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Australian Lamb

Financial performance of lamb producers, 2015–16 to 2017–18

James Frilay, Dale Ashton and Peter Martin

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Australian Lamb
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Department of Agriculture and Water Resources
GPO Box 858 Canberra ACT 2601
Telephone 1800 900 090
Web agriculture.gov.au

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Contents

Tables

Figures

Maps

Boxes

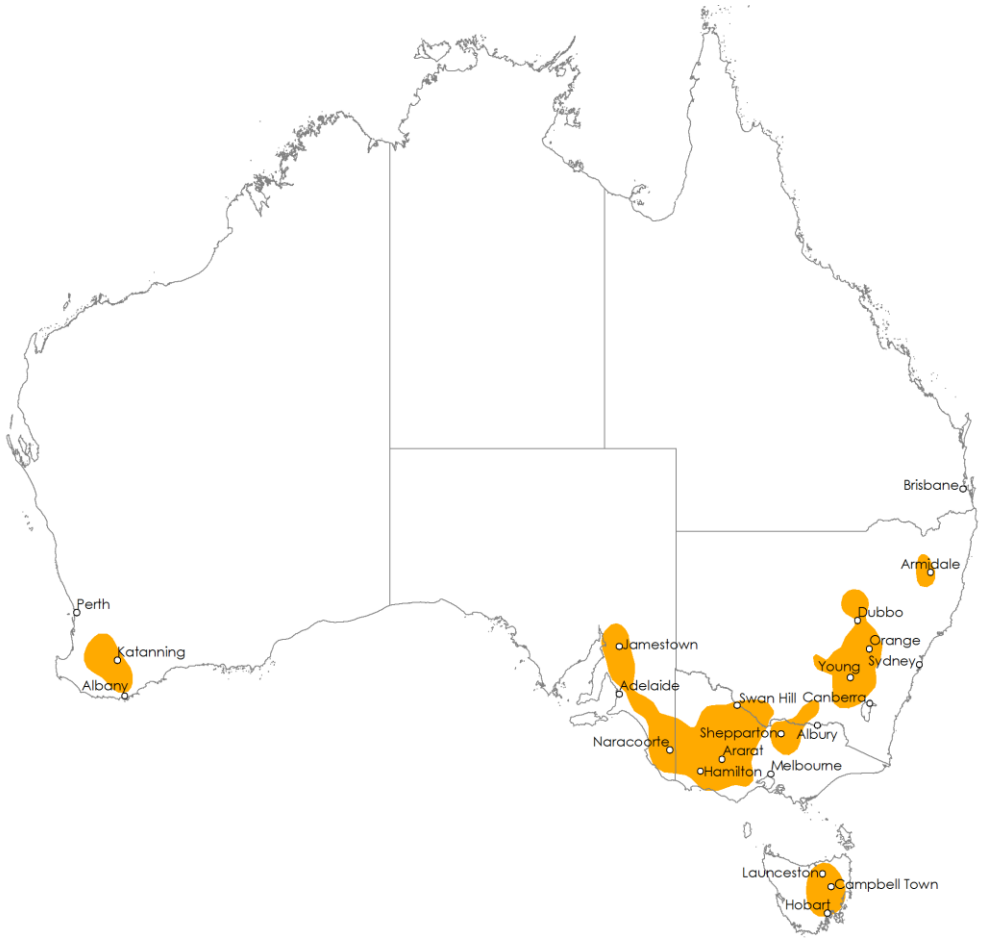
Industry overview

The lamb industry makes an important contribution to the Australian economy. In 2015–16 it accounted for around 6 per cent ($3.2 billion) of the gross value of agricultural production and around 4 per cent ($1.8 billion) of agricultural export income.

Since the early 1990s the number of farms producing lambs for slaughter has increased, as has the gross value of lamb production in aggregate and on a per farm basis. Many broadacre farms now rely on income from the sale of lambs for slaughter each year, with varying degrees of specialisation across the industry. Australia's lamb producing regions are concentrated in the south-east of Australia including Tasmania, Victoria, central and southern New South Wales and south-east of South Australia and in south-west Western Australia (see map below).

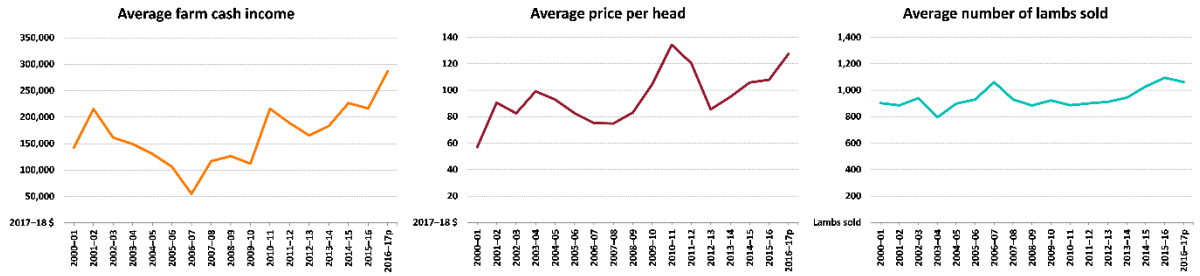
The results below are for farms included in the Australian Agricultural and Grazing Industries (AAGIS) survey that sold at least 200 lambs for slaughter. The AAGIS is funded by the Department of Agriculture and Water Resources, Meat & Livestock Australia (MLA) and the Grains Research and Development Corporation. MLA commissioned and funded the analysis of lamb industry farm performance.

Map 1 Australian lamb producing regions



Source: ABARES

Key drivers of farm income



Source: ABARES Australian Agricultural and Grazing Industries Survey

1 Farm financial performance

Farm cash income and profit

Average farm cash income of Australian lamb-producing farms is projected to decrease by 5 per cent in 2017–18 to an average of $273,000 per farm (Figure 1). Less favourable seasonal conditions in 2017–18 are projected to result in lower crop receipts. This will be partly offset by higher receipts for lambs, sheep and wool resulting from higher prices and increased production. In particular, sales of lambs and sheep increased in the second half of 2017 in response to drier pasture conditions in New South Wales, Western Australia and South Australia.

Farm cash income in 2017–18 is projected to be the second highest in over 20 years, an estimated 66 per cent higher than the average between 2000–01 and 2016–17 (in real terms). Income for lamb-producing farms has consistently trended upwards since 2006–07.

The projected decrease in farm cash income in 2017–18 follows a 32 per cent increase in average farm cash income of Australian lamb-producing farms in 2016–17 (Table 1). This increase was a result of higher prices for lambs, sheep and wool combined with higher crop receipts. Good seasonal conditions in 2016–17 resulted in significantly higher winter crop production for most lamb-producing farms and record farm incomes.

Table 1 Farm financial performance, lamb-producing farms, 2015–16 to 2017–18

average per farm

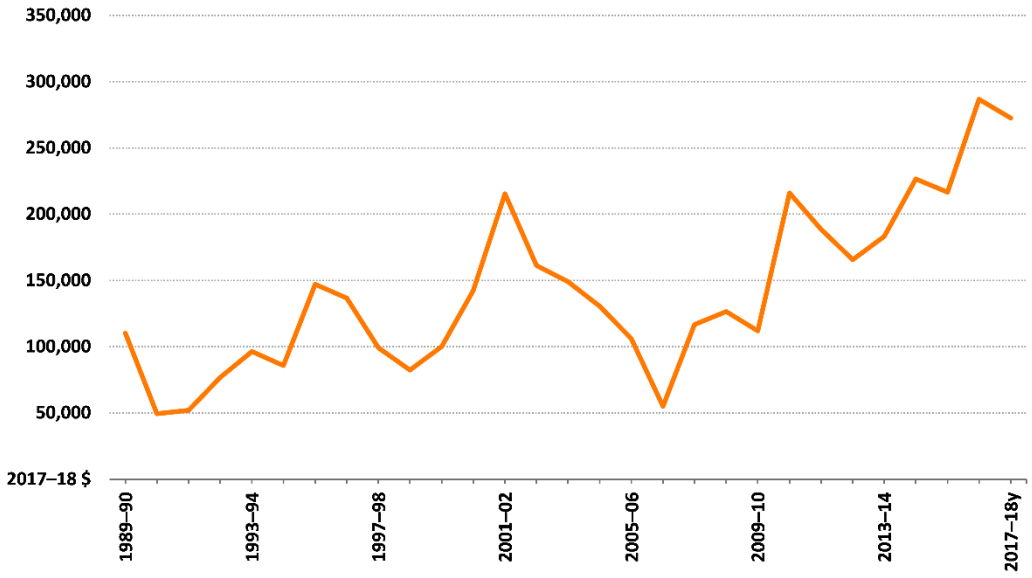
Performance measure	Unit	2015–16	2016–17p	2017–18y
Australia				
Total cash receipts	$	651,500	799,600	782,000
Total cash costs	$	442,720	518,400	509,000
Farm cash income	$	208,790	281,200	273,000
Farm business profit	$	88,280	184,700	156,000
Rate of return **a**	$	2.8	4.3	3.5
New South Wales				
Total cash receipts	$	660,160	715,400	686,000
Total cash costs	$	428,940	457,400	438,000
Farm cash income	$	231,220	258,000	248,000
Farm business profit	$	120,220	164,100	137,000
Rate of return **a**	%	3.5	4.0	3.2
Victoria				
Total cash receipts	$	469,030	633,100	660,000
Total cash costs	$	345,550	443,100	449,000
Farm cash income	$	123,480	190,000	212,000
Farm business profit	$	–12,810	152,800	117,000
Rate of return **a**	%	0.7	3.8	2.9

