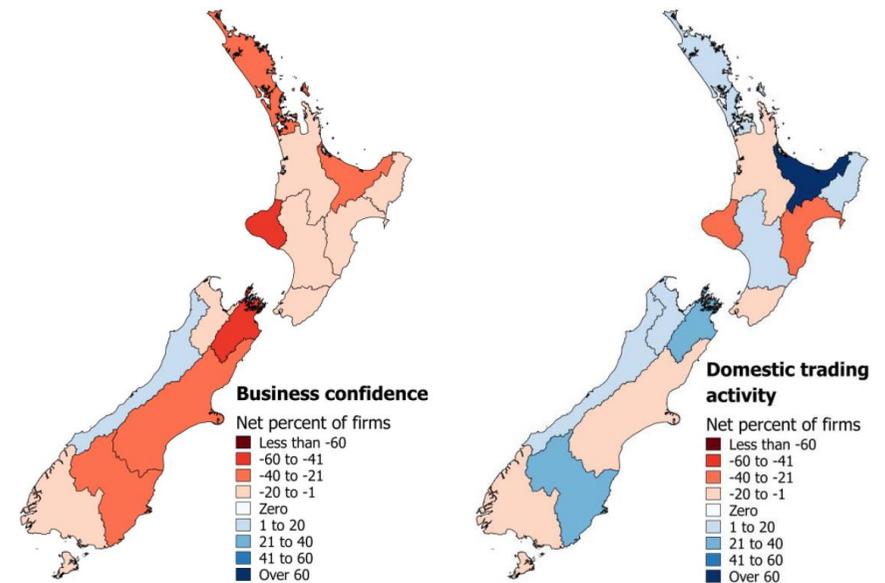


e estimate, f forecast

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

Figure 2

Quarterly Survey of Business Opinion & Domestic Trading Activity



Source: NZIER Quarterly Predictions – September 2018



Table 2

Consumer Prices

	Annual Average % Change, March Year					
	2015	2016	2017	2018e	2019f	2020f
	%	%	%	%	%	%
US	+1.2	+0.4	+1.6	+2.1	+2.4	+2.2
UK	+1.1	+0.1	+1.1	+2.8	+2.6	+2.3
Euro zone	+0.2	+0.1	+0.7	+1.4	+1.4	+1.5
Japan	+3.0	+0.2	-0.1	+0.7	+1.2	+1.0
China	+1.7	+1.7	+1.9	+1.8	+2.3	+2.3
South Korea	+1.2	+0.7	+1.3	+1.7	+1.5	+1.9
Australia	+2.1	+1.5	+1.5	+1.9	+2.1	+2.3
Trading Partners	+1.5	+2.0	+3.5	+1.7	+1.9	+2.0
New Zealand	+0.9	+0.3	+1.1	+1.6	+1.9	+2.1

Note: "Euro zone" are 15 Member States: Belgium, Germany, Ireland, Greece, Spain, Cyprus, Malta, France, Italy, Luxembourg, the Netherlands, Austria, Portugal, Finland and Slovenia. "Trading Partners" account for about 85% of New Zealand's total merchandise trade. e estimate, f forecast | Source: Statistics New Zealand, NZIER Quarterly Predictions

Consumer Prices

New Zealand's construction sector capacity limitations, elevated oil prices and lower exchange rate are expected to drive the increased headline inflation in late 2019. While the current inflation rate has risen, it is moderate and the Reserve Bank of New Zealand (RBNZ) has signalled that this will only be addressed if the impacts of raised inflation persist.

Underlying the current steady inflation rise is strong non-tradeable inflation largely driven by the construction sector costs, housing rents, and a rise in electricity charges. Despite the increase in fuel costs, tradeable inflation remains relatively steady.

Population growth and tight rental housing availability has driven a rise in the housing rental market inflation and non-tradeable inflation. A tight labour market, lifting of the minimum wage, and recently settled and ongoing pay disputes for large government sectors are expected to lift wage inflation.

Global inflation has risen but slowly and from subdued levels, and remains below central bank targets for some large economies. The lift in US inflation and stronger oil prices have driven higher costs, particularly for EMDEs after a period of relatively cheap borrowing.

Strong consumer demand, low unemployment and business investment have supported the lift in US inflation. Oil prices have increased in 2018 and are expected to strengthen with US-imposed trade sanctions on Iran, despite a recent increase in global production – particularly by Organization of the Petroleum Exporting Countries (OPEC) and the US.

Interest Rates

The outlook for the New Zealand official cash rate (OCR) is to remain at the record low rate of 1.75 per cent since it was reduced 0.25 percentage points in November 2016. The RBNZ indicated in August 2018 that it is unlikely to raise the OCR until sometime in 2020. The RBNZ Governor, Adrian Orr, stated that the prolonged period was to ensure sustainable high employment rates and low stable inflation.

Economic growth has recently eased slightly but is still near three per cent and is expected to lift moderately in the short-term. The RBNZ notes that there are indications of core inflation rising. Consumer price index (CPI) inflation is approaching two per cent, the middle of the target range of one to three percent.

Table 3

Short-term Interest Rates

	% p.a., March Year					
	2015	2016	2017	2018e	2019f	2020f
	%	%	%	%	%	%
US	0.0	0.2	0.5	1.4	1.2	1.5
UK	0.4	0.5	0.0	0.3	0.8	1.3
Euro zone	0.1	-0.1	-0.4	-0.3	0.1	0.2
Japan	0.1	0.1	0.1	0.1	0.3	0.4
Australia	2.8	2.4	1.8	1.8	2.3	2.5
New Zealand	3.6	2.6	2.0	1.9	1.9	2.6

Note: "Euro zone" are 15 Member States: Belgium, Germany, Ireland, Greece, Spain, Cyprus, Malta, France, Italy, Luxembourg, the Netherlands, Austria, Portugal, Finland and Slovenia. "Trading Partners" account for about 85% of New Zealand's total merchandise trade. e estimate, f forecast | Source: Statistics New Zealand, NZIER Quarterly Predictions



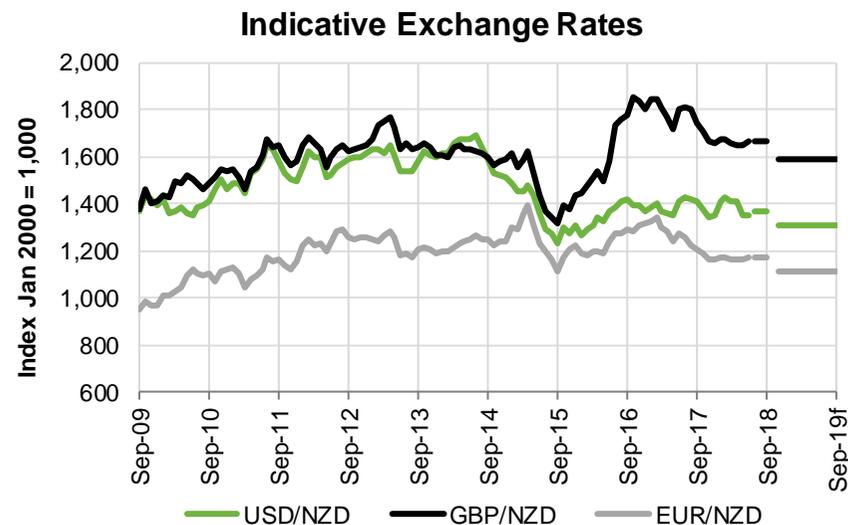
Externally, the general global economic pickup and weaker NZD will help export earnings. While within New Zealand, there is an expectation that a lift in government investment, household spending remaining stable, a tight labour market, constrained construction capacity and business investment will support the steady but gradual growth.

The US Federal Reserve (Fed) raised its current target benchmark interest rate by 0.25 percentage points to a target range of 1.75 to 2.00 per cent in June 2018, the second such rate increase for 2018 and the seventh since 2015 following low rates after the global financial crisis. The Fed statement highlighted that US economic growth had risen at a “solid” rate, up from “moderate” in May 2018. Robust economic growth has been backed by improving employment and household spending figures. The Fed has indicated that there may be a further two increases in 2018 and potentially four in 2019.

The faster than previously expected lift in US interest rates has raised expectations that other advanced economies will further normalise monetary policies and global interest rates – albeit at a slower pace than the US. Central bank rates in Europe and Japan are not expected to increase in 2018 but some wind-down of other expansionist policies, such as asset-buying programs, is expected.

In some EMDEs, challenges have arisen from the tightening of monetary policy in advanced economies. The higher Fed rates in particular are creating pressure on EMDE governments and companies after a period of strong investment as investors have sought better returns. As the US becomes more attractive, capital has flowed from EMDEs, putting further pressure on exchange rates and the cost of borrowing – as seen recently in the fall of the Turkish lira and Argentinian peso.

Figure 3



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

Exchange Rates

Table 4 shows the annual average exchange rates for the three major currencies in which New Zealand’s meat and wool are traded. For the year to September 2019, the outlook from banks at the time forecasting commenced was for the New Zealand dollar (NZD) to ease against the US dollar (USD), sterling (GBP) and euro (EUR).

As the New Zealand economy has recently performed steadily and with relatively high interest rates compared most major trading partners, the NZD has remained high. However, some advanced economies have strengthened and there are indications that others will in the short-term.

The NZD fell to a two-year low against the USD after the RBNZ’s August

2018 announcement that it would keep the OCR at 1.75 per cent and push out expectations of a OCR change to 2020. The pickup of other economies relative to New Zealand’s outlook encouraged some currency speculation away from the NZD.

The USD has strengthened since May 2018 due to a combination of a stronger economy, tightening of monetary policy, tax cuts and government spending in areas such as the USD12 billion aid package for farmers. The appeal of the USD has drawn capital away from other economies, further strengthening the USD but creating some instability – such as the fall of the Turkish lira. There is some concern that the fall of the Turkish lira and Argentinian peso could spread to other currencies.

Table 4

Sep Year	NZ Dollar Exchange Rates		
	USD	GBP	EUR
2016-17	0.71	0.56	0.65
2017-18e	0.70	0.52	0.59
2018-19f	0.67	0.50	0.56
2018-19f % change	-4.4%	-4.7%	-5.0%

e estimate, f forecast

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

Central bank monetary policies in other advanced economies are expected to strengthen their currencies, with the Bank of England raising its cash rate and signals the European Central Bank will end its asset-buying program before 2019.

Chinese authorities continue to aim at restricting capital moving out of China and limiting exchange rate fluctuations through its managed floating exchange rate framework.

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 proportion of New Zealand beef, lamb and mutton export volumes in the currencies in which the trade is denominated. For the first nine months of the 2017-18 production season, 72 per cent of total meat export volume was reported as being traded in USD-denominated contracts, 9.0 per cent in EUR and 6.7 per cent in GBP. The currency of trade usually depends on the region of the trade.

The US was the second largest market for red meat in this period (26%), which partially explains the dominance of USD in trades. However, the largest market was China (32%) and nearly 90 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 product value to the importer.

The UK and continental EU are traditional markets for New Zealand

lamb. However, while the UK and continental EU are still significant – 17 per cent of lamb volume was traded in GBP and 20 per cent in EUR for the first nine months of the 2017-18 season – 52 per cent (250,000 tonnes) was traded in USD. China accounted for around 34 per cent of lamb export volume making it the largest single country market. New Zealand lamb exports to the US have increased in recent seasons to 8 per cent of total making it the third-largest market.

The USD is significant for New Zealand beef exports because 85 per cent of total exports go to North America and North Asia – dominated by trade to the US (44%) and China (22%). The importance of the USD in mutton trades relates to high volumes exported to Asia, particularly China – 63 per cent of mutton exports.

Trade Agreements

A trial allowing exports of chilled meat to China from 10 specified New Zealand meat processing plants, which has been operating since July 2017, is proving successful. The New Zealand industry is yet to complete the outstanding administrative processes, typically an audit of premises against the protocols and plant listing information. A Chinese government restructure earlier this year may cause delays in completing this administrative process.

New Zealand aims to be one of the first six countries to ratify the CPTPP (Comprehensive and Progressive Trans-Pacific Partnership Agreement) before the end of 2018. Mexico, Japan and Singapore have ratified the CPTPP, and Australia and Chile have indicated they will by the end of 2018. The CPTPP will enter into force 60

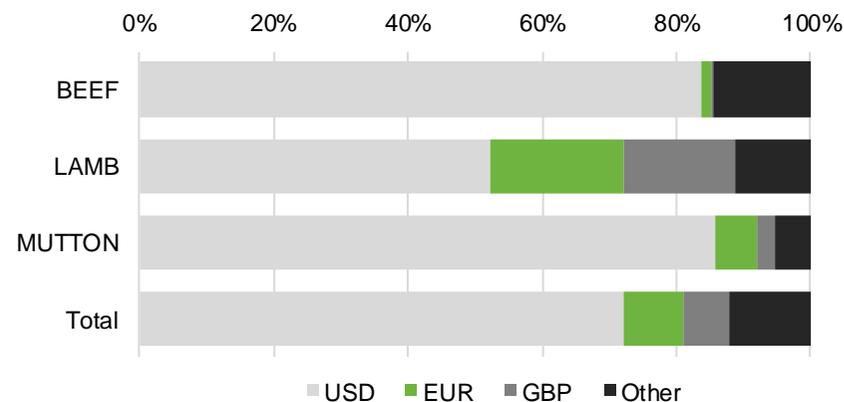
days after at least six of the signatory countries complete ratification. Thailand, Indonesia, South Korea, Colombia and UK have all indicated interest in joining the CPTPP but will have to wait until it comes into force.

The New Zealand Government and industry have been working together to ensure the quality and quantity of existing EU quotas are preserved, strongly opposing an EU-UK proposal to 'split' the EU's World Trade Organisation (WTO) tariff rate quotas (TRQ). The TRQs form part of the EU's WTO commitments and are legally binding.

NZ-EU FTA negotiations were launched in June 2018 and expected to be completed within two years. New Zealand was only one of six WTO members without an EU FTA in place or under negotiation. The EU was worth over NZ\$1.8 billion in New Zealand red meat exports for calendar 2017. It is New Zealand's largest regional market for sheepmeat, and second-largest for wool and chilled beef.

Figure 4

Meat Export Volumes in Currency of Trade Oct 2017 - Jun 2018



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

Exchange Rate Sensitivity – 2018-19

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

In 2018-19, the NZD is expected to begin easing against the USD, GBP and EUR. Exchange rate movement with the USD has the greatest effect because over 70 per cent of New Zealand's red meat exports are traded in this currency. The GBP is important because nearly 20 per cent of New Zealand lamb exports by volume and value were to the UK in recent years.

Exchange rate movements have a significant leveraged effect on farm-gate prices. All other things being equal, a 10 per cent decrease in the NZD against the USD – from 0.67 to 0.61 – and the associated cross rates against the GBP and the EUR, increases the average lamb price received by farmers by 15 per cent. Alternatively, if the NZD appreciates by 10 per cent – from 0.67 to 0.74 against the USD – then the farm-gate lamb price decreases by 12 per cent.

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

Exchange rate movements during that period strongly influence the season-average prices for beef, lamb, mutton and wool and thus farm revenue.