South Australia				
Total cash receipts	$	659,570	894,700	870,000
Total cash costs	$	422,520	551,700	574,000
Farm cash income	$	237,050	342,900	296,000
Farm business profit	$	73,030	229,300	156,000
Rate of return **a**	%	2.4	4.6	3.1
Western Australia				
Total cash receipts	$	930,150	1,090,000	1,127,000
Total cash costs	$	657,770	706,500	713,000
Farm cash income	$	272,380	383,500	414,000
Farm business profit	$	194,690	205,900	266,000
Rate of return **a**	%	4.6	4.8	5.7
Tasmania				
Total cash receipts	$	651,030	624,700	770,000
Total cash costs	$	475,240	455,100	496,000
Farm cash income	$	175,790	169,700	274,000
Farm business profit	$	22,480	101,500	182,000
Rate of return **a**	%	1.2	2.5	3.5

p Preliminary estimate. **y** Provisional estimate. **a** Excluding capital appreciation.
Source: ABARES Australian Agricultural and Grazing Industries Survey

Figure 1 Farm cash income, lamb-producing farms, Australia, 1989–90 to 2017–18

average per farm



y Provisional estimate.
Source: ABARES Australian Agricultural and Grazing Industries Survey

Farm business profit is a measure of long-term profitability. It accounts for capital depreciation, payments for family labour and changes in inventories of livestock, fodder and grain held on farm.

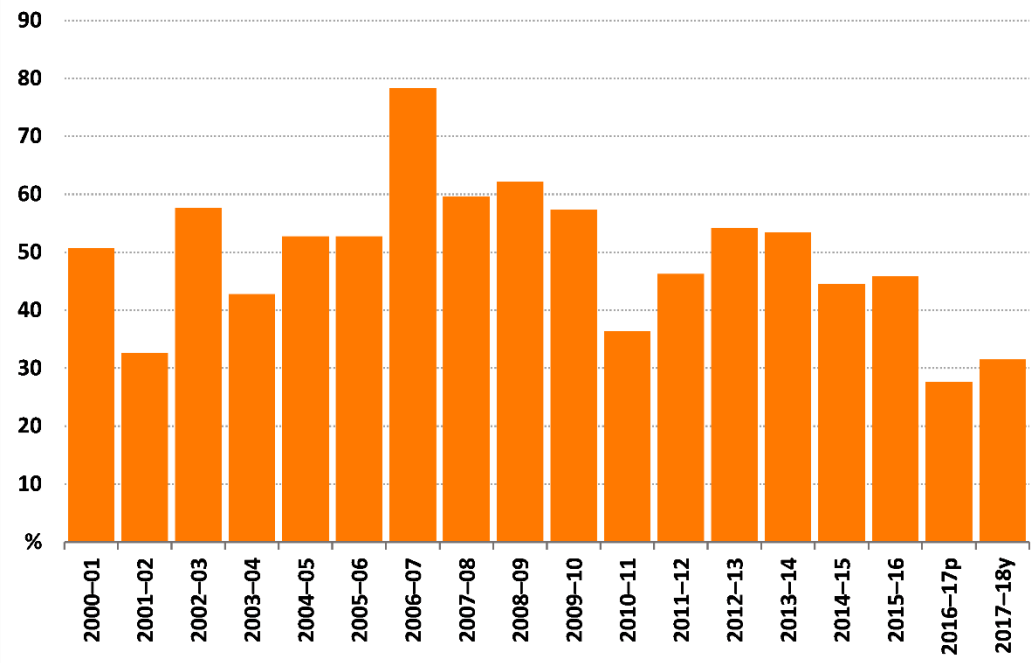
At the national level, farm business profit increased by around 109 per cent in 2016–17 but is projected to fall by 16 per cent in 2017–18 (Table 1). Changes in average farm business profit in 2017–18 are expected to be mixed at state level, increase in Tasmania and Western Australia but decrease in New South Wales, Victoria and South Australia. For some lamb producers, farm business profit is expected to fall by more than farm cash income because of a rundown in stocks of grain held on farm during 2017–18.

Over the 10 years to 2016–17, the proportion of lamb-producing farms recording negative farm business profits averaged 49 per cent a year. Reduced financial performance in 2017–18 is projected to result in a small increase in the proportion of farms recording negative farm business profit to around 32 per cent (Figure 2)—still well below the 10-year average to 2016–17.

Negative farm business profit means a farm has not covered the costs of unpaid family labour or set aside funds to replace depreciating farm assets. Many farms occasionally record negative farm business profits when their income fluctuates. However, ongoing low or negative profits affect long-term viability because farms have reduced capacity to invest in newer and more efficient technologies.

Figure 2 Proportion of lamb-producing farms with negative farm business profit, Australia, 2000–01 to 2017–18

percentage of farms



p Preliminary estimate. **y** Provisional estimate.
Source: ABARES Australian Agricultural and Grazing Industries Survey

Total cash receipts

Lamb-producing farms usually operate as both livestock and cropping enterprises. In 2016–17 sales of livestock and livestock products made up around 49 per cent of total farm receipts and cropping receipts made up 45 per cent. Receipts from the sale of sheep and lambs contributed around 28 per cent to total receipts, with lambs accounting for around 11 per cent of total cash receipts.

On average, total cash receipts increased by 21 per cent in 2016–17. Lamb receipts increased by 10 per cent as a result of favourable prices and increased turn-off per farm. Receipts from crops increased by around 41 per cent in 2016–17 because increased production more than offset lower prices for wheat and barley. Receipts from beef and wool rose because of higher production and prices.

In 2017–18 total farm cash receipts are projected to decrease by around 4 per cent, to an average of $782,000 per farm. Total crop receipts as a proportion of total cash receipts are projected to decrease from 45 per cent to 38 per cent, reflecting less favourable seasonal conditions in some regions and falls in total crop production. With higher prices and increased production, receipts from lambs, sheep and wool are projected to increase to around 46 per cent of total cash receipts, representing their highest contribution to total receipts for lamb producers since 1990–91.

Total cash costs

Average total cash costs of lamb-producing farms were relatively stable between 2014–15 and 2017–18. Fertiliser, repairs and maintenance, crop and pasture chemicals, interest payments, and hired labour accounted for the largest share of total cash costs for lamb producers.

In 2016–17 average total cash costs on lamb-producing farms increased by 15 per cent to around $518,400 per farm. Total cash costs are projected to decline by around 4 per cent in 2017–18.

Performance, by state and scale of lamb production

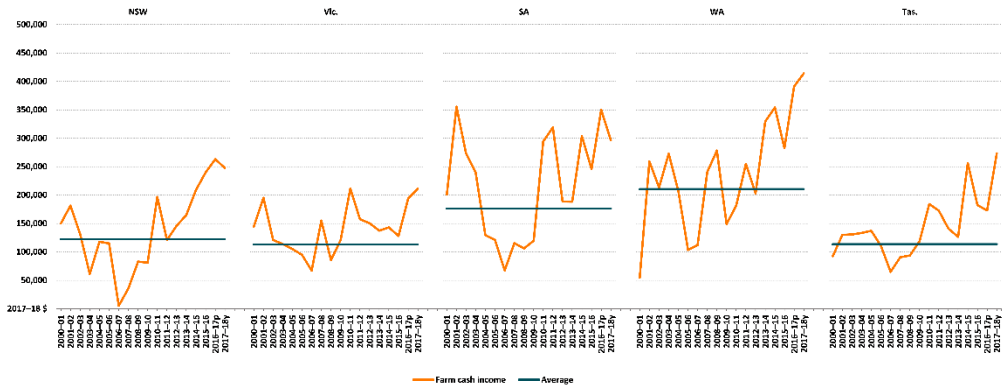
The contribution of lambs to total cash receipts varies widely by state and scale of production.

In 2016–17 lambs accounted for an estimated 21 per cent of total cash receipts in New South Wales, 20 per cent in Victoria, 16 per cent in South Australia, 10 per cent in Western Australia and 25 per cent in Tasmania. Insufficient lamb-producing farms were surveyed in Queensland in 2016–17 to produce reliable results.

In 2016–17 average farm cash income of lamb-producing farms rose in all states except Tasmania (Figure 3). Record-breaking winter crop production in some states, particularly Victoria, resulted in significantly higher total receipts and farm cash income. In 2017–18 farm cash income is expected to fall in New South Wales and South Australia but increase in Victoria, Western Australia and Tasmania. The projected decrease in farm cash income in New South Wales and South Australia is primarily the result of reduced crop receipts. These are expected to fall in all states except Tasmania, but the size of the decrease is much greater in New South Wales and South Australia.

Figure 3 Farm cash income, lamb-producing farms, by state, 2000–01 to 2017–18

average per farm



p Preliminary estimate. **y** Provisional estimate.
Source: ABARES Australian Agricultural and Grazing Industries Survey

All lamb-producing farms except small-scale farms (by number of lambs sold) are projected to have lower average farm cash income in 2017–18 (Table 2 and Figure 4). Larger lamb-producing farms also tend to have larger cropping enterprises. Reduced crop production and lower crop receipts are expected to result in a decline in farm cash income. Farm cash income for small-scale lamb-producing farms is projected to increase in 2017–18 because of higher receipts from sheep, lambs, wool and beef cattle. However, higher livestock receipts will be partly offset by lower cropping receipts.

Table 2 Farm financial performance, by scale of lamb production, 2015–16 to 2017–18

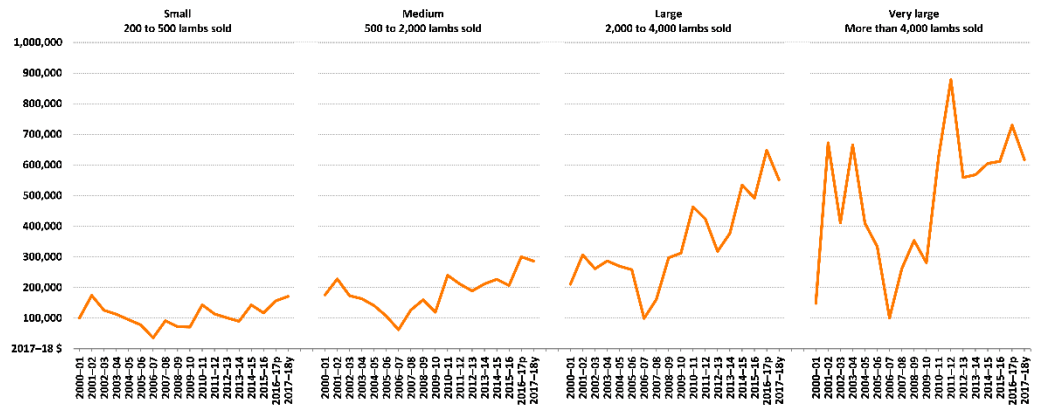
average per farm

Performance measure	Unit	2015–16	2016–17p	2017–18y
Small-scale farms (200 to 500 lambs sold)				
Farm cash income	$	113,050	153,800	172,000
Farm business profit	$	23,270	82,400	79,000
Rate of return **a**	%	1.5	3.4	2.9
Medium-scale farms (500 to 2,000 lambs sold)				
Farm cash income	$	199,660	294,900	286,000
Farm business profit	$	75,160	191,700	154,000
Rate of return **a**	%	2.6	4.2	3.4
Large-scale farms (2,000 to 4,000 lambs sold)				
Farm cash income	$	474,440	635,400	552,000
Farm business profit	$	290,480	460,900	436,000
Rate of return **a**	%	4.1	5.3	4.5
Very large-scale farms (More than 4,000 lambs sold)				
Farm cash income	$	589,990	715,700	618,000
Farm business profit	$	407,580	636,400	431,000
Rate of return **a**	%	4.3	5.3	3.6

p Preliminary estimate. **y** Provisional estimate. **a** Excluding capital appreciation.
Source: ABARES Australian Agricultural and Grazing Industries Survey

Figure 4 Farm cash income, by scale of lamb production, 2000–01 to 2017–18

average per farm



p Preliminary estimate. **y** Provisional estimate.
Source: ABARES Australian Agricultural and Grazing Industries Survey

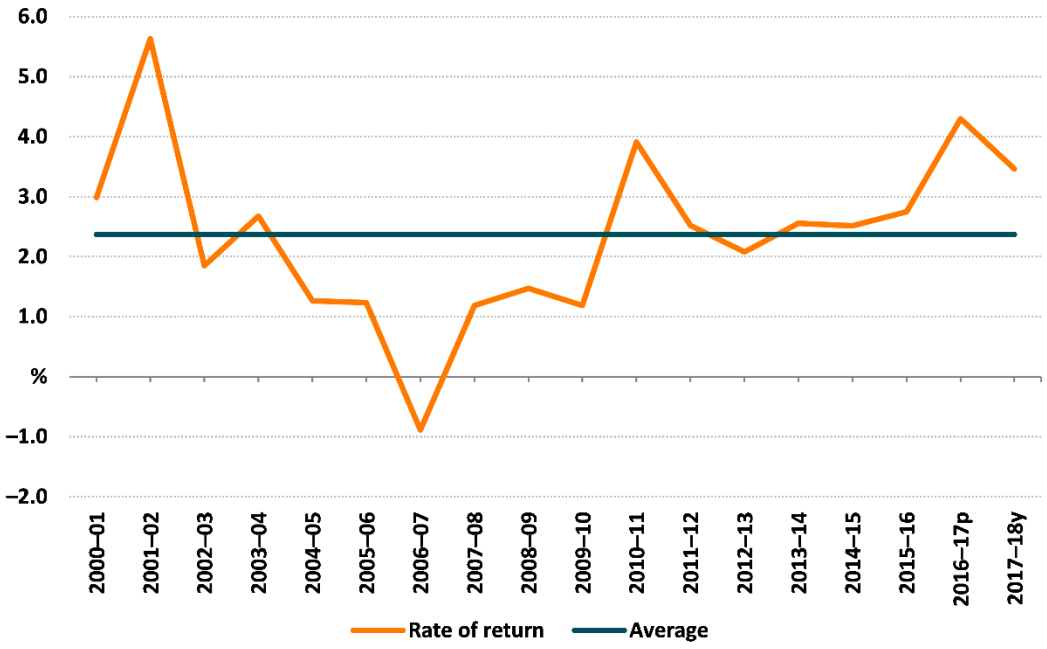
Rate of return

In 2016–17 the average rate of return (excluding capital appreciation) for lamb-producing farms increased to 4.3 per cent as a result of higher farm incomes (Figure 5). In 2017–18 lower average farm cash income is projected to result in the average rate of return falling to around

3.5 per cent. Despite the decline, the average rate of return in 2017–18 will still be above the long-term average of around 2.4 per cent per year recorded between 2000–01 and 2016–17.

Figure 5 Rate of return, lamb-producing farms, Australia, 2000–01 to 2017–18

average per farm

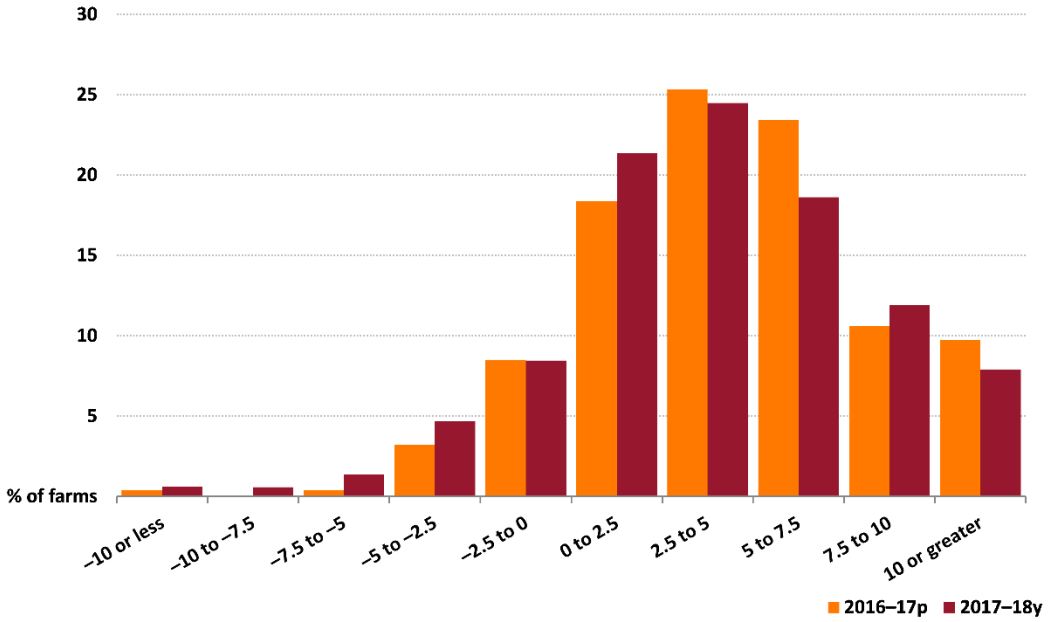


p Preliminary estimate. **y** Provisional estimate.
Source: ABARES Australian Agricultural and Grazing Industries Survey

The performance of lamb-producing farms varied widely in 2016–17 and 2017–18 (Figure 6). In 2016–17 an estimated 87 per cent of lamb-producing farms had positive rates of return excluding capital appreciation. Around 10 per cent of lamb-producing farms had a rate of return of more than 10 per cent, 11 per cent of farms had a rate of return of between 7.5 per cent and 10 per cent and an estimated 13 per cent recorded a negative rate of return.