Table 5

NZD Exchange Rates						Exchange Rate Change from USD 0.67	
	-10%	-5%	Forecast	+5%	+10%	to USD 0.61	to USD 0.74
USD	0.61	0.64	0.67	0.71	0.74	-10%	+10%
GBP	0.45	0.47	0.50	0.52	0.55	-10%	+10%
EUR	0.51	0.54	0.56	0.59	0.62	-10%	+10%
Farm-Gate Prices Received							
\$ / head							
Lamb	151	141	132	123	116	+14.6%	-11.9%
Mutton	129	119	110	101	94	+17.7%	-14.5%
Steer/Heifer	1,640	1,528	1,427	1,336	1,253	+14.9%	-12.2%
Cow	907	845	789	739	693	+14.9%	-12.2%
Bull	1,738	1,619	1,513	1,416	1,328	+14.9%	-12.2%
All Beef	1,360	1,267	1,183	1,108	1,039	+14.9%	-12.2%
c / kg							
Lamb¹	815	761	712	667	627	+14.6%	-11.9%
Mutton¹	506	466	430	397	368	+17.7%	-14.5%
Steer/Heifer	597	556	519	486	456	+14.9%	-12.2%
Cow	456	425	397	372	349	+14.9%	-12.2%
Bull	575	536	500	468	439	+14.9%	-12.2%
All Beef	545	508	475	444	417	+14.9%	-12.2%
Fine²	1,803	1,680	1,570	1,470	1,380	+14.8%	-12.1%
Medium²	807	752	703	658	618	+14.8%	-12.1%
Crossbred²	335	312	292	273	256	+14.8%	-12.1%
All Wool²	475	443	414	388	364	+14.8%	-12.1%

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

Livestock Numbers

Sheep

Sheep numbers at 30 June 2018 totalled an estimated 27.3 million head, down 0.8 per cent on the previous June. This was due to a decrease in breeding ewes for all regions, which was moderated by a lift in total hogget numbers. The most significant increases in total hogget numbers occurred in Marlborough-Canterbury and Northland-Waikato-Bay of Plenty.

North Island sheep numbers decreased 2.0 per cent (-270,000 head) to 13.3 million at 30 June 2018. Decreases occurred in all regions in response to strong mutton prices, which led to fewer breeding ewes. This overall decline in breeding ewes was moderated by a lift in hoggets, as strong prices encouraged farmers to carry trade lambs to heavier weights during good pasture growth.

South Island sheep numbers increased 0.4 per cent (+52,000 head) to 14.0 million at 30 June 2018 due to an increase in hogget numbers in Marlborough-Canterbury, moderated by a decrease in breeding ewes (-0.8%) across all South Island regions. Breeding ewe numbers decreased largely due to strong prices. In Marlborough-Canterbury the decline was largely driven by hard hill and hill country farms, while in Otago and Southland, the decrease was greatest on intensive finishing farms.

Beef Cattle

Beef cattle numbers at 30 June 2018 totalled an estimated 3.68 million head, up 1.9 per cent on the previous June. This was largely driven by an increase in trade cattle and weaners, particularly in South Island regions.

North Island beef cattle numbers decreased 0.4 per cent to 2.57 million head at 30 June 2018.

Northland-Waikato-Bay of Plenty breeding cow numbers decreased, moderated by a lift in the number of trade cattle. Trade cattle were seen by farmers as a good option due to abundant feed supplies, particularly on easier hill country properties. In Taranaki-Manawatu, total numbers declined due to fewer weaners and trade stock carried over 30 June. Farmers were more cautious buying this season due to strong prices and *Mycoplasma bovis*. The North Island represents 70 per cent of the national herd.

South Island beef cattle numbers increased 7.4 per cent to 1.12 million head at 30 June 2018.

Marlborough-Canterbury beef cattle numbers increased 9.8 per cent to 710,000 head. This was driven by beef breeders retaining more weaners, and continuing to buy dairy-beef weaners, driven by high feed supplies and easing weaner prices.

Otago and Southland beef cattle numbers increased 3.5 per cent to around 400,000 head. This was driven

by a lift in breeding cows and heavy trading stock, while weaner cattle numbers decreased. Positive returns for beef cattle have encouraged farmers to increase their breeding herds.

Dairy Cattle

Dairy cattle numbers lifted slightly to 6.60 million head at 30 June 2018 due to a rise in cows and heifers. The South Island now contains 40 per cent of the New Zealand dairy herd, up from 35 per cent 10 years ago.

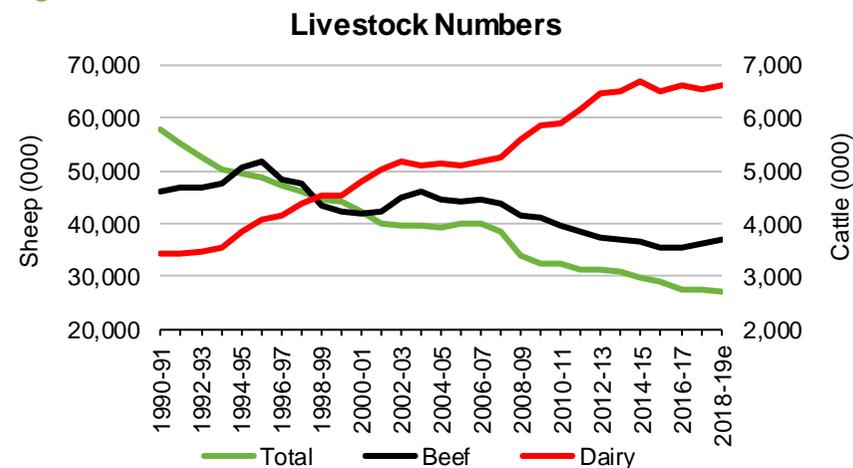
Table 6

	Livestock numbers million head				
	Breeding Ewes	Hoggets	Total Sheep	Beef Cattle	Dairy Cattle
30 June 2017	17.76	8.88	27.53	3.62	6.53
30 June 2018e	17.37	9.11	27.31	3.68	6.60
17-18 to 18-19 % change	-2.1%	2.5%	-0.8%	1.9%	1.0%

e estimate

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

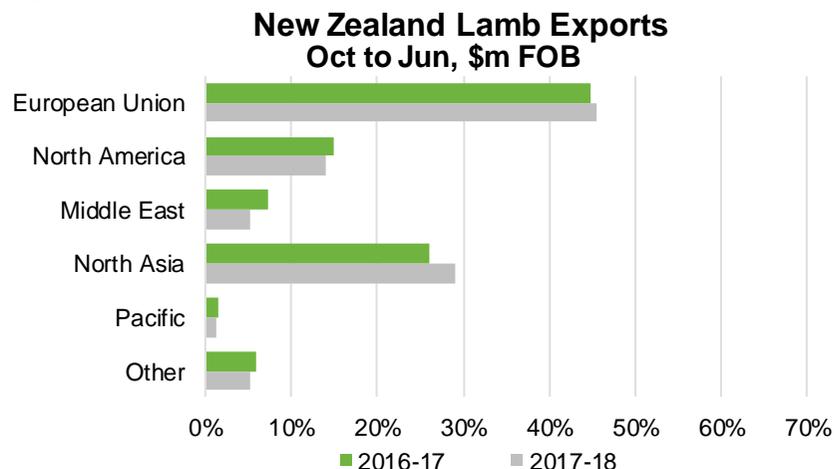
Figure 5



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

Lamb & Mutton Exports

Figure 6



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

Lamb 2017-18

Lamb exports are estimated to be down 2.0 per cent to 289,000 tonnes shipped weight, reflecting the decrease in lamb crop and average carcass weight, and increased retention of ewe hoggets. The average FOB value per tonne was up strongly by 18 per cent to \$10,121 – only behind 2010-11 after adjusting for inflation, and following an 8.8 per cent increase in 2016-17.

Total lamb receipts were up sharply by 15 per cent to \$3.12 billion FOB. Export receipts from co-products (including edible offal and skins) were up 13 per cent, as prices improved for skins and offals after recent declines.

Shipments in the first nine months of 2017-18 were up 4.4 per cent despite the estimated 2.0 per cent decline for the full season. This was in part due to dry conditions in many regions in the December quarter and strong prices encouraging producers to sell.

Table 7

Sep Year	Lamb meat			Co-Products	Total Lamb	Lamb Meat
	000 tonnes	\$ / tonne	\$m FOB	\$m FOB	\$m FOB	%*
2014-15	302	8,470	2,559	256	2,815	91%
2015-16	303	7,907	2,397	187	2,584	93%
2016-17	295	8,603	2,538	168	2,706	94%
2017-18e	289	10,121	2,926	191	3,116	94%
2018-19f	284	10,245	2,912	202	3,113	94%
2018-19f % change	-1.7%	+1.2%	-0.5%	+5.9%	-0.1%	

* Lamb Meat value as a percentage of the value of Total Lamb exports, including Co-Products

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

Processing slowed in the March quarter as the feed outlook improved in some regions, then picked up as winter approached.

As shown in Figure 6, the share of total lamb export receipts achieved from the EU increased marginally – up 0.8 percentage points to 45 per cent in the first nine months of 2017-18. This follows an 8.4 percentage point drop in 2016-17, which was largely due to the weaker GBP following the Brexit referendum in June 2016, tighter international supply and good demand from China.

The share of lamb export receipts from North Asia rose 2.9 percentage points in the first nine months of 2017-18, after a 4.3 percentage point rise for the same period in 2016-17. In 2017-18, the average FOB value per tonne for exports to China was up 17 per cent while the average across all export markets was up 18 per cent. In 2016-17, the average FOB value per tonne was up 22 per cent for

China, but up 6.3 per cent across all markets.

2018-19

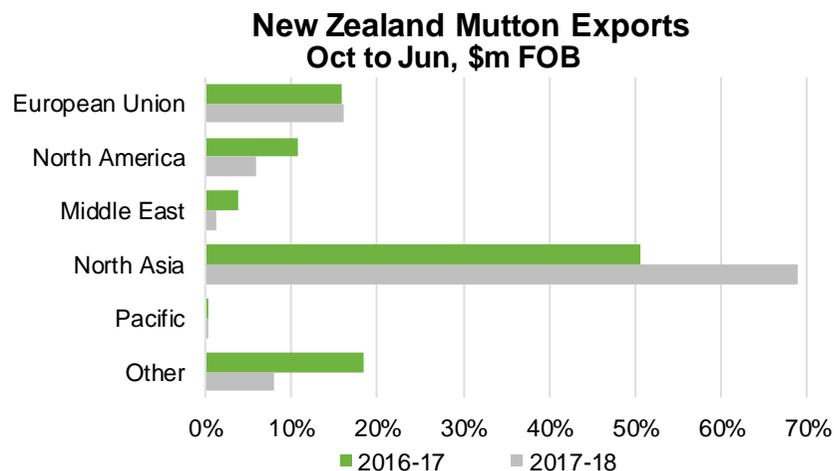
For 2018-19, lamb meat export receipts are forecast at \$3.11 billion FOB, unchanged on 2017-18.

The volume of lamb meat shipped is projected to decrease by 1.7 per cent due to a slightly smaller number of lambs available for export with the reduced lamb crop, partly offset by a minor rise in average carcass weight.

The forecast strengthening of major currencies in which New Zealand meat exports are traded is expected to exceed the slight easing of in-market prices in 2018-19 – on a backdrop of limited international supply – resulting in the average FOB value per tonne being up 1.2 per cent.

Export receipts from co-products are forecast to increase by 5.9 per cent in 2018-19, driven by an improvement in receipts for skins while offals remain steady after the gains in 2017-18.

Figure 7



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

Mutton 2017-18

Strong farm-gate prices for mutton have been a feature of the 2017-18 season, driving an estimated 5.0 per cent increase of mutton exports after declines in recent seasons. The strong expansion of the New Zealand dairy herd in the decade to 2014-15, dry conditions in some regions and a significant facial eczema outbreak in 2016 have contributed to smaller national sheep flock and the declining supply of mutton. The strong prices and production will influence mutton availability in 2018-19.

The estimated average FOB value per tonne of mutton exports shot up 23 per cent, following a 15 per cent increase in 2016-17. This reflects limited mutton availability from the two

largest sheepmeat traders – New Zealand and Australia.

Total export receipts for mutton are projected to be up 24 per cent, and are estimated to contribute over \$670 million to New Zealand's export earnings for 2017-18. Export receipts from co-products (including edible offal and skins) are estimated to have risen by 4.1 per cent.

Table 8

Sep Year	Mutton meat			Co-Products \$m FOB	Total Mutton \$m FOB	Mutton Meat %*
	000 tonnes	\$ / tonne	\$m FOB			
2014-15	86	5,214	447	157	604	74%
2015-16	83	4,581	380	132	512	74%
2016-17	81	5,247	424	120	544	78%
2017-18e	85	6,459	548	125	673	81%
2018-19f	71	6,604	466	122	588	79%
2018-19f % change	-16.9%	+2.2%	-15.1%	-2.6%	-12.7%	

* Mutton Meat value as a percentage of the value of Total Mutton exports, including Co-Products
e estimate, f forecast | Source: Beef + Lamb New Zealand Economic Service, Statistics New Zealand

In the first nine months of 2017-18, total receipts from mutton exports were up 44 per cent to \$534m. Over this period, mutton exports increased 16 per cent to 82,000 tonnes shipped weight, despite the smaller national flock, and the average value per tonne increased 24 per cent.

North Asia remains the largest export region market, receiving 69 per cent of volume (62,000 tonnes) – up 56 per cent. Total receipts from North Asia increased 95 per cent over the first nine months of the season due to the combination of higher volume and the average value per tonne up 26 per cent. The rise in volume was at the expense of all other regional markets, which all declined in volume.

China dominates New Zealand's mutton exports by taking 66 per cent of total exports, the average FOB value per tonne increased by 27 per cent for this period – this has risen by 57 per cent over the last two seasons. This is significant considering the high weighting of volume the Chinese market has on the 24 per cent increase in average FOB value across all markets.

2018-19

In 2018-19, mutton exports are forecast to decrease 17 per cent. After high production in 2017-18 driven by record farm-gate prices, mutton availability will fall due to the deeper cull and younger flock with more ewe hoggets retained in 2017-18.

The total value of mutton exports is forecast to decline 15 per cent to \$466 million FOB despite a 2.2 per cent increase of average FOB value per tonne, due to the large volume decline. The higher average value per tonne is backed by demand driven by China, the strengthening of trading partners' currencies, and tight international supply despite the current high prices.



Lamb & Mutton – International Situation

Overview

The international trade of sheepmeat is dominated by New Zealand and Australia, which account for nearly three-quarters of global exports. The impact of tighter export supply from New Zealand and Australia, and import demand from China drove prices that began rising in 2016-17, particularly mutton.

In 2018-19, international lamb and mutton supply is forecast to remain tight due to drought in the Australian 2018 winter hampering flock rebuilding, strong 2017-18 mutton prices in New Zealand driving increased mutton production and limiting availability for 2018-19, and a younger New Zealand breeding ewe flock as more hoggets were retained.

Australia

The winter drought has dominated Australian sheepmeat production, with the national lamb processing in the first half of 2018 exceeding 12 million for the first time (Australian Bureau of Statistics).