Financial performance was weaker in 2017–18, but the distribution of lamb-producing farms by rate of return remained skewed towards the positive. An estimated 84 per cent of lamb-producing farms are projected to have a positive rate of return in 2017–18 and 8 per cent will have a return exceeding 10 per cent. An estimated 16 per cent of lamb-producing farms are projected to have a negative rate of return in 2017–18.

Figure 6 Distribution of lamb-producing farms, by rate of return, 2016–17 and 2017–18



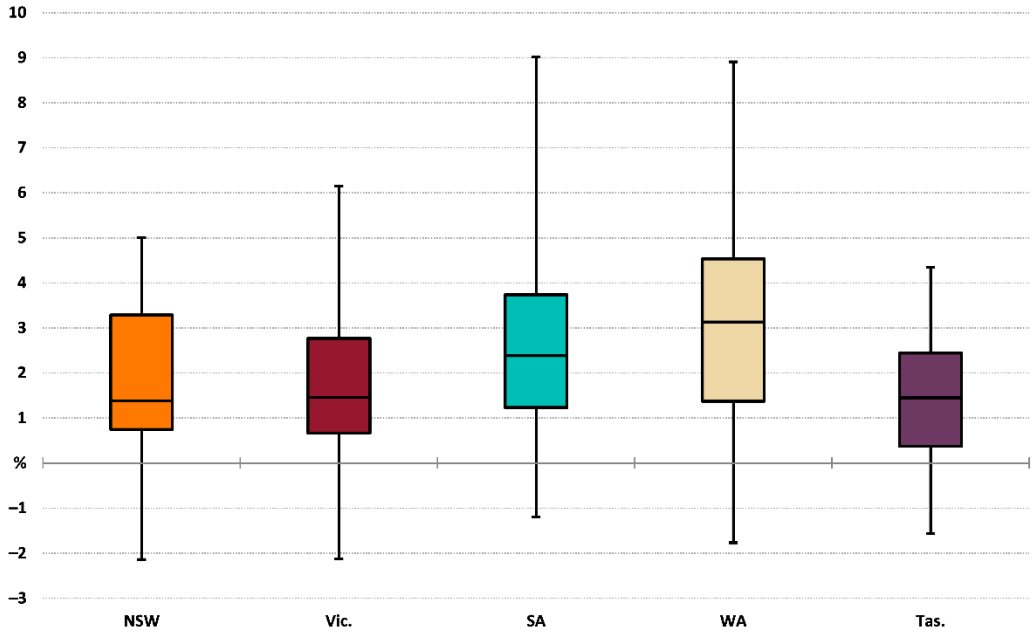
p Preliminary estimate. **y** Provisional estimate.
Source: ABARES Australian Agricultural and Grazing Industries Survey

Variation in rate of return

The long-term performance of farm businesses is determined by the level and variability of profits. Variations in the rate of return reflect changes over time in average seasonal conditions, commodity prices and the cost of farm inputs recorded in each state. Individual farms are likely to have experienced different variations in the rate of return over the period. These are a result of seasonal conditions and commodity prices, and farm-specific factors such as enterprise mix and the skills of the manager.

Tasmania had the smallest range in rate of return over the period (Figure 7), but it also recorded the lowest maximum rate of return. Western Australia had the highest median rate of return and the widest distribution.

Figure 7 Rate of return variability, by state, 1989–90 to 2016–17



Note: Boxes represent 50 per cent of years. Vertical lines represent the rates of return in the 25 per cent best and worst years. Horizontal lines in each box is the median. Rates of return are excluding capital appreciation.
Source: ABARES Australian Agricultural and Grazing Industries Survey

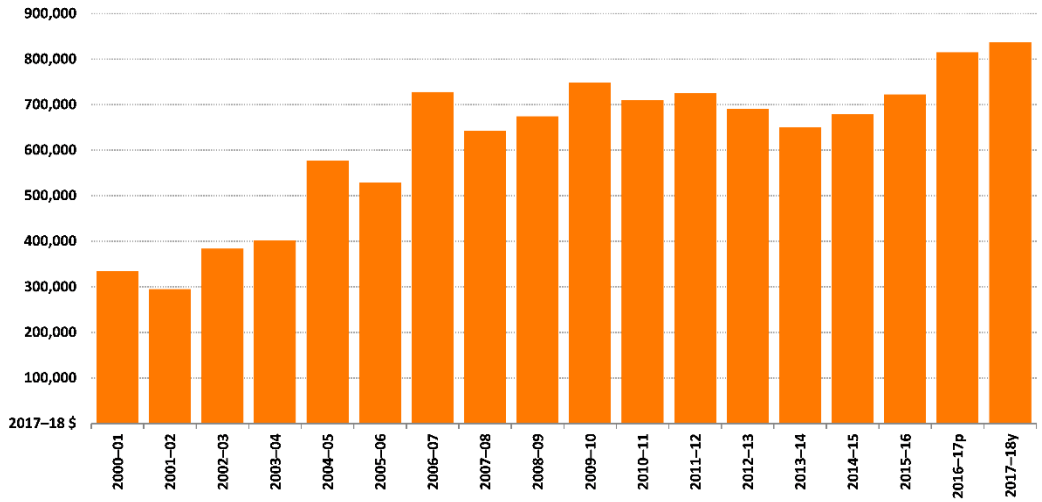
2 Farm debt and equity

Trends in average debt per farm

Debt is an important source of funds for investment and ongoing working capital for many lamb-producing farms. At the national level, between 2000–01 and 2017–18 average debt of lamb-producing farms trended upwards in real terms, mainly resulting from an increase in average farm size and changes in enterprise mix (Figure 8). In the 10 years to 2016–17 total farm debt fluctuated around an average of $706,000 per farm, in real terms. In 2016–17, average debt of lamb-producing farms increased by around 14 per cent to $815,000 per farm. Average debt is projected to have increased further in 2017–18 to $837,000 per farm.

Figure 8 Total farm debt at 30 June, lamb producers, Australia, 2000–01 to 2017–18

average per farm



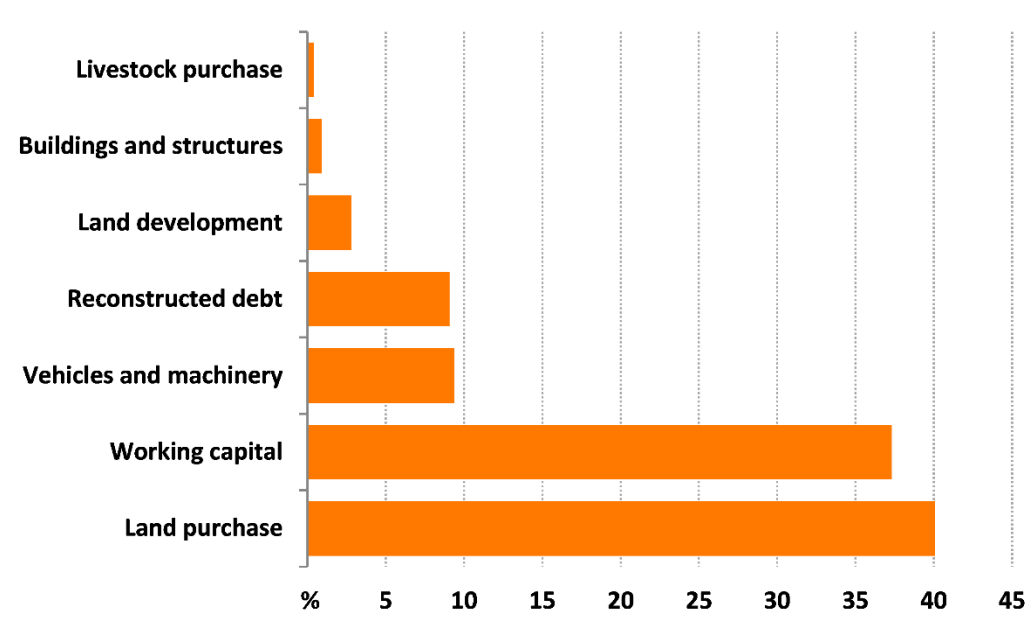
p Preliminary estimate. **y** Provisional estimate.
Source: ABARES Australian Agricultural and Grazing Industries Survey

In ABARES farm surveys, debt is recorded by its main purpose. However, because some loans cover a range of purposes, estimates of debt by main purpose provide a guide only.

Over the 3 years to 2016–17 land purchases accounted for the largest proportion of total farm debt, at 40 per cent on average (Figure 9). A further 37 per cent of debt was for working capital. The remaining debt was for a range of purposes such as vehicles and machinery, land development and buildings and structures. As a result of the mixed natures of lamb-producing farms, a significant proportion of working capital debt is for cropping enterprises.

Figure 9 Main purpose of farm debt, lamb producers, Australia, 2014–15 to 2016–17

average proportion per farm



Source: ABARES Australian Agricultural and Grazing Industries Survey

Equity ratio

Changes in average debt per lamb-producing farm over the medium to longer term were largely matched by changes in total farm equity. This was a result of increases in land values and average farm sizes. However, at the national level, the average equity ratio of lamb-producing farms trended downwards slightly over the 10 years to 2016–17, averaging around 86 per cent.

In 2016–17, 58 per cent of lamb producers had equity ratios greater than 90 per cent (Table 3). On average, lamb-producing farms with higher equity ratios tended to be smaller than farms with lower equity ratios. Lamb receipts as a proportion of total receipts decreased with equity ratio, reflecting the higher level of diversification among larger farms.

Table 3 Farm performance, by equity ratio, lamb producers, Australia, 2016–17

average per farm

Equity ratio:	Units	More than 90%	70 to 90%	Less than 70%
Proportion of farms	%	58	30	12
Total area operated	ha	2,483	4,031	3,758
Lambs sold	no.	887	1,206	1,219
Lamb receipts	$	113,200	156,800	153,700
Total cash receipts	$	546,100	1,017,400	1,215,900
Lamb receipts as a proportion of total receipts	%	21	15	13

Source: ABARES Australian Agricultural and Grazing Industries Survey

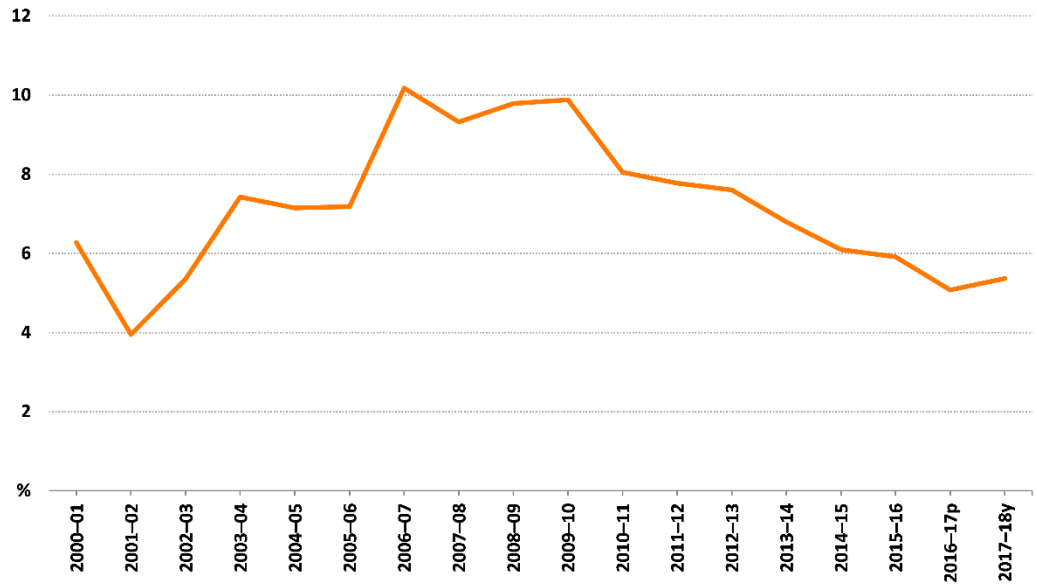
Debt-servicing capacity

The long-term viability of a farm is affected by its capacity to service debt. The servicing of debt consists of making interest payments and paying down the principal. The proportion of farm receipts spent on interest payments is a useful indicator of short-term capacity to service debt.

For lamb-producing farms the ratio of interest payments to total cash receipts fell from an average of around 10 per cent in 2009–10 to around 5 per cent in 2017–18 (Figure 10). Increased cash receipts and lower interest rates were the main reasons for this decline.

Figure 10 Ratio of interest paid to total cash receipts, lamb producers, Australia, 2000–01 to 2017–18

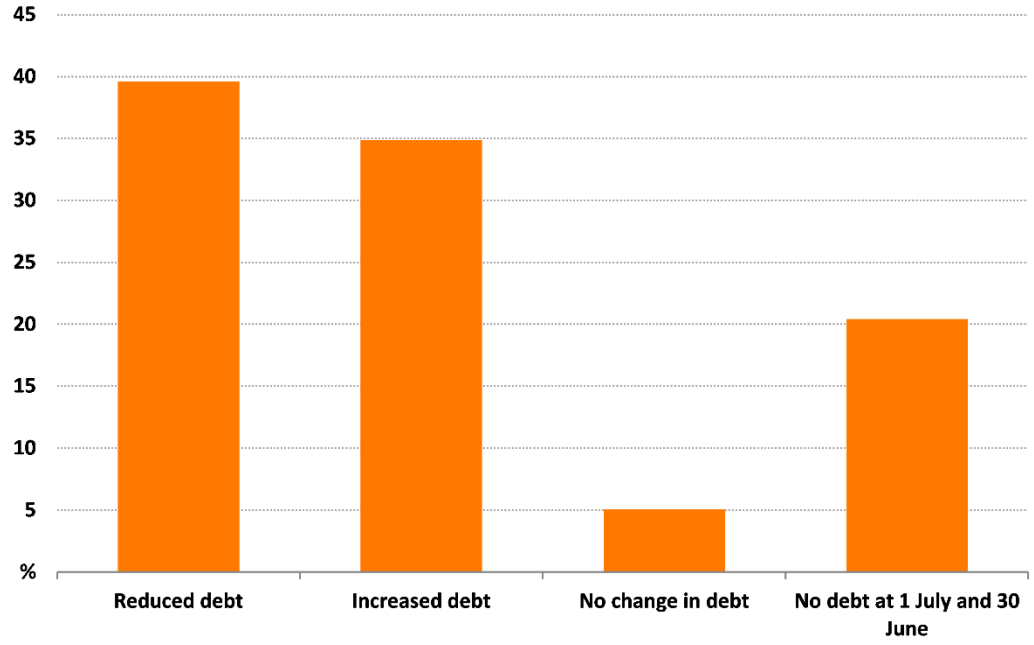
average per farm



p Preliminary estimate. **y** Provisional estimate.
Source: ABARES Australian Agricultural and Grazing Industries Survey

At the national level, in 2016–17 around 40 per cent of lamb producers reduced total debt on average (Figure 11). A further 35 per cent increased debt, and 5 per cent had no change in debt. The remaining 20 per cent of lamb-producing farms had no debt at 1 July 2016 and 30 June 2017.

Figure 11 Distribution of farms, by change in debt, lamb producers, Australia, 2016–17



Note: Change in debt from 1 July 2016 to 30 June 2017
Source: ABARES Australian Agricultural and Grazing Industries Survey

Debt and equity, by size

Between 2000–01 and 2017–18 average debt for very large lamb producers (selling more than 4,000 lambs for slaughter) increased at a faster rate than for the other size groups. In contrast, increases in debt were more modest for small, medium and large lamb producers. Nevertheless, lamb producers of all sizes increased their debt for purchasing land and working capital.

Between 2000–01 and 2016–17 equity ratios trended downwards for all size categories. Overall, average equity ratios showed little variation across the three smallest size groups, reflecting the mixed nature of most lamb-producing farms and the importance of cropping and other livestock to these farm businesses.