The drought has impacted across the continent but eastern Australia has been severely affected by drought. According to state governments, 57 per cent of Queensland and 100 per cent of NSW were declared drought-affected – 70 per cent of NSW was either in drought or intense drought conditions in August 2018. Victoria – particularly eastern areas of the state – have been under prolonged dry and

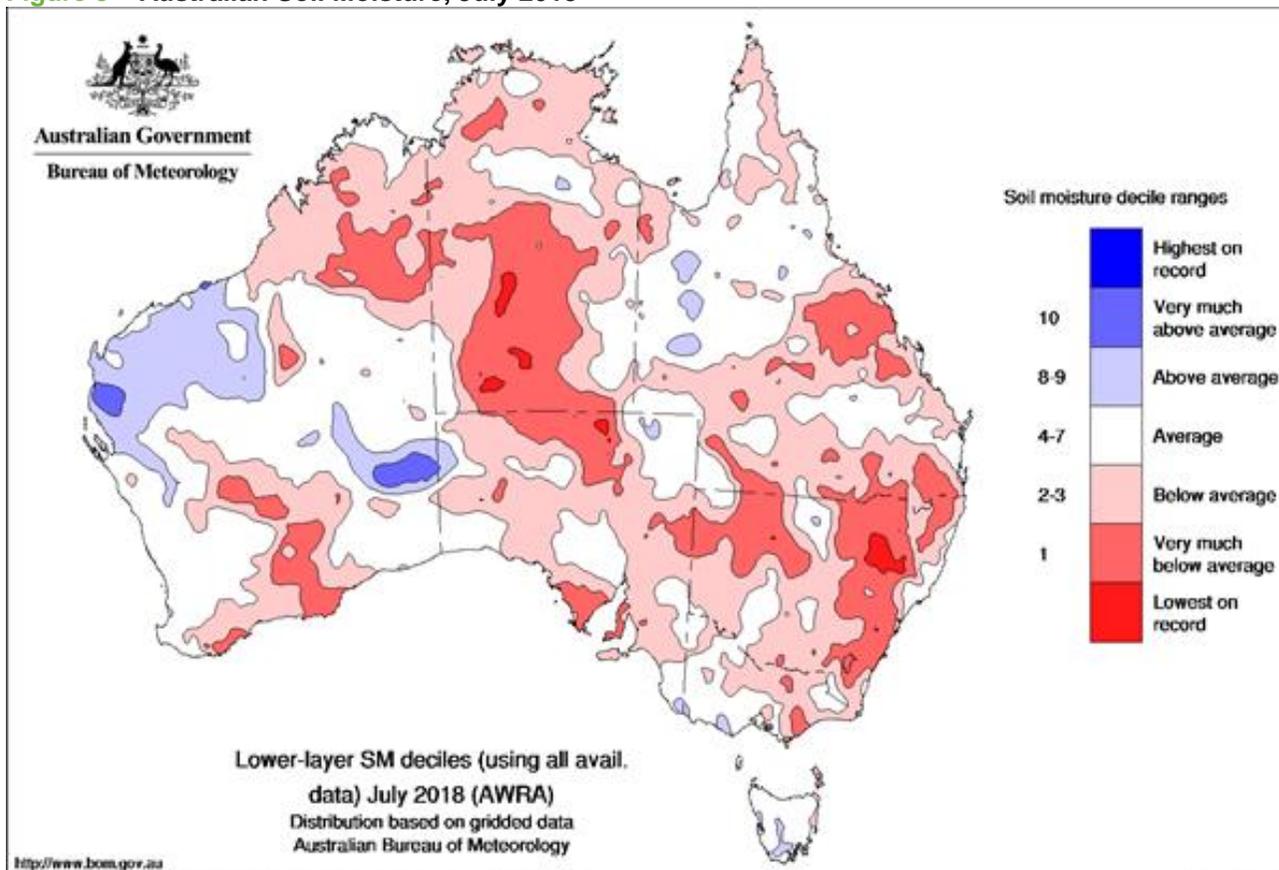
drought conditions also. Victoria and NSW account for around 70 per cent of Australian sheepmeat production.

The Australian Bureau of Agricultural and Resource Economics (ABARES) estimates the Australian national flock to have remained steady for the year

ending June 2018 as the adverse climate and strong farm-gate prices hindered rebuilding. However, the national flock is forecast by ABARES to pick up again in the coming season by 1.1 per cent to 72.9 million, driven by lamb-producing systems.

Farm-gate prices for 2017-18 in Australia remained strong despite the severe climatic conditions. In the period from October 2017 to June 2018, Australian mutton processing peaked in October-November and again in May, but New Zealand's mutton processing peaked in January

Figure 8 – Australian Soil Moisture, July 2018





and was 82 per cent lower by May. The offset processing peaks is likely to have benefitted the export values.

The average saleyard price for lamb was estimated to be up 3.4 per cent, driven by export demand. Australia has a significant portion of production consumed domestically compared with New Zealand, which influences the prices received by farmers. Strong export demand and the continued flock rebuilding effort are expected to support the forecast saleyard prices – lamb at AUD6.25 per kg (+2.1%) and mutton at AUD4.25 per kg (+1.7%).

The dry conditions and strong prices drove increased Australian lamb and mutton supply, similar to New Zealand, except the climate was a greater influence. Lamb processing was estimated up 3.3 per cent to 23.1 million head and mutton up 25 per cent to 8.2 million head. Much like New Zealand, increased processing in 2017-18 will tighten mutton availability in 2018-19 – down 3.4 per cent to 7.9 million head (ABARES). Strong farm-gate prices and flock recovery and expansion will create tension for the number of lambs available but processing is forecast to increase – up 1.8 per cent – assuming a return to more average climate conditions (ABARES).

Australian sheepmeat exports are expected to be slightly up (+0.9%) to 450,000 tonnes, as increased lamb production more than offsets the lower mutton production. A forecast strengthening of average export value per tonne will contribute to a 4.4 per cent increase of the total value of

sheepmeat exports – to AUD3.3 billion – on the back of steady volume.

China

Chinese demand for sheepmeat has had a significant influence on the strong international and farm-gate prices. Growth of domestic sheepmeat demand has slowed but importantly it is still growing, combined with limited international supply and decreased Chinese domestic production. High farm-gate prices and drought in key production regions encouraged smaller producers to exit the industry in 2016 – limiting domestic production in 2017. Generally, Chinese sheepmeat demand is outpacing domestic production, however it

remains a minor, though premium section of the animal protein market – around three per cent.

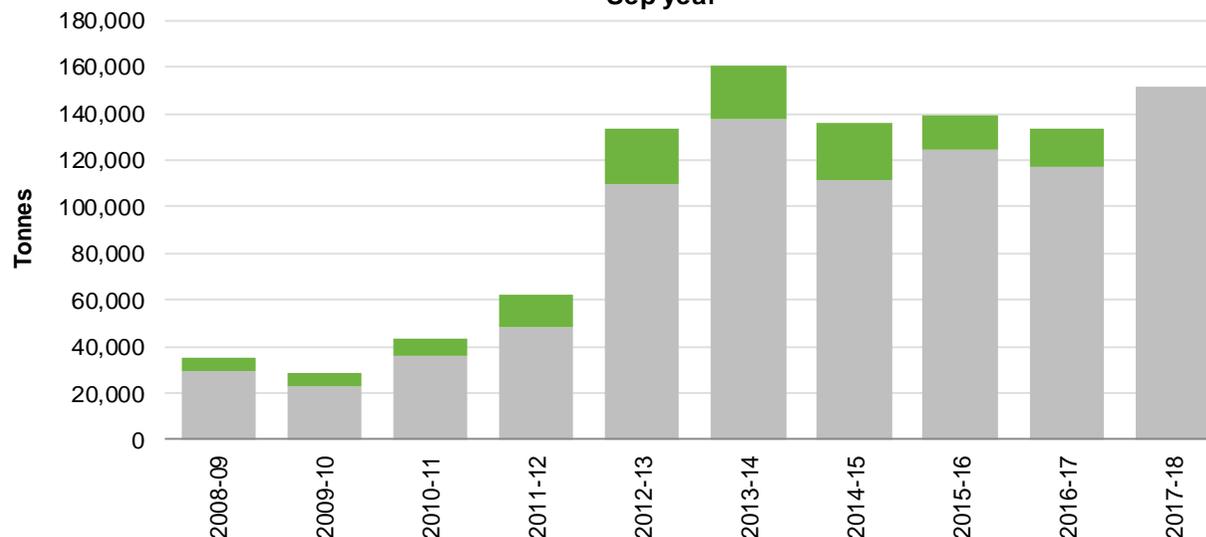
In recent seasons, China has been the dominant market for New Zealand’s mutton exports taking an average of 52 per cent over the five seasons from 2012-13 to 2016-17. However, for the first nine months of 2017-18, Chinese imports of New Zealand mutton increased by 59 per cent, after decreasing 9.8 per cent in 2016-17. The average FOB value per tonne for the same period increased by 27 per cent in 2017-18, after a 23 per cent increase the season before. The tighter supply and growing demand has led to increased lamb exports to China also,

accounting for 34 per cent of New Zealand’s exports from October to June.

The increased Chinese demand and tight mutton supply has driven the strong average FOB value per tonne for New Zealand lamb. The average FOB value per tonne began rising in 2016-17 driven by the 21 per cent increase in the value per tonne of exports to China, which accounted for 30 per cent of volume. The largest changes in the average value of exports to China were increases in traditional “value” cuts, such as bone-in breast and flaps.

Figure 9

New Zealand Sheepmeat Exports to China
Sep year



Note: The grey areas represent the value of exports from October to June and the green areas the value of exports for the rest of the season – from July to September.

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

The gains made in the second half of the 2016-17 season set a high starting point across all markets for the average lamb FOB value per tonne for the 2017-18, which have continued through the season. While the average FOB value per tonne for exports to China has increased strongly again – up 17 per cent for the season to June – other markets increased also with the result being an 18 per cent increase for all lamb exports. This highlights the strong Chinese demand and tight international supply for mutton have driven lamb demand and increased competition.

European Union

Overall, the EU sheep flock remains relatively stable, with minor changes in flock size and production across the region. However, the impact of the current drought on feed costs, and on the number of lambs and adult sheep available for processing will influence import demand in 2019. The improving EU economies, the drought risks for EU sheepmeat production and limited supply from Australia and New Zealand support a steady farm-gate price in New Zealand, against a backdrop of already strong international prices.

After EU sheepmeat imports declined by 15 per cent in 2017, they are forecast to stabilise in 2018 then increase by 3.0 per cent in 2019 according to the European Commission. New Zealand dominates the EU sheepmeat imports – accounting for around 86 per cent – and drove the decline in volume following the relatively weaker GBP due to the Brexit referendum in June 2016 and competition from other markets, particularly with China for “value” cuts.

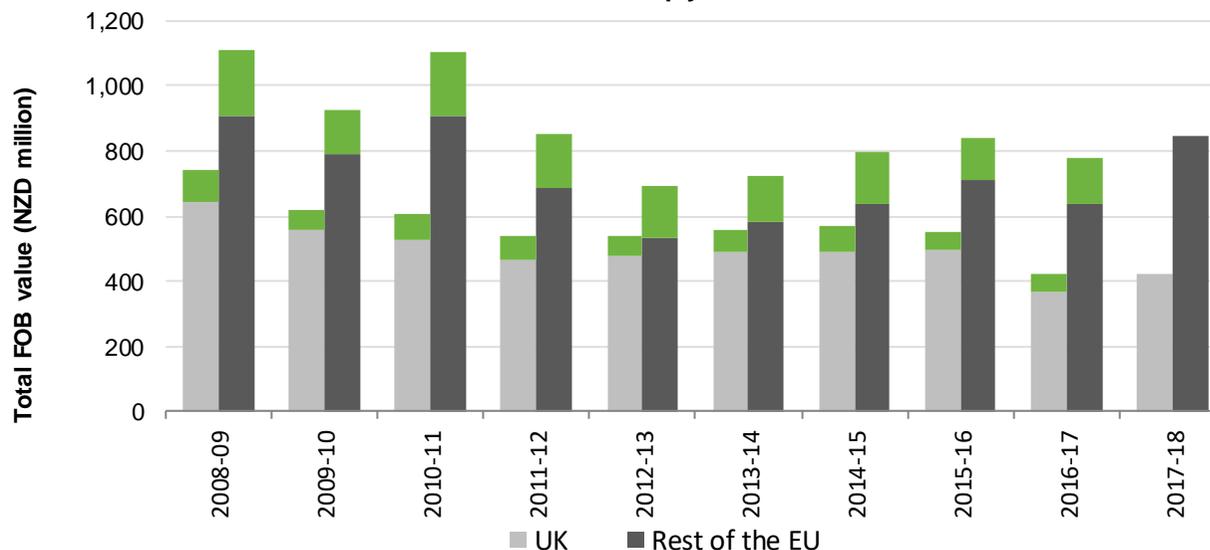
Stabilisation of EU sheepmeat imports has been supported by the pickup in large EU economies and increased

value per tonne. For the first nine months of 2016-17, the average FOB value per tonne for lamb across all New Zealand’s markets increased by 6.3 per cent but increased only 1.4 per cent from the EU. However, while up 18 per cent across all markets for the same period in 2017-18, the value per tonne from the EU was up by 22 per cent. This was due to strong international prices and an altered product mix with a portion of the “value” cuts going to China instead, which lifts the average value per tonne.

The UK remains New Zealand’s largest market in the EU. The Agriculture and Horticulture Development Board (AHDB) estimated the spring 2018 UK lamb crop was down six per cent due to poor lambing conditions in the spring, supporting the European Commission’s forecast 3.0 per cent increase in sheepmeat imports for 2019.

Figure 10

New Zealand Sheepmeat Export Value to UK and Rest of the EU
Sep year



Note: The grey areas represent the value of exports from October to June and the green areas the value of exports for the rest of the season – from July to September.

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

Lamb & Sheep Prices – Farm-gate

Lamb

The different exchange rate scenarios presented in Table 9 highlight the leveraged effect of the exchange rate on the New Zealand lamb price to farmers. At the mid exchange rate of USD0.67, the forecast lamb price of 712 cents per kg for 2018-19 is up 0.5 per cent from the estimated 2017-18 price of 708 cents per kg. The forecast 3.4 per cent decrease of in-market prices across all export markets is offset by the predicted strengthening of New Zealand's major trading currencies.

Following the strong growth that began in March 2017, the monthly average lamb farm-gate price in 2017-18 began above 700 cents per kg and rarely dipped below this mark. This surpassed the previous inflation-adjusted record farm-gate price set in 2010-11 (+6.9%). For the 2017-18 season-to-date, the variation within the season has been minimal compared to previous seasons despite the dry conditions in many regions early in the season.

Table 9
All Grades Lamb Price Sensitivity Analysis

Exchange Rate	Lamb Price			
	\$ per head	c per kg		
Low NZD				
USD	0.61			
GBP	0.45	151	815	High
EUR	0.51			
Mid NZD				
USD	0.67			
GBP	0.50	132	712	Mid
EUR	0.56			
High NZD				
USD	0.74			
GBP	0.55	116	627	Low
EUR	0.62			

Source: Beef + Lamb New Zealand Economic Service

In addition to historical quarterly prices, Figure 11 includes forecast quarterly prices to show the likely seasonal pattern of lamb prices in 2018-19.

Figure 11 shows the monthly, quarterly and annual weighted average price for all lamb to the end of September 2019.

Three exchange rate scenarios are provided in the outlook for 2018-19 because of the volatility in exchange rates. The three scenarios use annual average exchange rates of USD0.61, USD0.67 and USD0.74 and the associated cross rates against the GBP and the EUR.

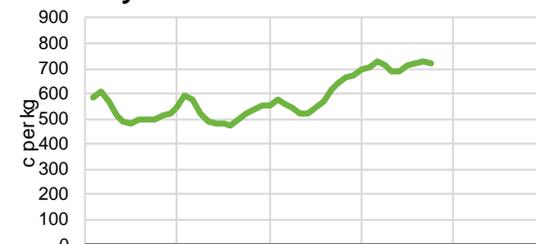
Quarterly prices are presented in Figure 11 to better express the variation in prices within a season. Historical data shows that prices tend to be high during the December quarter and then gradually decrease as the season progresses and as number of lambs processed increases. In the last quarter, when the number of lambs processed starts to reduce again, prices tend to go up.

Mutton

At the mid exchange rate of USD0.67, the annual average mutton price is forecast at 430 cents per kg in 2018-19, an increase of 3.2 per cent on the estimated 417 cents per kg for 2017-18. The 2017-18 inflation-adjusted average farm-gate mutton price was 7.0 per cent higher than the 2010-11 record. This increase reflects the more favourable exchange rates, supported by tight Australian and New Zealand mutton exports in 2018-19. For the 2017-18 season, the estimated average mutton farm-gate price increased by 45 per cent.

Figure 11

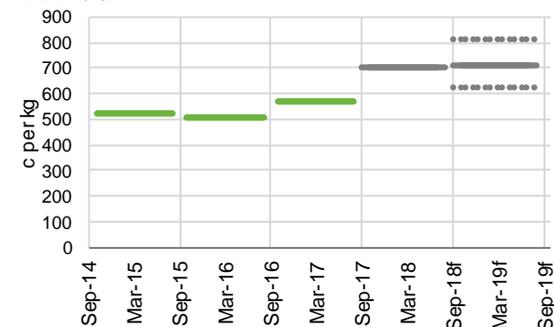
Monthly



Quarterly



Annual



Source: Beef + Lamb New Zealand Economic Service

Lamb & Mutton Production

Table 10

Sep Year	Export Lamb Production			
	Lamb Crop million head	Slaughter million head	Carcase Weight kg	Production 000 tonne bone-in
2014-15	25.8	21.2	18.1	384.2
2015-16	24.6	19.9	18.3	364.9
2016-17	24.1	19.2	18.6	358.3
2017-18e	23.7	19.5	18.4	357.7
2018-19f	22.8	19.0	18.5	351.6
2018-19f % change	-3.8%	-2.2%	+0.5%	-1.7%

e estimate, f forecast

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

Lamb

For the year ending September 2019, the number of lambs processed in export-approved premises is forecast to decrease 2.2 per cent or 0.4 million head to 19.0 million. The decrease in 2018-19 lamb production largely reflects the reduced ewe numbers.

The total number of lambs tailed in the spring of 2018 is estimated at 22.8 million head, down 3.8 per cent or 0.9 million head on the previous spring, reflecting fewer breeding ewes. For the year to 30 June 2018, New Zealand's breeding ewe flock decreased 2.1 per cent to 17.4 million head, due to high farm-gate prices encouraging sales.

The estimated 2018-19 lamb crop is driven by lower breeding ewe numbers and scanning rates, though a slight rise in mating of ewe hoggets.

Pregnancy scanning results were mixed, and results did not necessarily meet farmer expectations. Good ewe and feed condition at mating and going into winter, and following record lambing rates the previous season, drove farmer expectations.

Anecdotally, parasite load, sub-clinical facial eczema and ram failure have contributed to lower scanning rates.

With 17.4 million ewes, each one percentage point change in breeding ewe lambing percentage is equivalent to 174,000 lambs. A final estimate of the number of lambs born will be made when Beef + Lamb New Zealand's Lamb Crop Survey is completed in November.

Assuming normal climatic conditions for 2018-19, carcass weights are expected to average 18.5kg per head. This would be a slight increase from 2017-18 (+0.5%) when dry conditions

in the December quarter drove a greater proportion of processing earlier, and lambs were not brought up to heavier finishing weights. The lower number of lambs processed will be partially offset by the heavier carcasses leaving a production decrease of 1.7 per cent to 352,000 tonnes carcass weight.

Mutton

The number of sheep processed is forecast to fall 17 per cent or 0.7 million head to 3.3 million head in 2018-19, after an extraordinary 2017-18. Record farm-gate prices drove higher processing numbers in 2017-18 – up 10 per cent. However, the national flock size was steady and the number of ewe hoggets retained increased by 4.6 per cent – limiting the flock younger on average – limiting the availability of mutton in 2018-19.

A decrease in the number of breeding ewes across New Zealand drove the slight decline in total sheep numbers at 30 June 2018 for all regions except Marlborough-Canterbury, which was boosted by hogget numbers.

In the North Island in 2018-19, the number of adult sheep processed is expected to drop 20 per cent or 374,000 head to 1.5 million head, and the South Island is forecast to decrease 14 per cent or 279,000 head to 1.8 million head.

For the year ending September 2019, the average mutton carcass weight is projected to be marginally down to 25.5kg per head (-0.5%), following historically high weights in the previous two seasons. Total export mutton production is forecast to be down 17 per cent to 84,100 tonnes carcass weight.

Table 11

Sep Year	Export Mutton Production		
	Slaughter million head	Carcase Weight kg	Production 000 tonne bone-in
2014-15	4.1	25.0	102.1
2015-16	3.8	25.1	96.4
2016-17	3.6	25.7	92.2
2017-18e	3.9	25.7	101.2
2018-19f	3.3	25.5	84.1
2018-19f % change	-16.5%	-0.5%	-16.9%

e estimate, f forecast

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

Beef & Veal Exports

2017-18

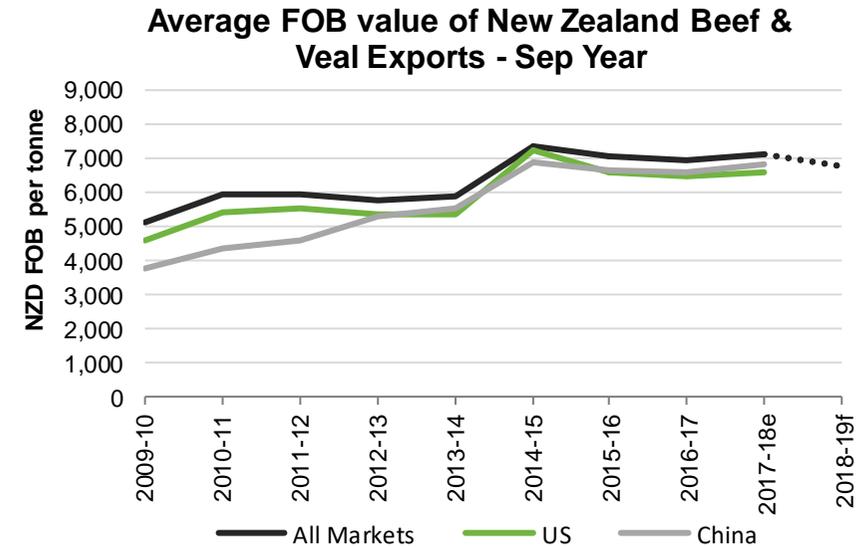
In 2017-18, demand from New Zealand's largest beef export market region – North America – eased relative to opportunities in North Asia, which is dominated by China in volume terms. Improved competition from China has helped to support export value per tonne of beef exports in the 2017-18 season to date.

Beef and veal meat exports are estimated up 8.3 per cent to 428,000 tonnes shipped weight in 2017-18 compared with 2016-17. The estimated average FOB value per tonne of beef and veal meat exports increased 1.2 per cent reflecting the softer NZD offsetting an easing of average in-market value per tonne.

In 2017-18, total receipts for beef and veal exports are estimated at \$3.55 billion FOB, up 8.9 per cent on 2016-17. Despite this increase, export receipts from beef and veal are expected to fall behind those from sheepmeat, after leading for the previous three seasons.

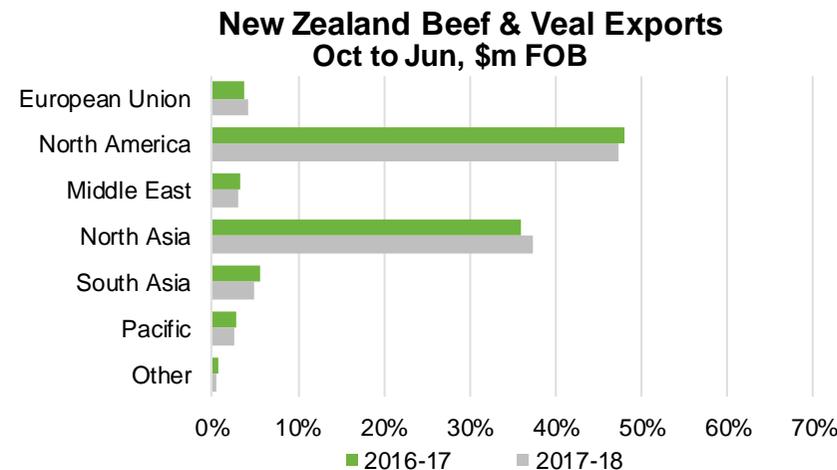
Figure 12 shows the strong increases in average FOB value per tonne of New Zealand beef and veal for the 2014-15 season, when a historically low US cattle herd drove demand and a 27 per cent increase. The average FOB value per tonne declined moderately over 2015-16 and 2016-17, though still remained well above pre-2014-15 levels.

Figure 12



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

Figure 13



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

While the US drove the higher export value per tonne in 2014-15, US domestic production has been growing since and domestic producer prices softened in 2017-18. US demand for frozen lean manufacturing beef remained strong in the December quarter, but softened as the season progressed. The US beef herd began to show signs of approaching its production peak with cows and heifers making a greater proportion of the slaughter mix and a slight decline in the number of beef heifers retained for breeding, combined with drought conditions in some regions.

However, China's domestic beef consumption has been outpacing its

production and has played a significant role in accommodating growing international production – and supporting New Zealand's beef export returns.

The product mix of New Zealand's beef exports to the US and China are not necessarily like-for-like, as the US market receives more manufacturing cuts while more secondary cuts go to China. However, in 2017-18, the proportion of manufacturing beef exports increased to China, likely highlighting both higher US beef production softening domestic prices and continuing growth of Chinese import demand.



Manufacturing beef exports account for approximately 60 per cent of New Zealand's total beef exports. For the first nine months of the 2017-18 season, the average FOB value per tonne of manufacturing beef exported to the US rose by 1.4 per cent while exports to China increased 7.1 per cent. There was a 3.1 per cent increase across all markets. This translated to a 3.7 percentage point increase in the share of New Zealand's total manufacturing beef exports going to China and 0.7 percentage point decline to the US.

Figure 13 shows that in the first nine months of 2016-17 and 2017-18, North America and North Asia dominated New Zealand's beef and veal exports – accounting for 88 per cent of exports. The share of total beef and veal export receipts from North America declined marginally by 0.7 percentage points to 47 per cent in 2017-18, while those from North Asia increased by 1.4 percentage points to 37 per cent. These two regional markets are predominantly made up of the US and China respectively.

2018-19

For 2018-19, New Zealand beef and veal exports are forecast to decrease by 3.1 per cent to 415,000 tonnes shipped weight. Under the USD0.67 exchange rate assumption, the average FOB value per tonne is expected to decrease 2.8 per cent, despite the exchange rate being more favourable than the estimated USD0.70 for 2017-18. The value of co-products is forecast to increase 7.0 per cent.

Overall, beef and veal receipts are expected to total \$3.42 billion FOB in 2018-19, down 3.7 per cent from 2017-18 and down from the record high of \$3.8 billion achieved in 2014-15. However, these are still high receipts by historical standards and well above the \$3 billion mark that had not been passed until 2014-15.

Global beef production is expected to keep growing in 2018 and 2019 according to OECD-FAO estimates. However, moderate growth of Chinese import demand and growth in economies of major trading partners raising consumption – particularly the US in the context of New Zealand's beef exports – will accommodate rising production.

Table 12

New Zealand Beef and Veal Exports

Sep Year	Beef and Veal Meat			Co-Products \$m FOB	Total Beef \$m FOB	Beef Meat %*
	000 tonne	\$ / tonne	\$m FOB			
2014-15	432	7,395	3,193	594	3,787	84%
2015-16	423	6,996	2,962	562	3,524	84%
2016-17	396	6,898	2,729	533	3,262	84%
2017-18e	428	6,977	2,990	562	3,552	84%
2018-19f	415	6,782	2,817	602	3,419	82%
2018-19f % change	-3.1%	-2.8%	-5.8%	+7.0%	-3.7%	

* Beef and Veal Meat value as a percentage of the value of Total Beef exports, including Co- Products e estimate. f forecast | Source: Beef + Lamb New Zealand Economic Service, Statistics New Zealand

Beef – International Situation

Overview

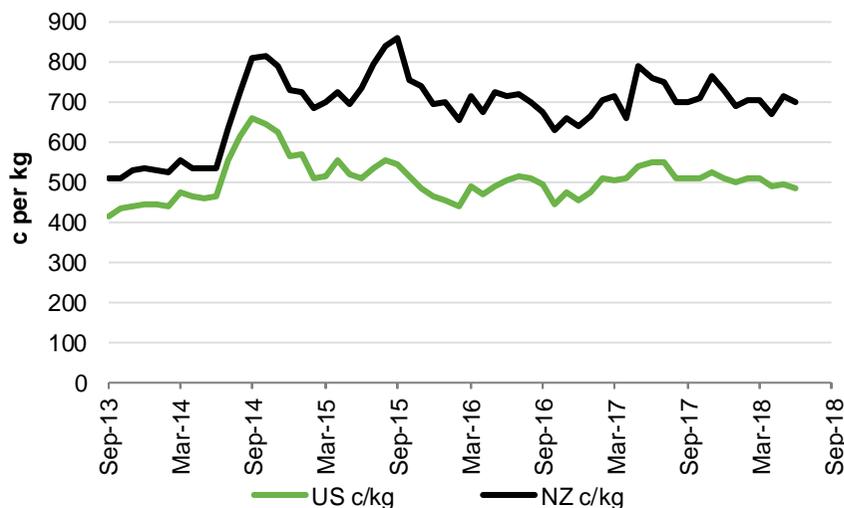
Global beef and veal production for 2018 has been revised down but is still expected to grow and do so again in 2019. The extent of recent droughts in North and South America, Australia and Europe, and disease outbreaks in competing animal proteins – such as African Swine Fever (ASF) in Europe and China. International geopolitical uncertainty creates some downside risk. However, improving demand – particularly from China – and the timing of New Zealand's peak in beef production mitigates these risks.

United States

Figure 14 shows the indicative price trend for imported frozen 95CL (95% chemical lean) beef in the US in USD and converted to NZD. For June 2018, the average in-market price at USD4.85 per kg was up 2.0 per cent on June 2017. In NZD terms, the comparative increase was 2.7 per cent, reflecting the easing of the NZD relative to the USD. Further easing of the NZD will see the difference between these prices grow and partly mitigate the forecast softer US wholesale prices.