Very large lamb-producing farms have the lowest equity ratios, averaging under 80 per cent between 2014–15 and 2016–17 (Table 2). This is because larger farms usually have higher turnover and are better able to service debt. Larger farms often have access to non-farm equity, whereas smaller farms are mostly family-owned businesses that rely heavily on the farmers own capital.

Table 4 Equity ratio and total farm debt, lamb producers, by size 2014–15 to 2016–17

average per farm

Size	Equity ratio (%)			Total farm debt ($)		
	2014–15	2015–16	2016–17p	2014–15	2015–16	2016–17p
Small (200–500 lambs)	89	88	89	321,630	440,160	393,100
Medium (500–2,000 lambs)	86	87	87	697,430	630,290	811,500
Large (2,000–4,000 lambs)	84	85	84	1,490,030	1,353,550	1,852,800
Very large (>4,000 lambs)	79	79	79	3,066,860	3,255,020	3,518,700

p Preliminary estimate.

Source: ABARES Australian Agricultural and Grazing Industries Survey

Distribution of farms, by debt and equity

Table 3 shows the distribution of lamb-producing farms by debt and equity ratio at 30 June 2017. An estimated 25 per cent of all lamb-producing farms in Australia held no debt at 30 June. A further 12 per cent of farms held less than $100,000 in debt. An estimated 25 per cent of lamb-producing farms had debt exceeding $1 million. Average debt for lamb-producing farms was closely related to the scale of cropping activities. Around 58 per cent of lamb-producing farms had an equity ratio of more than 90 per cent.

Table 5 Distribution of farms, by farm business debt and equity ratio, lamb-producing farms, Australia, 30 June 2017

Equity ratio	No debt	Less than $100,000	$100,000 to less than $250,000	$250,000 to less than $500,000	$500,000 to less than $1m	$1m to less than $2m	More than $2m	Total
More than 90%	25	12	10	5	5	1	0	58
80 to less than 90%	0	0	3	4	5	5	2	19
70 to less than 80%	0	0	0	1	2	4	3	11
60 to less than 80%	0	0	0	0	1	4	3	7
Less than 60%	0	0	0	1	1	1	2	5
Total	25	12	13	12	13	14	11	100

Note: Row and column totals may not sum to 100 due to rounding.

Source: ABARES Australian Agricultural and Grazing Industries Survey

3 Farm capital and investment

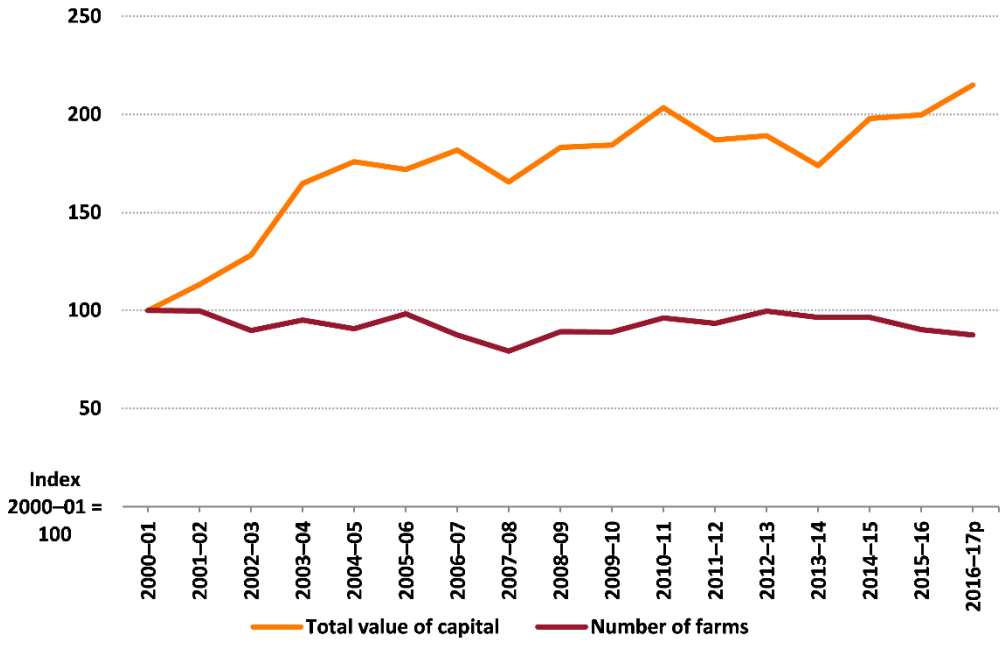
Total farm capital

From 2000–01 to 2016–17 the gross value of Australian lamb production increased by around 158 per cent in real terms to an estimated $3.1 billion. Over the same period the number of lamb-producing farms remained relatively steady and, consequently, the gross value of production per farm increased.

Investment in farm capital is important for the ongoing development of the Australian lamb industry. New and more efficient technologies are important for farm productivity and investments in land, fixed improvements, and plant and equipment are key drivers of lamb producers' capacity to generate farm outputs.

The total value of capital for Australian lamb-producing farms increased by 115 per cent in real terms from 2000–01 to 2016–17, largely as a result of an appreciation in land values (Figure 12). On a per farm basis, total capital increased from 2000–01 to 2016–17 by 146 per cent to around $6.2 million per farm.

Figure 12 Total value of capital and number of farms, lamb producers, Australia, 2000–01 to 2016–17

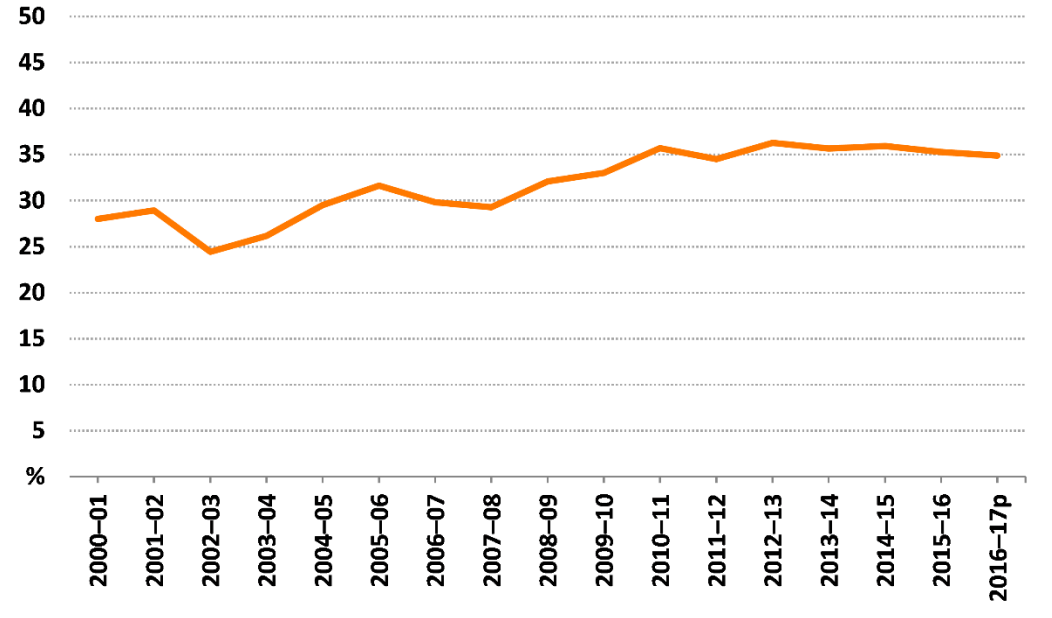


p Preliminary estimate.
Source: ABARES Australian Agricultural and Grazing Industries Survey

Many lamb-producing farms are operated as mixed enterprises and production systems vary considerably. From 2000–01 to 2016–17 the total number of broadacre farms in Australia declined but the proportion of farms producing lambs increased from around 28 per cent to an estimated 35 per cent (Figure 13). As a result of this increase, the total number of lamb-producing farms remained relatively stable, in contrast to the trend towards lower farm numbers in other broadacre industries. Many of these new entrants to lamb production were

larger mixed enterprise or cropping specialist farms that increased their lamb production in response to higher prices for lambs.