Figure 14

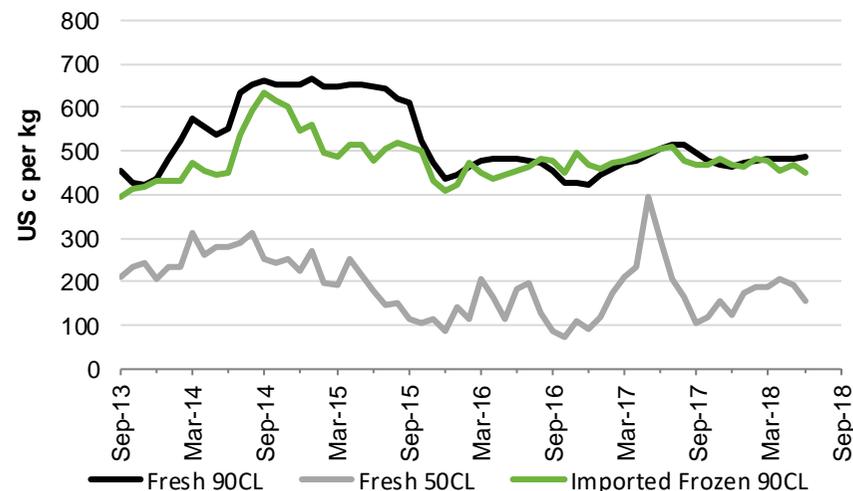
Indicative Prices of US Imported Beef Frozen 95CL



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

Figure 15

US Lean Beef Prices
Chemical lean - FOB Plant basis



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

Figure 15 shows prices for US domestic fresh 50CL and 90CL beef, and imported frozen 90CL in USD terms. The prices for fresh and frozen 90CL beef rose in 2016-17 – but not to the record prices reached in 2014 and early 2015 – and have remained there for the current season to June, despite highs and lows of 50CL beef. The higher fat content trimmings from fed (feed-lot-finished) cattle – 50CL – is blended with lean manufacturing beef from non-fed cattle, which includes New Zealand's cow and bull beef – imported frozen 90CL and 95CL.

In 2014, the US cattle herd began a rebuilding phase, which limited supply of domestic lean beef and drove increased demand for imported lean beef. As the US herd has matured, production has begun increasing since 2016. In 2018, there are signals that the US herd is approaching the peak of the beef herd growth cycle. A greater proportion of the US cattle processed in 2018 has been made up of cows and heifers, and the number of heifers retained for breeding declined on 2017.



In the December quarter 2017 and at the start of the March quarter 2018, demand for imported lean beef was strong but eased slightly as the US production built into spring and summer. The drought affecting the Southern Plains, Missouri and Kansas has developed, non-fed cattle processing has lifted – combined with

the maturing herd – and prices for US domestic lean beef softened.

The drought and feed availability has driven more feeder cattle to come onto feed lots at lighter weights and remaining there longer. At the end of June 2018, drought had not noticeably impacted feed grain production. The

US Department of Agriculture (USDA) reported crops to be in good or excellent condition and a greater area was planted. Combined with livestock feed being included by China in the trade war with the US, feed is expected to remain readily available.

The US and Australian droughts have occurred during New Zealand’s winter and lower processing time of the beef production season, which may minimise the downside price risk of drought-induced increases in lean beef production. Australia and New Zealand account for a large proportion of US beef imports – around 45 per cent for the first half of 2018. The majority US beef imports from Australia and New Zealand is manufacturing beef – 63 per cent and 86 per cent respectively.

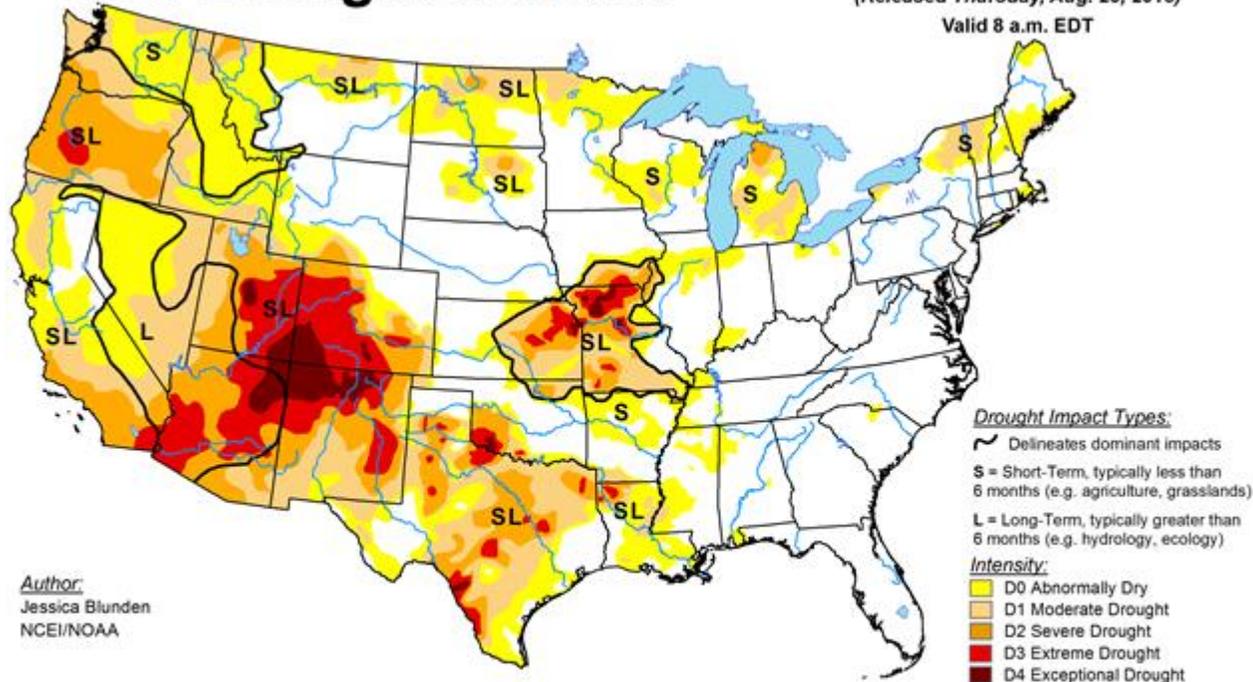
Retail and food service demand for beef – and more relevantly, ground beef – have been encouraging in 2018, despite increasing US beef production. The improving US economic performance has supported US domestic beef consumption and increased export volume has helped accommodate increased production.

Geopolitical uncertainty and the current drought create some downside market risk. There has been little direct impact of the US-China trade war on New Zealand’s beef exports to China. China lifted import restrictions on US beef in 2017 after they had been excluded since 2003 following discovery of the first case of bovine spongiform encephalopathy (BSE) in the US. Trade had not fully resumed because common US production methods do not fully meet China’s new import restrictions, limiting development of this trade.

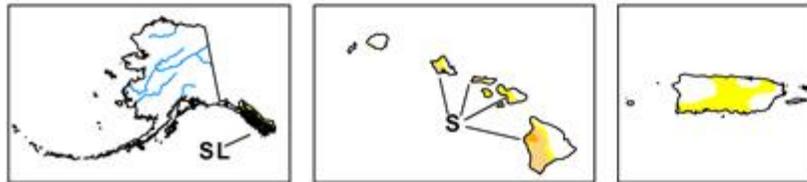
Figure 16

U.S. Drought Monitor

August 21, 2018
(Released Thursday, Aug. 23, 2018)
Valid 8 a.m. EDT



Author:
Jessica Blunden
NCEI/NOAA



USDA NDMC NOAA
<http://droughtmonitor.unl.edu/>



North Asia

China has played a key role in global beef trade in recent seasons, becoming the second-largest beef importer, behind the US. Some of this increase will be a shift from indirect “grey channel” imports to direct imports. Chinese import demand is forecast to continue to grow in 2019, helping to accommodate increased global production. New Zealand products account for around 13 per cent of Chinese beef imports.

Competition for the Chinese market has also grown with more access being granted, and imports from South America making large gains in recent seasons. However, the average import value per tonne for China has gradually increased for all beef imports, in USD terms.

Chinese beef demand has been driven by rising incomes growing the market for beef, which is relatively more expensive and retains the highest price at wholesale of red meat and poultry – closely followed by sheepmeat. Beef wholesale prices in China have been steady in recent seasons but with a gradual increase beginning in mid-2017.

The US was granted access in late 2017 after being excluded following the detection of BSE in 2003. Compliance with Chinese import standards does not readily fit US production systems, severely limiting US product in China. Additionally, in

July 2018, Chinese tariffs on US beef were raised.

Chinese domestic beef consumption is expected to continue outpacing domestic production, strengthening demand for imports. The USDA estimates that Chinese beef consumption in 2018 will be 8.53 million tonnes carcass weight (+3.6%) while production is estimated at 7.33 million tonnes carcass weight (+0.9%). This equates to a 303,000-tonne shortfall – raising import demand – which is forecast to continue in 2019.

Brazil

The Brazilian beef industry has played a central role in the nation’s recent economic and political turbulence. Brazil has a significant influence on international trade because it was the second largest exporter of beef in 2016 and 2017 – behind India (including buffalo beef).

The Brazilian currency – the real – has weakened in 2018, which could benefit Brazilian exporters but weigh on meat export margins for other beef trading nations. However, corruption, bribery and adulteration scandals, with various trade disputes – including beef and other animal proteins – have damaged the reputation of Brazil’s beef industry and wider meat production.

Brazilian beef production is still forecast to grow in 2018, up 4 per cent approximately. Producer input prices are expected to rise in the second half of 2018 as feed prices rise due to the US-China trade war, which has increased Chinese demand for Brazilian feed. However, domestic demand is weak due to poor economic performance, creating downward pressure on beef margins and potentially an accumulation of stock.

A prolonged truck driver strike in May halted Brazilian economic recovery and had ramifications on the entire beef supply chain, from feed supplies through to taking livestock to processing and products to export. The limited export supply did create a temporary international beef price

increase for June 2018 – highlighting the influence Brazilian domestic challenges can have on international beef trade.

Brazilian beef exports are expected to grow, largely to the Middle East, North Africa and Asia. The aforementioned reputation issues, trade disagreement with Russia and domestic challenges present more risks and raise difficulties in developing markets.



Australia

The downward trend in the Australian beef cattle herd turned around in 2016-17 but the expected herd building stuttered in 2017-18 due to the widespread winter drought – with no significant break forecast – driving a rise in the proportion of cattle processing made up by cows and heifers.

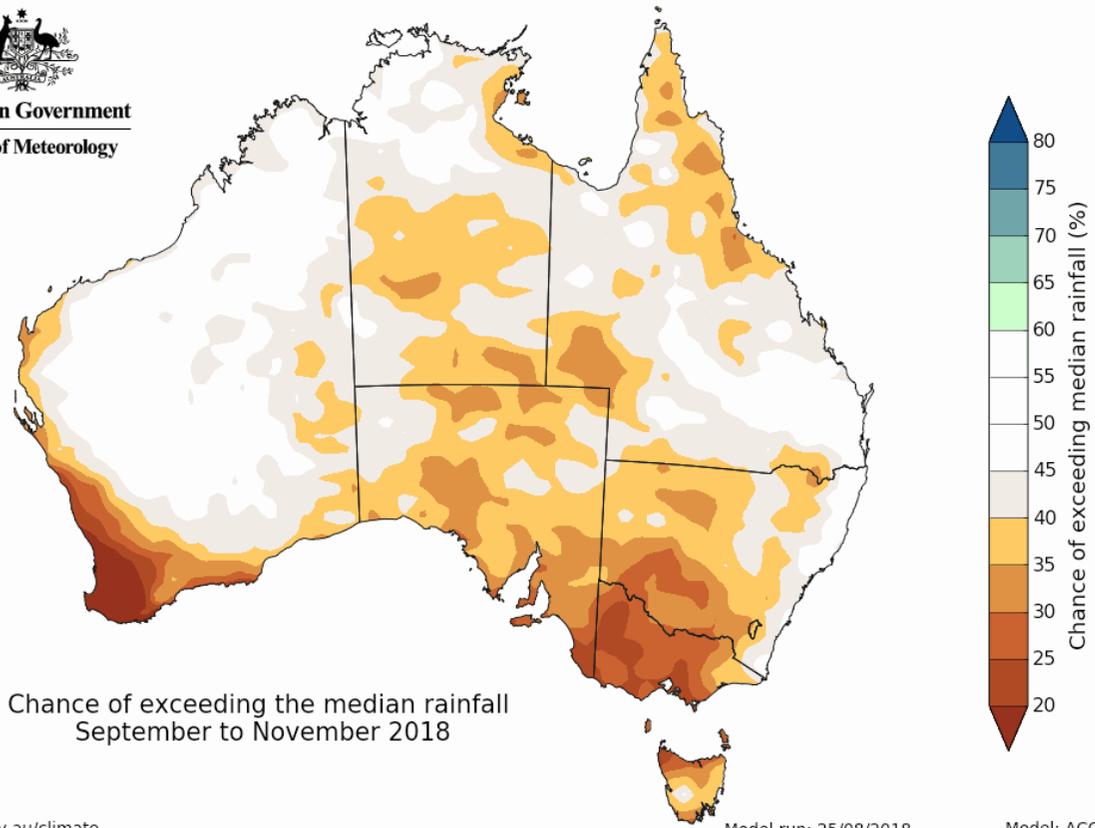
Meat & Livestock Australia's (MLA) July forecast estimated a 1.8 per cent decline in the national herd but herd rebuilding is forecast to resume – assuming a return to more average seasonal climate patterns.

In 2017-18, Australian beef production is expected to increase 7 per cent. The drought conditions have driven an increase in the number of cattle processed, more than offsetting the 1.6 per cent lighter carcass weights due to the increased proportion of cows processed.

Production is forecast to contract by 5.1 per cent in 2018-19 – to 2.16 million tonnes – due to a higher proportion of the herd processed in 2017-18 and female retentions for breeding as the herd returns to rebuilding. The average carcass weight is forecast to increase by 1.4 per cent, partially offsetting the 6.4 per cent decline in cattle available.

A greater proportion of Australia's beef production is consumed domestically compared with New Zealand, so the impact of a shift in production is greater at export. Total beef exports are expected to be up by 10 per cent for 2017-18 and fall by 7.5 per cent in 2018-19 – to 1.03 million tonnes shipped weight.

Figure 17



Chance of exceeding the median rainfall
September to November 2018

Cattle Prices – Farm-gate

Figure 19 shows the monthly and annual average cattle price for all grades to the end of September 2019.

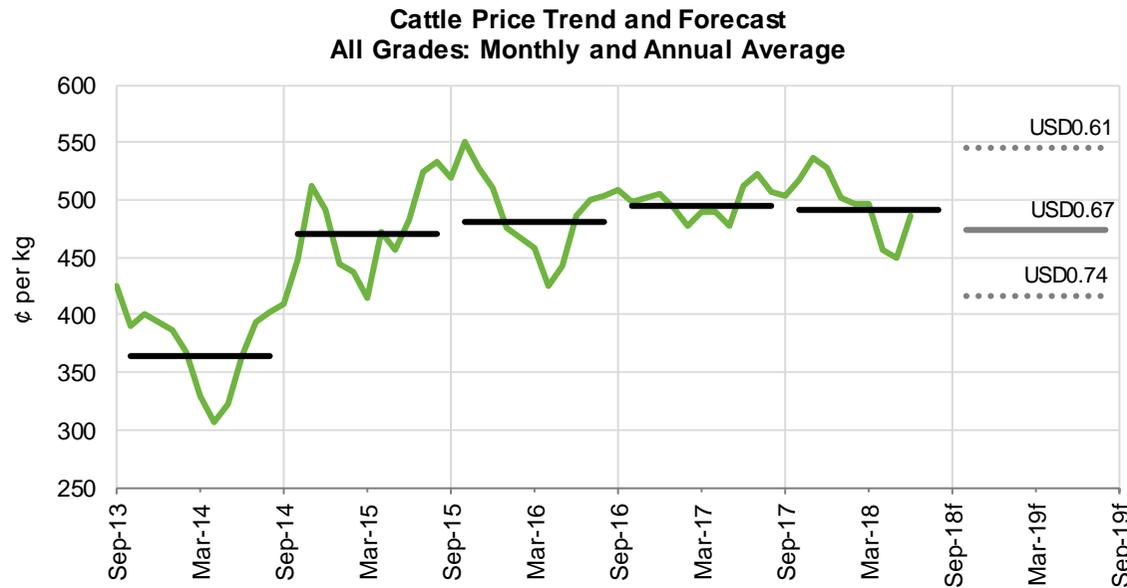
The estimated overall weighted average beef price for 2017-18 at 491 cents per kg was down slightly (-0.8%) on the previous year. This followed the beef price for all grades in 2016-17 rising by 2.9 per cent to average 495 cents per kg for the season.

The seasonal pattern of price decline in the June quarter – coinciding with peak cow cull – returned in 2017-18, after remaining relatively steady throughout the 2016-17 season.

The outlook for 2018-19 is for beef prices to decline moderately by 3.3 per cent to 475 cents per kg, minimised by an easing of the average exchange rate. Three exchange rate scenarios are used in the outlook for 2018-19 to indicate the effect of possible exchange rate variability. The three scenarios use annual average exchange rates of USD0.61, USD0.67 and USD0.74 and the associated cross rates against the GBP and EUR.

At USD0.67, the estimated 2018-19 average annual price for P steer/heifer (270-295kg) is 525 cents per kg. It is forecast to average 398 cents per kg for M cow (170-195kg), which includes a large component of cull dairy cows, and 503 cents per kg for M bull (270-295kg).

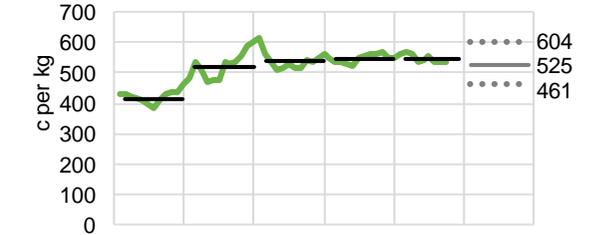
Figure 19



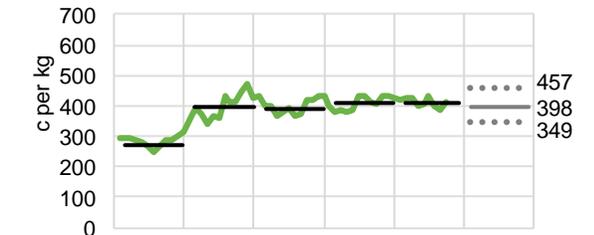
Source: Beef + Lamb New Zealand Economic Service

Figure 18

Steer & Heifer - P Class, 270-295 kg



Cow - M Class, 170-195 kg



Bull - M Class, 270-295 kg



Source: Beef + Lamb New Zealand Economic Service



Beef Production

Table 13

Export Cattle Slaughter Composition

Sep Year	000 head				
	Steer	Heifer	Cow	Bull	Total
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	532	453	1,059	545	2,589
2018-19f	530	454	1,005	521	2,510
2018-19f % change	-0.4%	+0.3%	-5.1%	-4.4%	-3.0%

e estimate, f forecast

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

Table 14

Export Cattle Carcase Weights

Sep Year	kg / head				
	Steer	Heifer	Cow	Bull	Total
2014-15	302	234	197	301	243
2015-16	308	238	195	298	246
2016-17	314	243	199	304	253
2017-18e	308	239	199	305	250
2018-19f	307	238	199	305	250
2018-19f % change	-0.3%	-0.2%	-0.1%	0.0%	-0.0%

e estimate, f forecast

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

Table 15

Export Beef Production Composition

Sep Year	000 tonne bone-in				
	Steer	Heifer	Cow	Bull	Total
2014-15	169	106	234	144	652
2015-16	158	104	215	141	619
2016-17	164	107	186	141	598
2017-18e	164	108	211	165	648
2018-19f	162	108	200	157	628
2018-19f % change	-0.8%	+0.0%	-5.2%	-4.6%	-3.1%

e estimate, f forecast

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

Cattle Slaughter

For 2018-19, the number of cattle processed for export is forecast to decline by 3.0 per cent to 2.51 million head (see Table 13). This forecast decrease follows from a 9.6 per cent increase in 2017-18, due to large increases of cows (+13%) and bulls (+18%). There were also moderate increases in steer and heifer processing. The mix of cattle classes is expected to remain relatively steady in 2018-19.

Cow and bull processing started the season strong – up 33 per cent and 24 per cent respectively for the December 2017 quarter – due to dry conditions, a maturing dairy herd following contraction in 2014-15 and 2015-16 and bull calves retained in previous seasons. The 2018-19 forecast would be similar to the total number of cattle processed in 2015-16 but with a different class mix as the dairy herd contracted and elevated the proportion of cows processed.

While the impact of *Mycoplasma bovis* has an extreme impact on those farms directly impacted by the disease and following depopulation, it is expected to have little impact on the total cattle slaughter as the government-directed cull animals would make up a small proportion. Additionally, culling will be mitigated by some compensatory behaviours such as increased heifer retentions or decreased cow cull on other farms where some are sold to restock affected farms.

Cattle Weights

The estimated average export carcase weight was down slightly (-1.1%) in 2017-18 as the proportion of cows in the total cattle processed increased by one percentage point, and slight decreases in the average carcase weights of steers and heifers after two years of small increases (see Table 14).

For 2018-19, the overall cattle weight is forecast to average 250kg per head, even with 2017-18 and little change within cattle classes. Sustained beef prices, minimal land use change, a stable dairy herd and assuming moderate seasonal weather, there is little to drive change in the average carcase weight.

Beef Production

In 2018-19, New Zealand's export beef production is forecast to decrease by 3.1 per cent – to 628,000 tonnes bone-in, attributable to the dip in the number of cattle processed (see Table 15). Despite the forecast number of cattle processed being similar to 2015-16, total bone-in production is forecast to be higher due to the reduced proportion of dairy cows.



Wool¹

Exports

The outlook for 2018-19 is for wool export volumes to decline 2.2 per cent on 2017-18, which was bolstered by an element of carry-over stocks from the 2016-17 season. The average export receipts at FOB is expected to lift 6.4 per cent to \$5,760 per tonne. Total wool receipts are estimated to rise 4.1 per cent to \$565 million due to the higher FOB value per tonne, which is ahead of the previous season. The estimate is for auction wool prices to be up 4.1 per cent on 2017-18.

For the 2017-18 wool production season (which is from June to July), New Zealand wool exports were up 18 per cent to 100,200 tonnes clean, which as noted above was bolstered by carry-over stocks from 2016-17. Wool exports in 2016-17 were below production for that season due to low prices, with unsold wool held as wool stocks on-hand.

North Asia was New Zealand's largest market region, which is driven by China. In 2017-18, North Asia accounted for 48 per cent of wool exports, up from 43 per cent in 2016-17. Eighty per cent of the net export wool volume increase of 15,500 tonnes for 2017-18 could be attributed to the increase in exports to China. Exports to the EU – the next largest market (30%) – increased 2.4 per cent – accounting for 4 per cent of the overall increase in wool exports.

Overall, export receipts per tonne for 2017-18 were lower than the previous year due to the carry-over of crossbred wool from the previous season in exports. This had the effect of diluting the influence of the higher value wool in the overall per tonne export receipt value in 2017-18. The opposite occurred in 2016-17 when crossbred wool was withheld from sale increasing the influence of higher value wool in the overall average value of wool exports.

Prices

In 2017-18, the season average fine wool price jumped significantly by 58 per cent on the previous year while the medium wool price increased 8.8 per cent. In contrast, the strong wool price fell 29 per cent to be just 3.0 per cent above the inflation-adjusted price that occurred in 2008-09, which was the lowest price since at least 1950-51. Fine wool prices for 2017-18 were at their highest in inflation-adjusted terms since 1988-89, 29 years earlier. Fine wool is used in apparel and strong wools in carpets and upholstery.

For 2018-19, the overall auction wool price is forecast to be up moderately – by 4.3 per cent – reflecting some improvement from the weak price position for crossbred wool in 2017-18.

Table 16

Auction Prices and Raw Wool Exports

June Year	Auction Price	Wool Exports		
	\$ / kg clean	FOB \$ / kg clean	000 tonne clean	\$m FOB
2014-15	5.95	6.82	118.0	805.0
2015-16	6.64	7.38	103.0	760.1
2016-17	5.18	6.16	84.8	522.1
2017-18	5.38	5.41	100.2	542.6
2018-19e	5.60	5.76	98.1	564.8
2018-19e % change	+4.1%	+6.4%	-2.2%	+4.1%

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

Table 17

Season Average Auction Wool Prices cents / kg greasy

June Year	Fine	Medium	Strong	Lambs	All Wool
2014-15	915	606	407	496	443
2015-16	997	725	445	485	494
2016-17	1,074	616	314	298	386
2017-18	1,696	672	271	349	397
2018-19e	1,569	706	292	376	414
2018-19e % change	-7.5%	+5.1%	+7.7%	+7.7%	+4.3%

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

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



Production

For 2018-19, total wool production, which is estimated at 139,000 tonnes greasy, shows a 2.2 per cent decrease on the previous year. A slightly smaller flock (-0.8%), a decline in shorn wool per head (-1.1%) and lower slipe wool production (-4.5%) all contribute to this decrease. Lower slipe wool production reflects lower adult sheep production following high production in 2017-18 that was underwritten by record mutton prices – the highest in at least 30 years in inflation-adjusted terms. Shorn wool production decreases largely from higher shearing charges and continuing low crossbred wool prices leading to less shearing and slightly higher slipe wool yield per skin as a consequence.

In 2017-18, total wool production – at 142,100 tonnes greasy – was similar to the previous year (-0.9%). Slipe wool production was down 1.3 per cent mainly due to lower slipe wool yield per skin.

Export meat production on a June year basis was initially early in 2017-18 on expectations of an El Niño drought that did not materialise, but which resulted in a slow lamb processing pattern towards the end of the June year and contributed to the reduced slipe production.

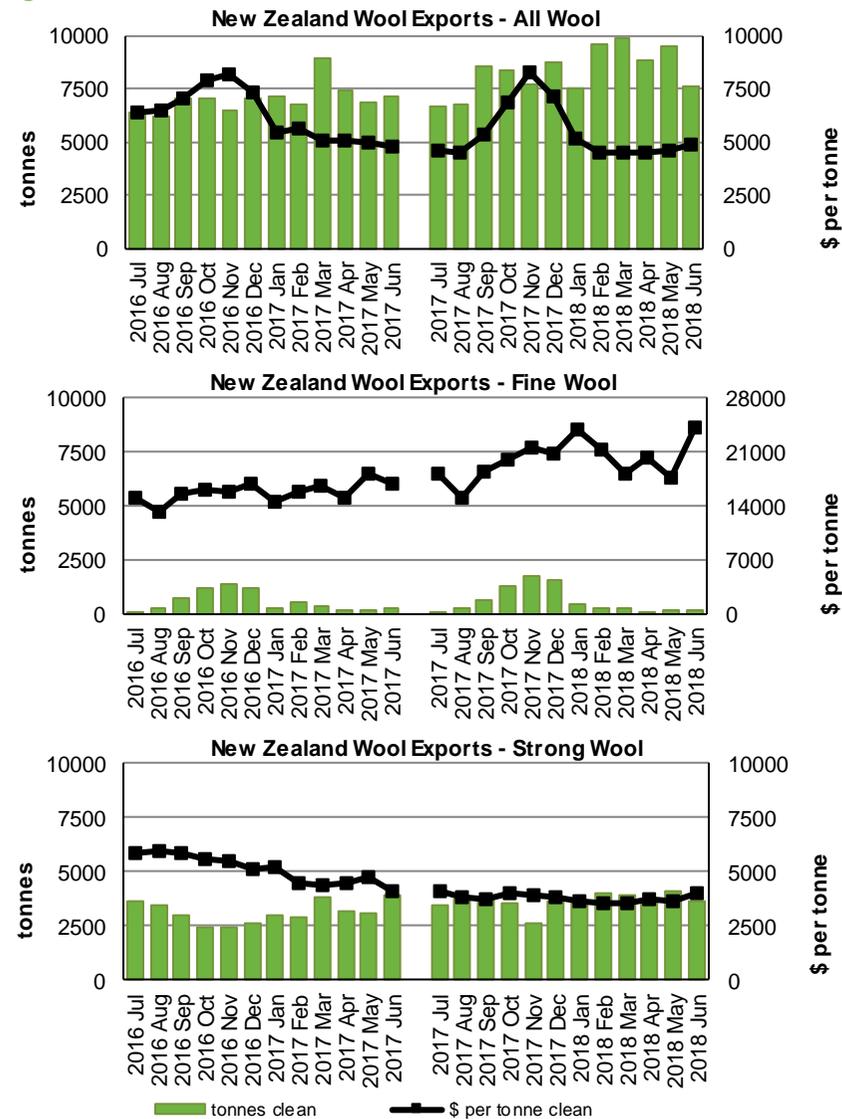
Table 18

June Year	Wool Production				
	Sheep million head	Shorn 000 tonnes greasy	Slipe 000 tonnes greasy	Total Shorn Wool 000 tonnes greasy	Total Shorn Wool kg / head*
2014-15	29.8	137.0	16.9	153.8	4.60
2015-16	29.1	135.1	16.5	151.6	4.64
2016-17	27.6	126.9	16.5	143.4	4.60
2017-18	27.5	125.8	16.2	142.1	4.57
2018-19e	27.3	123.5	15.5	139.0	4.52
2018-19e % change	-0.8%	-1.9%	-4.5%	-2.2%	-1.1%

*excludes wool on sheepskins

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

Figure 20



Climatic Conditions

Autumn 2018 Summary

A warm start to autumn, then cooler and unsettled at times.

Rainfall

Autumn rainfall in the North Island was generally near normal (80-119% of normal) or above normal (120-149% of normal), with a handful of locations also recording well above normal (>149% of normal) rainfall. In the South Island, above normal (120-149% of normal) or well above normal (>149% of normal) rainfall was observed in most locations, with a few spots also recording near normal (80-119% of normal) rainfall.

Temperature

Nearly all of the North Island observed above average (0.51 to 1.20°C of average) temperatures during autumn, along with isolated pockets of near average (-0.50 to 0.50°C of average) and well above average (>1.20°C of average) temperatures. In the South Island, most locations recorded near average (-0.50 to 0.50°C of average) temperatures during autumn, with a handful of stations observing above average (0.51 to 1.20°C of average) temperatures.