Figure 13 Proportion of broadacre farms producing lambs, Australia, 2000–01 to 2016–17



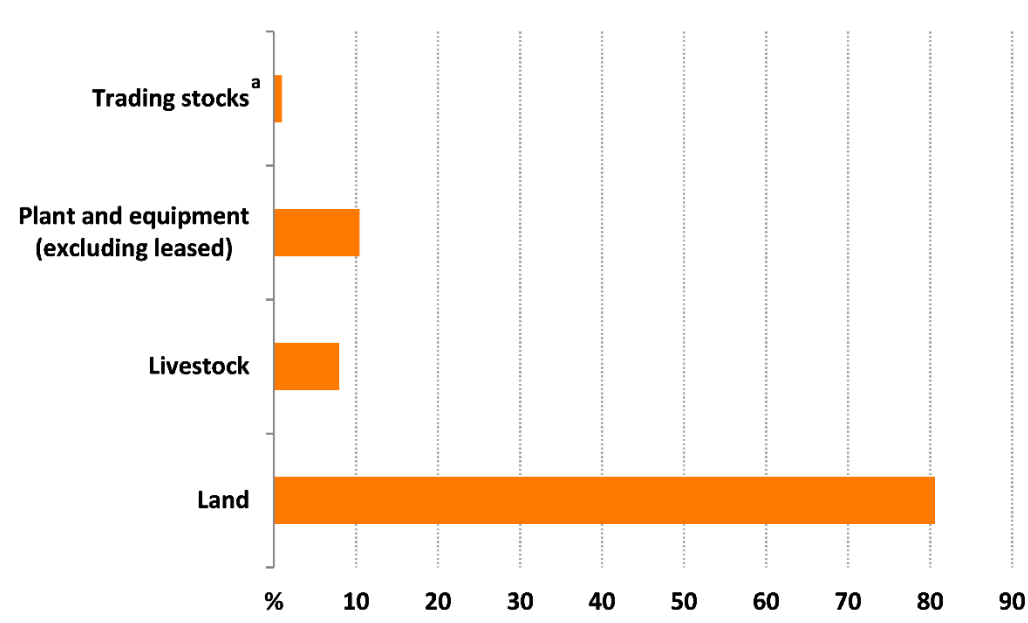
p Preliminary estimate.
Source: ABARES Australian Agricultural and Grazing Industries Survey

Land accounted for an average of 81 per cent of total capital per farm between 2012–13 and 2016–17 (Figure 14). Plant and equipment made up 10 per cent of total capital and livestock a further 8 per cent. The proportion of plant and equipment is higher than might be expected on livestock-producing farms because of the relatively high proportion of lamb-producing farms that also have cropping enterprises.

Plant and equipment made up around 11 per cent of total capital for lamb producers with grain-growing enterprises and only around 6 per cent of total capital for lamb producers without grain enterprises. Livestock makes up a greater proportion of total capital for lamb producers without grain growing at 13 per cent compared with 7 per cent for those with grain growing. Land accounted for around 80 per cent of capital for both groups.

Figure 14 Components of capital, lamb producers, Australia, 2012–13 to 2016–17

average per farm



a The value of all inventories including stocks of wool and grains held on the farm at 30 June.
Source: ABARES Australian Agricultural and Grazing Industries Survey

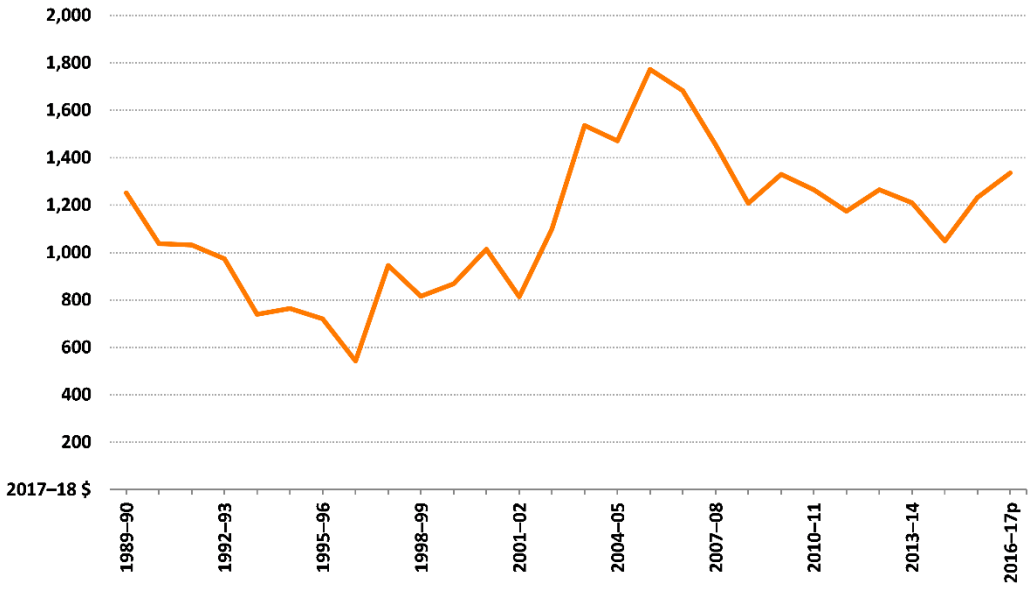
Return on land

ABARES uses two rates of return to farm capital—rate of return excluding capital appreciation and rate of return including capital appreciation. Rate of return is defined as farm profit expressed as a percentage of total capital. Because land is the largest component of total farm capital, it plays a key role in determining changes to total farm returns over the medium to longer term.

Figure 15 shows the average value of land and fixed improvements per hectare. The average annual return from land appreciation from 2000–01 to 2015–16 was around 4 per cent per year. From 1990–91 to 1999–2000 the average annual return from land appreciation was negative, at –0.7 per cent per year before stronger demand for farm land led to sharp increases in land values. From 2000–01 to 2005–06 the average annual return from land appreciation was 14.7 per cent per year before declining to an average of –2 per cent per year for 2006–07 to 2016–17. Interpretation of these changes in value is complicated by the addition of new entrants to lamb production (as described above), impacting the composition of the sector.

Figure 15 Value of land and fixed improvements per hectare, lamb producers, Australia, 1989–90 to 2016–17

average per farm



p Preliminary estimate.
Source: ABARES Australian Agricultural and Grazing Industries Survey

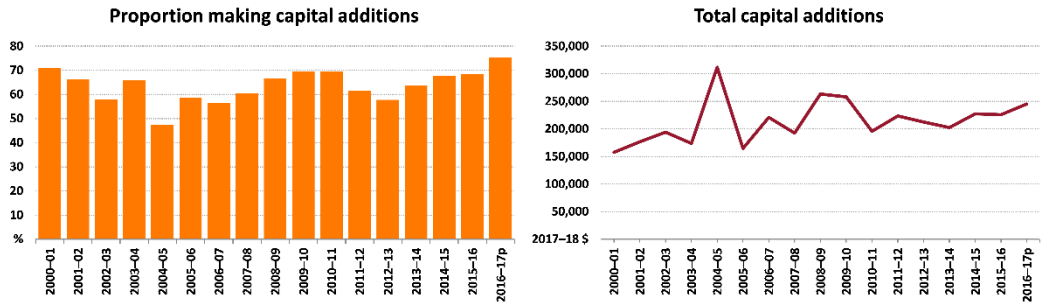
New farm investment

Most farmers make new investments each year to add to the existing capital stock or to replace capital items that have reached the end of their useful life. Farm investments are usually made with longer-term outcomes in mind and based on expected returns over the life of the investment.

On average, 66 per cent of lamb-producing farms each year made additions to their total capital over the 10 years to 2016–17 (Figure 16). The average amount invested each year by those making capital additions fluctuated around an average of $225,000, broadly in line with movements in farm cash incomes.

In 2016–17 an estimated 75 per cent of lamb producers made capital additions at an average of $245,000 per farm.

Figure 16 Total capital additions, lamb producers, Australia, 2000–01 to 2016–17



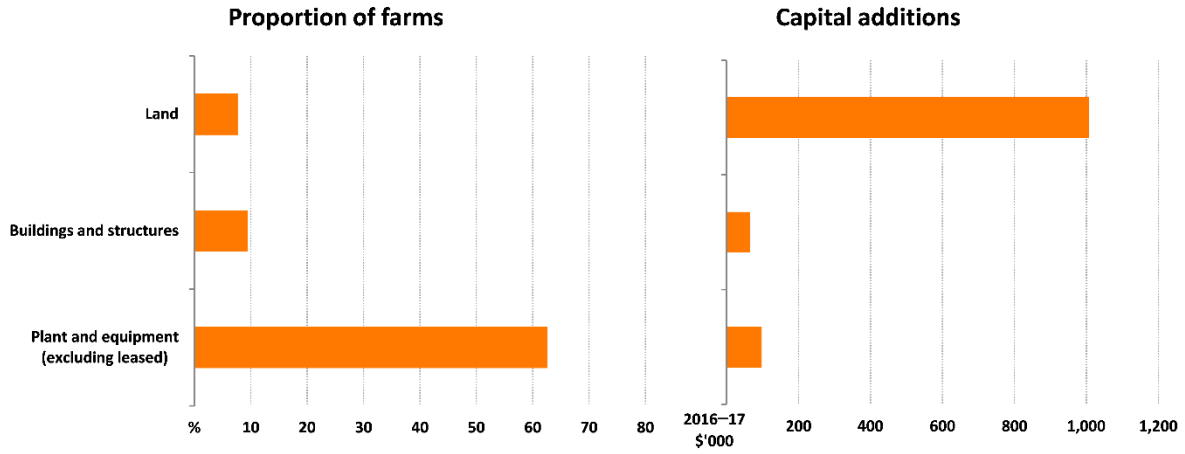
p Preliminary estimate.
Note: Total capital additions is the average of those farms making capital additions.
Source: ABARES Australian Agricultural and Grazing Industries Survey

Figure 17 shows the average proportion of lamb producers that made capital additions each year from 2012–13 to 2016–17 and the average capital addition in three categories—land purchases, plant and equipment, and buildings and structures. Land is the biggest component of capital additions each year, although only around 8 per cent of lamb producers purchased land each year on average between 2012–13 and 2016–17. Average expenditure on land for those making purchases was around $1 million per farm.