Soil moisture

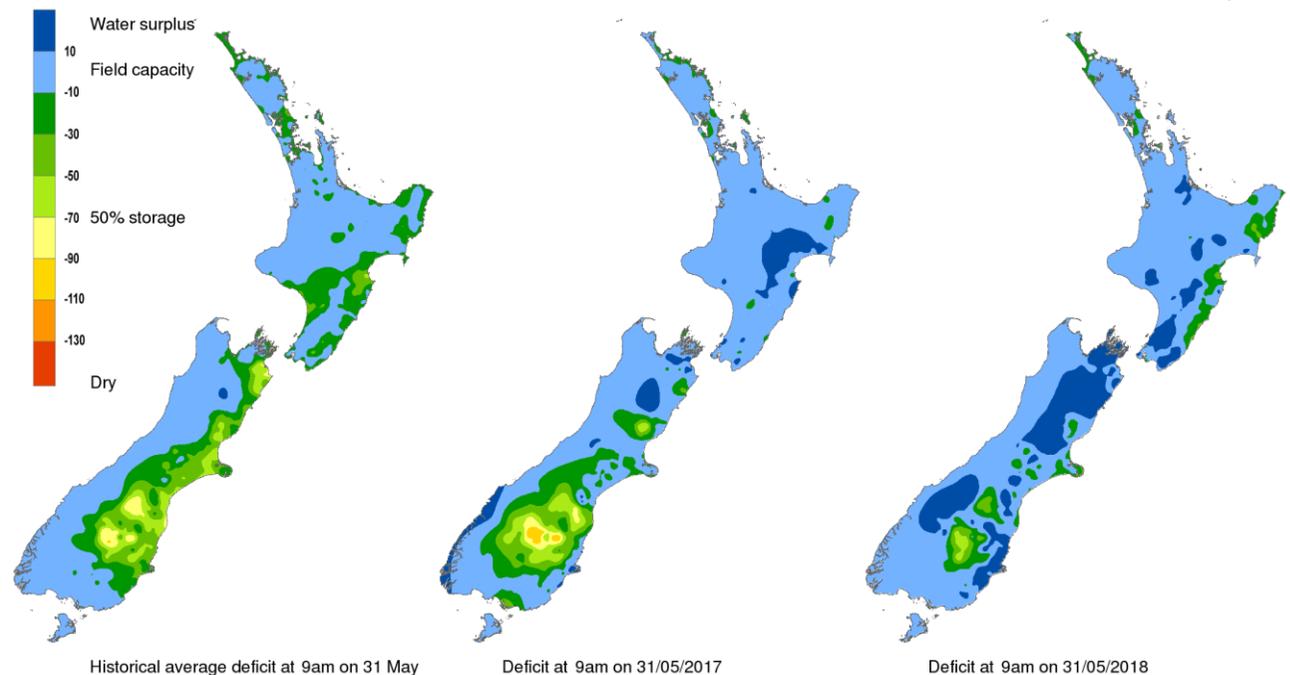
As of 1 June, soil moisture was near normal in most of the North Island, along with the western and southern South Island. However, soils were wetter or even much wetter than normal in small portions of the lower North Island and nearly all of the eastern South Island.

Sunshine

Tauranga received the highest sunshine hours, followed by Auckland and Hamilton, then Christchurch.

Figure 21

Soil moisture deficit (mm) at 9am on 31/05/2018



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



Outlook – August to October 2018

Temperature

Temperatures are forecast to be near average (40% chance) in the North Island. For all regions of the South Island, seasonal temperatures are expected to be above average (40%) or near average (35% chance).

Rainfall

Rainfall totals are forecast to be near normal (40% chance) or below normal (35-40% chance) in the north and east of the North Island and the north of the South Island. For the west of the North Island and the west and east of the South Island, near normal rainfall totals for the season as a whole are forecast (45-50% chance).

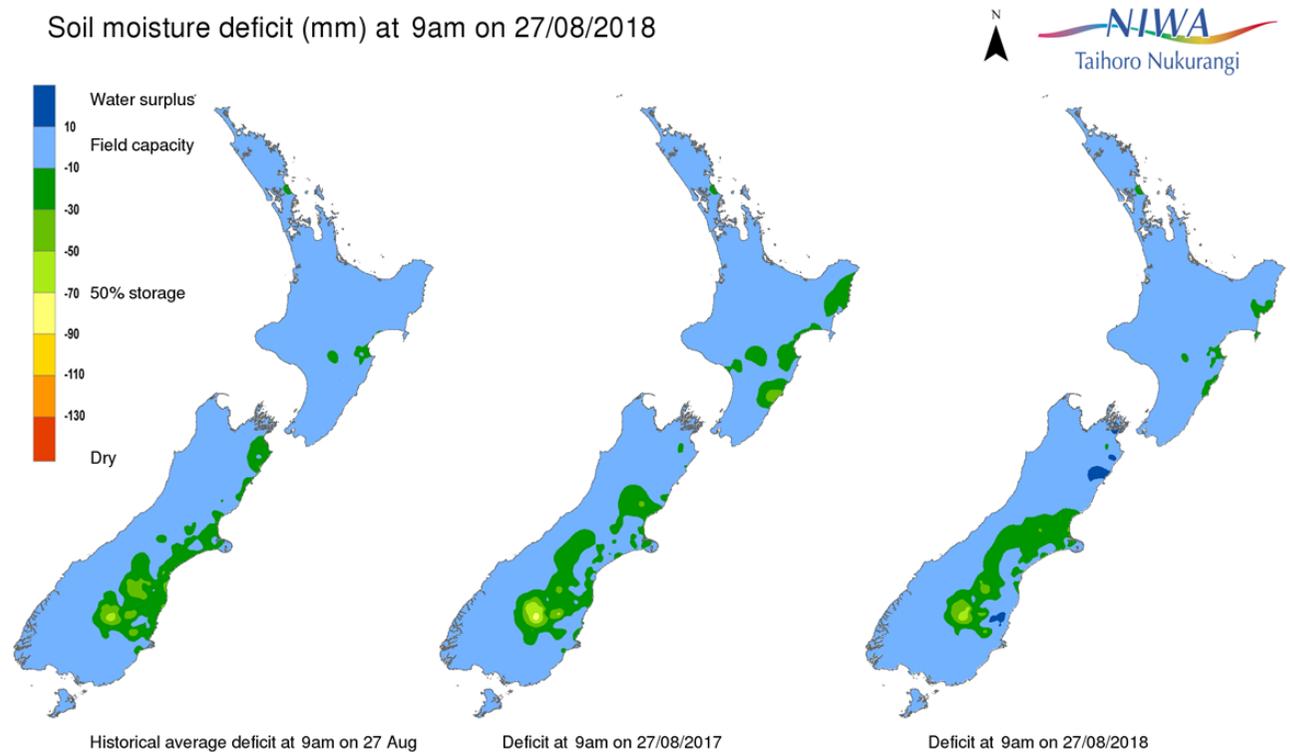
Soil Moisture

Soil moisture levels and river flows are forecast to be near normal (35-40% chance) or below normal (35-40% chance) in the north and east of the North Island. Below normal soil moisture levels and river flows are forecast in the east of the South Island (50-55% chance). In the west of the North Island and the north and west of the South Island, soil moisture levels and river flows are forecast to be in the near normal (35% chance) or above normal (35-40% chance) range.

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

Figure 22

Soil moisture deficit (mm) at 9am on 27/08/2018



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



Farm Revenue, Expenditure & Profit – New Zealand

Revenue

Forecast gross farm revenue for 2018-19 farming year, which ends on 30 June, under an exchange rate scenario of USD0.67 is marginally up by 0.7 per cent to \$545,900 for the All Classes Sheep and Beef Farm. This is driven by increased revenue from sheep.

Sheep revenue, which contributes 48 per cent of gross farm revenue, increases 1.2 per cent to \$263,600 for 2018-19. This increase is driven by a continuation of strong farm-gate prices, which offset a decrease in the number of head sold store and prime.

Wool revenue increases 5.3 per cent to \$37,600 for 2018-19. This increase is due to a lift in the price of wool, offsetting a decline in the volume of wool sold. Despite a lift in the average wool price, it still remains below the recent five-year average.

Cattle revenue decreases 3.7 per cent to \$142,500 for 2018-19. This is due to softer average beef cattle sale prices, and a high base in the previous year due to a lift in the value of stock on hand – little change in the value of stock on hand is estimated for 2018-19. At an island level, North Island regions decrease, while South Island regions are expected to lift. On average, the total number of beef cattle per farm has lifted 8.6 per cent to 290 head in 2018-19.

Table 19

Sheep and Beef Farm Revenue and Expenditure

	Weighted Average All Classes ¹										
	Provisional				Forecast			Forecast % Change			
	2014-15	2015-16	2016-17	2017-18	2018-19 USD 0.61	2018-19 USD 0.67	2018-19 USD 0.74	2017-18 to 2018-19 USD 0.61	2017-18 to 2018-19 USD 0.67	2017-18 to 2018-19 USD 0.74	
Revenue											
Wool	51,395	54,136	36,240	35,700	42,900	37,600	33,300	+20.2%	+5.3%	-6.7%	
Sheep	209,679	183,709	204,793	260,600	304,500	263,600	230,100	+16.8%	+1.2%	-11.7%	
Cattle	125,098	125,930	139,455	148,000	163,500	142,500	125,400	+10.5%	-3.7%	-15.3%	
Dairy Grazing	31,995	29,009	27,229	29,300	29,500	29,500	29,500	+0.7%	+0.7%	+0.7%	
Deer + Velvet	3,401	3,819	4,588	4,600	5,800	5,100	4,600	+26.1%	+10.9%	0.0%	
Goat + Fibre	47	51	14	0	0	0	0				
Cash Crop	50,108	45,669	46,178	45,800	48,100	48,100	48,100	+5.0%	+5.0%	+5.0%	
Other	17,085	17,218	20,702	18,300	19,500	19,500	19,500	+6.6%	+6.6%	+6.6%	
Total Gross Revenue	\$ per farm	488,808	459,541	479,199	542,300	613,800	545,900	490,500	+13.2%	+0.7%	-9.6%
Expenditure											
Fert, Lime & Seeds	66,421	64,995	59,738	68,400	70,700	69,700	68,900	+3.4%	+1.9%	+0.7%	
Repairs & Maintenance	32,395	32,747	31,234	35,100	35,200	34,700	34,300	+0.3%	-1.1%	-2.3%	
Interest & Rent	65,823	68,017	65,754	65,400	63,200	63,400	63,600	-3.4%	-3.1%	-2.8%	
Other Expenses	214,214	221,754	222,595	239,900	253,000	248,400	244,600	+5.5%	+3.5%	+2.0%	
Total Expenditure	\$ per farm	378,853	387,513	379,321	408,800	422,100	411,400	+3.3%	+1.8%	+0.6%	
Farm Profit Before Tax²	\$ per farm	109,955	72,028	99,878	133,500	191,700	79,100	+43.6%	-2.8%	-40.7%	
EBITRm³	\$ per farm	179,641	143,678	169,276	202,805	259,700	146,500	+28.1%	-2.7%	-27.8%	
Real (2004-05\$) Farm Profit ³		87,400	57,100	78,000	102,800	144,600	59,600	+40.7%	-4.9%	-42.0%	
Index of Real Farm Profit		1,193	779	1,065	1,403	1,973	813	+40.7%	-4.8%	-42.0%	
Fertiliser Use	kg per SU	24.6	25.7	23.7	25.6	26.3	25.9	25.6	+2.6%	+1.2%	+0.0%
Prices											
Wool auction	¢ per kg clean	595	663	519	538	638	560	496	+18.6%	+4.1%	-7.8%
All wool ⁵	¢ per kg greasy	401	444	314	293	364	320	283	+24.3%	+9.1%	-3.4%
Lamb	\$ per head	94	93	106	130	151	132	116	+15.9%	+1.2%	-10.9%
Mutton	\$ per head	67	57	74	107	129	110	94	+20.8%	+2.6%	-12.2%
Prime Steer/Heifer	¢ per kg	513	531	539	538	597	519	456	+11.0%	-3.4%	-15.2%

1. The Weighted Average All Classes Sheep and Beef Farm for 1 July 2018 was 640 effective hectares with stock numbers of 2,575 sheep, 356 cattle and 25 deer, totalling 4,048 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. Net of charges and freight.

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



Dairy grazing revenue increases 0.7 per cent to average \$29,500 per farm for 2018-19. There is an island difference: North Island regions decrease on the previous year, while South Island regions increase. On average dairy grazing revenue contributes about 5.4 per cent of gross farm revenue.

The cash cropping account increases 5.0 per cent to \$48,100 for 2018-19. This is down 3.9 per cent on the five-year average (2013-14 to 2017-18) of \$50,100. The cash crop account accounts for 8.8 per cent of gross farm revenue in 2018-19.

Aggregate Sheep and Beef Farm Revenue at the farm gate for 2018-19 is forecast at \$6.2 billion, up 0.7 per cent on the previous year. Gross farm revenue is spent buying goods and services for running the farm business then taxation, debt reduction and personal living expenses.

Expenditure

Total expenditure for the All Classes Sheep and Beef Farm is estimated to increase 1.8 per cent to \$416,200 per farm for 2018-19. Increased expenditure occurs in all parts of farm businesses, except for repairs and maintenance, interest, and, feed and grazing, which decrease. These items represent around 25 per cent of total farm expenditure.

Prices for inputs used on sheep and beef farms are estimated to increase 3.2 per cent on average. This follows a 2.0 per cent increase for 2017-18, which was due to a price rise across all farm inputs.

Fertiliser, lime and seeds expenditure increases 1.9 per cent to \$69,700. An increase in volume offsets a slight decrease in the on-ground price, which leads to a small lift in expenditure on the previous year. This is up 8.6 per cent on the five-year (2013-14 to 2017-18) average and makes up around 17 per cent of total farm expenditure.

Interest expenditure decreases 4.0 per cent to \$49,600. This is the fourth consecutive year of decline, largely due to continued decreases in the price of interest. Repairs and maintenance decreases 1.0 per cent, but is still up 7.5 per cent on the previous five-year average.

Feed and grazing decreased 3.9 per cent to \$21,000. This was moderated by a lift in Otago/Southland, which increased to \$24,300 – its highest level ever – due to dry conditions in Southland in December 2017.

Farm Profit before Tax

Farm Profit before Tax is required to meet personal drawings for family living expenses, taxation payments, debt repayments and the purchase of capital items for the farm business, such as farm machinery.

Figure 23 shows the trend in Farm Profit before Tax in inflation-adjusted, 2004-05 dollar terms. It shows the steep fall in profitability from 2001-02 to a 50-year low in 2007-08. This was followed by a recovery that was underwritten by improved international prices, which exceeded the effect of the strengthening NZD.

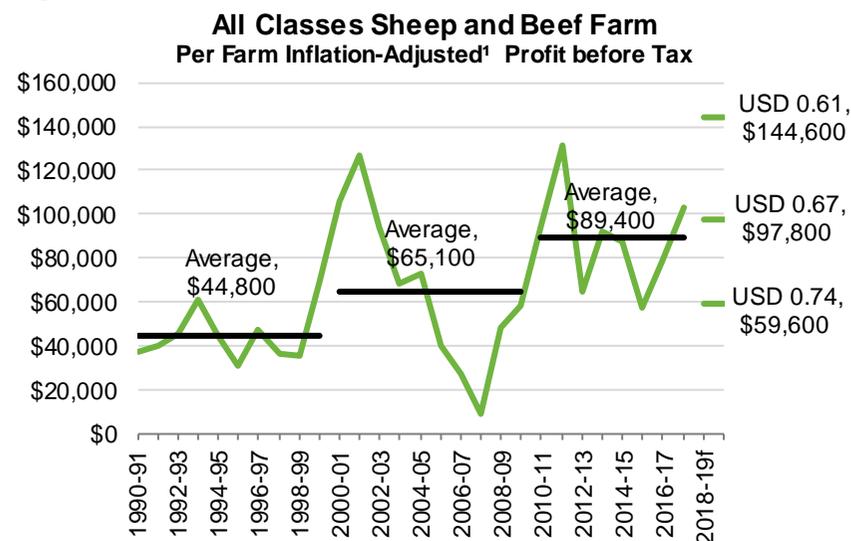
The inflation-adjusted profit of \$131,100 per farm for 2011-12 was the highest since the early 1970s and similar to 2001-02 when inflation-adjusted Farm Profit before Tax was \$126,900 per farm.

Three forecast scenarios are shown in Figure 23 in inflation-adjusted 2004-05 dollar terms:

- At the lower exchange rate (USD0.61), inflation-adjusted Farm Profit before Tax is \$144,600 in 2004-05 terms, up 41 per cent on \$102,800 for 2017-18. In nominal terms, i.e. without adjusting for inflation, Farm Profit before Tax is \$191,700, up 44 per cent on \$133,500 for 2017-18.

- At the mid exchange rate (USD0.67), inflation-adjusted Farm Profit before Tax is \$97,800, down 4.9 per cent on \$102,800 for 2017-18. In nominal terms, Farm Profit before Tax is \$129,700, down 2.8 per cent on \$133,500 for 2017-18.
- At the higher exchange rate (USD0.74), inflation-adjusted Farm Profit before Tax is \$59,600, down 42 per cent on \$102,800 for 2017-18. In nominal terms, Farm Profit before Tax is \$79,100, down 41 per cent on \$133,500 for 2017-18.

Figure 23



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

Farm Revenue, Expenditure & Profit – Regional

North Island Summary

Sheep and Beef Farm Profit before Tax decreases 12 per cent to \$118,300 per farm for 2018-19. This is due to the combined impact of decreased gross revenue, and increased total farm expenditure.

Gross revenue decreases 2.3 per cent to \$484,000. The largest source of this decrease is cattle revenue, which declines 6.7 per cent to \$175,200. This is driven by an overall decrease in average beef cattle prices and follows a record high year for North Island cattle revenue. Cattle revenue contributes around 36 per cent of gross farm revenue. Decreases also occur in crop/grain and seeds (-4.4%) and dairy grazing (-14%). Combined these two items make up 5.7 per cent of farm revenue.

Total expenditure increases 1.4 per cent to \$365,700 for 2018-19. Increases occur in all categories except interest (-5.0%), repairs and maintenance (-4.0%), cultivation and sowing (-1.4%), and rent (-0.7%). Repairs and maintenance decreases after a high figure in the previous year, when record gross revenue provided opportunity to catch up in this area. Shearing expenditure increases 9.3 per cent on the previous season due to increased charges per sheep shorn.

South Island Summary

Sheep and Beef Farm Profit before Tax increases 7.7 per cent to \$142,300 per farm for 2018-19. This is largely due to an increase in gross farm revenue from all enterprises.

Gross farm revenue increases 3.4 per cent to \$615,400 for 2018-19. This is driven by a lift in revenue across all enterprises.

Sheep revenue increases 1.8 per cent to \$301,700 due to price improvement, and a small lift in the number of prime lambs sold. Increased prime lambs

sold is largely due to a return to 'typical' ratios of prime and store lambs sold per farm, which were adversely affected by dry conditions during December 2017.

Cattle revenue increases 2.1 per cent to \$105,600 due to a lift in sales revenue, and less expenditure on purchases. A lift in the number of cattle at open – weaners and trade cattle – contributes towards an upwards shift in the number of head sold, which also extends to fewer cattle purchases. Anecdotal feedback from farmers has been that, for those

not identified as having *Mycoplasma bovis*, management decisions around sales and purchases have not been significantly impacted. Cattle revenue contributes 17 per cent of gross farm revenue.

Total expenditure increases 2.2 per cent to \$473,100. This is due to a lift in all expenditure except for feed and grazing, and interest which decrease 6.6 per cent and 3.1 per cent respectively. Shearing expenditure increases 14 per cent on the previous season due to increased charges per sheep shorn.

Table 20

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

Region	2016-17	2017-18p	2018-19f				Stock Units	Hectares
	Profit	Profit	Revenue	Expenditure	Profit	EBITRm ¹		
Northland-Waikato-BoP	100,451	122,400	418,700	308,400	110,300	160,100	3,300	350
East Coast	93,525	126,300	546,100	426,400	119,700	207,700	4,800	560
Taranaki-Manawatu	90,169	175,400	505,900	373,000	132,900	201,200	4,200	490
North Island	97,268	134,800	484,000	365,700	118,300	185,500	4,000	450
Marlborough-Canterbury ²	99,011	128,900	711,800	575,900	135,900	219,600	4,300	930
Otago/Southland ²	107,450	133,800	497,600	349,700	147,900	198,100	3,700	720
South Island²	102,812	132,100	615,400	473,100	142,300	210,500	4,100	850
New Zealand	99,878	133,500	545,900	416,200	129,700	197,400	4,000	640

p provisional, f forecast | Exchange rate used in forecast year USD/NZD 0.67

¹Earnings before Interest, Tax, Rent and Managers Salary

² Effective area is inflated by High Country Farms which average 8,000 hectares per farm

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



Regional Comment – North Island

Northland–Waikato– Bay of Plenty

Gross farm revenue decreases 2.5 per cent to \$418,700 per farm for 2018-19. This is driven by reduced revenue for sheep, cattle and dairy grazing, which make up 89 per cent of the farm revenue.

Cattle revenue decreases 2.8 per cent to \$196,100 due to less sales revenue from cattle in response to lower prices and lower sales numbers compared with the previous year. Adding further complications to this have been the wet winter conditions that led to soil pugging. Although cattle revenue is down on the previous year, it is still 6.8 per cent above the five-year (2013-14 to 2017-18) average.

Sheep revenue decreases 2.1 per cent to \$143,500 due to a reduced lamb crop, which leads to fewer lambs sold prime. The lamb crop decreases due to high numbers of breeding ewes having been culled for age in 2017-18 in response to strong prices. This has also led to a lift in hogget retentions, particularly on hill country and farms that breed and finish their own stock.

Total farm expenditure increases marginally by 0.4 per cent to \$308,400 for 2018-19. Decreased expenditure on repairs and maintenance, fertiliser, and interest, which contribute 40 per cent of total expenditure, moderate expenditure increases elsewhere.

Repairs and maintenance decreases 1.6 per cent to \$30,000. This follows a peak in the previous year when repairs and maintenance was at its highest level due to per-hectare gross revenue being at its highest level in inflation-adjusted terms since 1972-73 - 46 years earlier.

Interest expenditure decreases 1.7 per cent to \$34,800 for 2018-19. This is due to the combined effect of term debt reduction, and lower average term interest rates. Fertiliser expenditure decreases 3.0 per cent to \$51,300 for 2018-19 due to a reduction in tonnage applied on hill country farms.

Farm Profit before Tax decreases 9.9 per cent on the previous season to \$110,300 for 2018-19. On average, sheep and beef farms in the region carry 3,300 stock units on 350 effective hectares.

East Coast

Gross farm revenue decreases marginally by 0.3 per cent to \$546,100 for 2018-19. This is driven by a lift in the sheep revenue, which is offset by decreased cattle revenue.

Sheep revenue increases 4.1 per cent to \$292,400 for 2018-19, the highest level since 2011-12. This is due to strong lamb prices, which offset fewer lambs sold store and prime. There has also been a decrease in the number of sheep on hand at open, particularly breeding ewes, which has been in response to strong prices for cull ewes. Although lambing percentages are estimated to be above the 10-year average (2008-09 to 2017-18), fewer breeding ewes are expected to reduce the overall lamb crop this spring. Sheep revenue contributes 54 per cent to gross farm revenue.

Cattle revenue decreases 9.4 per cent to \$171,800 for 2018-19. This is due to lower average sale prices, and fewer sold. Strong prices encourage farmers on hard hill country properties to sell cull cows, while competition for beef replacements from beef finishers and breeders is expected to continue placing upward pressure on weaner heifer prices. Cattle revenue represents 32 per cent of gross farm revenue.

Total farm expenditure increases 1.1 per cent to \$426,400 for 2018-19. The most significant increases in farm expenditure are from wages and shearing expenses. Retaining labour

has been a significant issue – particularly on hard hill country farms – due to workers getting older and retiring, and those workers in the older demographic being more selective when it comes to labour-intensive jobs like working with sheep.

The largest decreases in farm expenditure occur in repairs and maintenance (-8.4%), and interest (-6.0%). Repairs and maintenance decreases after peaking in the previous year in response to increased farm revenue, which provided opportunity to invest more back into the farming business. Interest expenditure decreases due to reductions in term debt.

Farm Profit before Tax decreases 5.2 per cent to \$119,700 for 2018-19. On average, sheep and beef farms in the region run 4,800 stock units on 556 effective hectares.



Taranaki–Manawatu

Gross farm revenue decreases 6.3 per cent to \$505,900 for 2018-19 due to decreased revenue from sheep and cattle.

Sheep revenue decreases 4.4 per cent to \$298,100 due to fewer lambs sold, which offsets a lift in prime lamb prices. Fewer lambs are expected to be available for spring 2018 due to a decline in breeding ewe numbers and a record ewe lambing percentage in the previous year. Sheep revenue contributes around 59 per cent of gross farm revenue.

Cattle revenue decreases 12 per cent to \$134,800. This is due to a decrease in the average sale price per head and fewer cattle sold. On breeding-finishing farms, high purchase prices have led to farmers finishing stock at higher weights to still make a margin on trades. Cattle revenue contributes around 27 per cent of gross farm revenue.

Dairy grazing revenue decreases 22 per cent to \$12,300. Hill country farms that have historically been involved in dairy grazing activities are anecdotally looking to get out of it due to the high risk associated with *Mycoplasma bovis* and strong returns for sheep.

Total farm expenditure increases 2.4 per cent to \$373,000 for 2018-19. Increased expenditure occurs for everything except animal health, repairs and maintenance, and interest, which combine to moderate the overall lift in expenditure.

Fertiliser expenditure increases 13 per cent to \$49,800 due to a lift in tonnes applied per hectare, which follows a record profit in the previous season. Shearing expenditure increases 14 per cent to \$27,100. This is partially due to the impact of the Shearing Contractors Association recommending its members increase shearing rates by up to 25% to retain skilled staff in New Zealand.

Farm Profit before Tax decreases 24 per cent to \$132,900 for 2018-19. This is comparable to 2011-12, which – at \$144,800 – was a record farm profit for farms in this region.

On average, sheep and beef farms in the region run 4,230 stock units on 490 effective hectares.



Regional Comment – South Island

Marlborough–Canterbury

Gross farm revenue increases 3.3 per cent to \$711,800 for 2018-19. Increased revenue is estimated from all sources.

Sheep revenue is effectively unchanged (+0.1%) at \$266,600 for 2018-19. Mixed cropping and finishing farmers are anecdotally swinging towards having more sheep rather than cattle. This is due to there being less soil damage associated with sheep, and farmers getting over the 'fear of labour' in sheep. Sheep revenue contributes 38 per cent to gross farm revenue.

Cattle revenue increases 2.0 per cent to \$136,800 for 2018-19. A lift in the number of beef cattle, particularly beef weaners carried over balance date, contributes towards an increase in the number of cattle sold. Increased numbers sold offsets a decline average sale prices.

Dairy grazing revenue increases 13 per cent to \$60,800 due to a rise on Finishing-Breeding farms – the most common Canterbury farm type. An increased in dairy grazing on these farms is due to more long-term rising one and two-year-old cattle, which are replacements, being grazed.

Cash cropping revenue increases 6.3 per cent to \$160,000 for 2018-19. This is largely due to a lift in cash cropping on mixed cropping and finishing farms from a lift in wheat yields and area. Cash cropping

contributes 23 per cent of gross farm revenue.

Wool revenue increases 3.3 per cent to \$53,000 for 2018-19. This is due to a lift in the price of wool, which lifts from low prices received in the previous two years. The strong wool price in 2017-18 was at its lowest level since 2009-10. The outlook is for a small lift in prices for all wool grades, which lifts the wool revenue outlook.

Total farm expenditure increases 2.8 per cent to \$575,900 for 2018-19. This is due to an increase in all expenditure except for interest (-2.4%) and fertiliser (-0.7%).

Interest expenditure decreases due to some decrease in term liabilities and average term interest rates. On average, sheep and beef farms in this region carry around \$1.1 million in term liabilities, up from \$0.63 million ten years earlier. Fertiliser expenditure, at \$59,900 for 2018-19, is down slightly (-0.7%).

Farm Profit before Tax increases 5.4 per cent to \$135,900 for 2018-19. This is due to a lift in gross farm revenue for all farm types except Finishing-Breeding farms.

On average, sheep and beef farms in the region run 4,340 stock units on 930 effective hectares. Extensive High Country and foothill farms inflate the average area of farms in the region. Finishing-Breeding farms average 420 hectares while High Country farms average 9,050 hectares.

Otago–Southland

Gross farm revenue increases 3.7 per cent to \$497,600 per farm for 2018-19. The largest drivers of this increase are sheep, cattle and wool, which all increase and combined contribute around 92 per cent of gross farm revenue.

Sheep revenue increases 3.7 per cent to \$343,000 for 2018-19. This is due to a lift in the number of prime lambs sold, at slightly stronger prices compared with the previous year. On hill country properties, sheep numbers appear to be stabilising, while on high country properties there has been a lift in farmer focus towards cross breeds and meat production. Sheep revenue contributes 69 per cent of gross farm revenue on average in this region.

Cattle revenue increases 2.1 per cent to \$68,800 for 2018-19. This is largely due to a lift in the number of cattle at open, particularly breeding cows and heifers.

Wool revenue increases 3.7 per cent to \$44,600. This is due to an expected lift in the average price of wool sold that offsets a decline in volumes sold per farm.

Total farm expenditure increases 1.0 per cent to \$349,700 for 2018-19. Feed and grazing, and interest are the only two significant decreases, down 21 per cent and 4.2 per cent respectively. Expenditure on feed and grazing returns to more normal levels after dry conditions in the previous

year caused this to reach record levels of expenditure.

Interest expenditure decreases 4.2 per cent to \$40,500 due to some debt repayment and a decrease in the average term interest rate. In the last 10 years, interest expenditure has averaged \$45,500, peaking at \$53,000 in 2008-09. This peak was in line with the interest rates in this ten-year period.

Farm Profit before Tax increases 10 per cent to \$147,900 for 2018-19.

On average, sheep and beef farms in the region run 3,745 stock units on 720 effective hectares. However, the average farm size is inflated by High Country farms, which average 6,420 hectares, whereas Finishing-Breeding farms average 490 hectares and Intensive Finishing Farms average 230 hectares.