Around 63 per cent of all lamb producers made additions to plant and equipment on average each year over the period, at an average of around $98,000 per farm. Around 9 per cent of lamb producers made additions to buildings and structures. Expenditure on these capital additions averaged around $66,000 per farm.

Figure 17 Components of capital additions, lamb producers, Australia, 2012–13 to 2016–17

proportion of farms and average per farm in category



Source: ABARES Australian Agricultural and Grazing Industries Survey

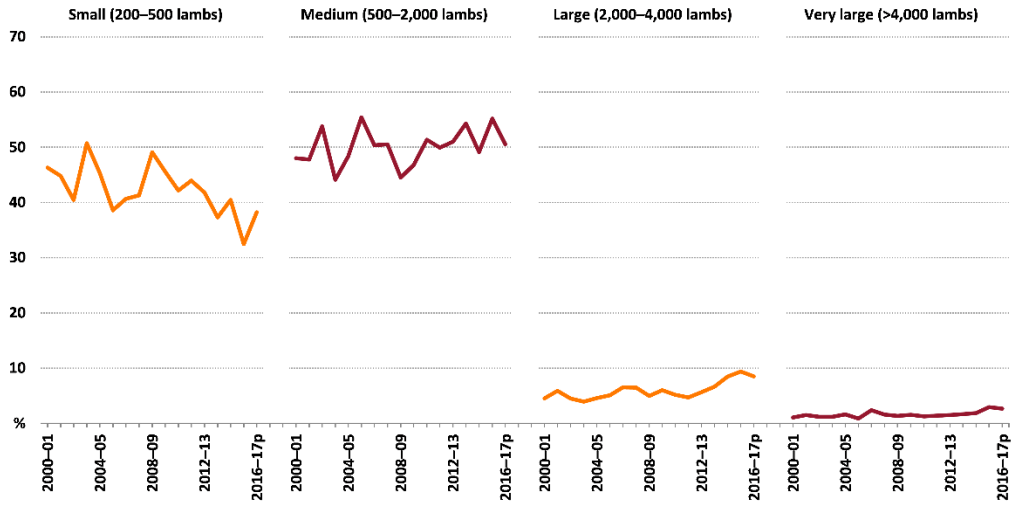
Capital and investment by farm size

The scale of production and underlying financial attributes of a farm determine how often capital additions may be made as well as the choice of additions. Because lamb-producing farms

generally have a mix of enterprises, the set of investment choices available to a lamb producer will also include investments for non-lamb related components of farm businesses.

From 2000–01 to 2016–17 the proportion of medium, large and very large lamb-producing farms (by number of lambs sold) increased and the proportion of small lamb-producing farms declined (Figure 18).

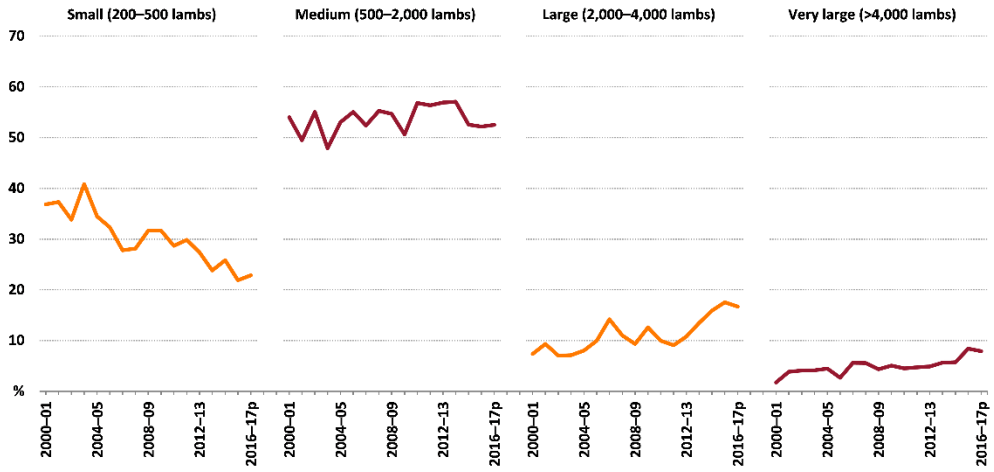
Figure 18 Proportion of farms by size category, lamb producers, 2000–01 to 2016–17



p Preliminary estimate.
Source: ABARES Australian Agricultural and Grazing Industries Survey

Figure 19 shows the proportion of total industry capital held by lamb-producing farms in each size category. The proportion of total capital held by small lamb-producing farms declined from 37 per cent in 2000–01 to 23 per cent in 2016–17, reflecting the decline in the number of small farms. Medium lamb producers accounted for 54 per cent of total capital held by lamb producers in 2000–01 and 53 per cent in 2016–17. Large lamb-producing farms held 17 per cent and very large farms held 8 per cent of total capital in 2016–17.

Figure 19 Proportion of total capital, lamb producers, by size, 2000–01 to 2016–17

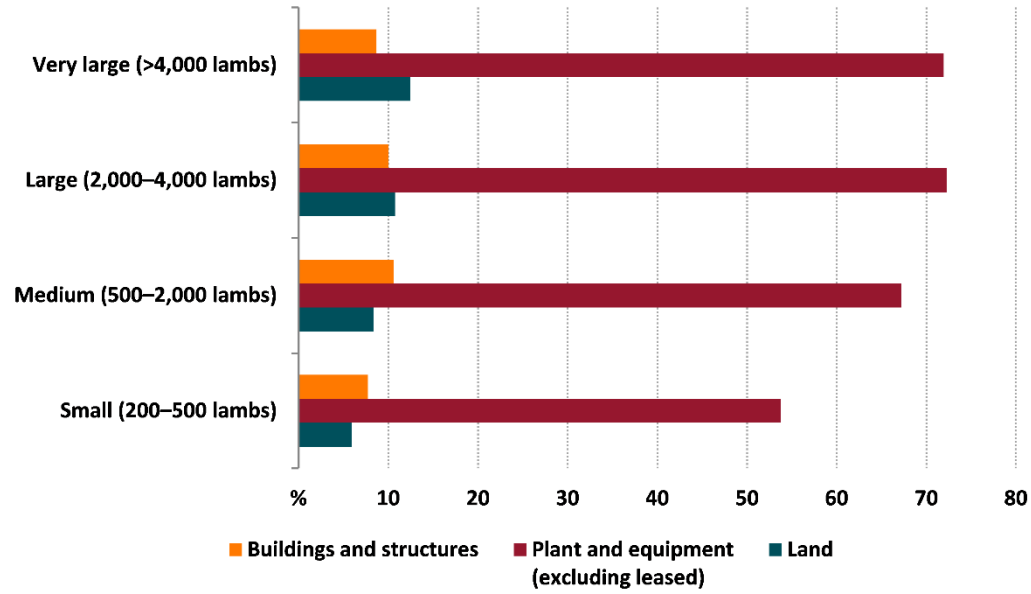


p Preliminary estimate.
Source: ABARES Australian Agricultural and Grazing Industries Survey

Figure 20 shows capital additions by size category. On average, the proportion of farmers making land additions is higher for larger scale farms than for smaller scale farms. An average of 12 per cent of very large lamb producers made land additions per year. Similarly, a greater proportion of large and very large lamb producers made plant additions per year than the two smaller size categories. Medium lamb producers made the higher proportion of building additions, with an average of 11 per cent of medium farms making additions per year.

Figure 20 Proportion of lamb producers making capital additions, by size, 2012–13 to 2016–17

proportion of farms



Source: ABARES Australian Agricultural and Grazing Industries Survey

Capital and investment by age of owner–manager

Investment in machinery, structures or land will be used over multiple production cycles and may take time before producing cash flow. Agricultural investments often require a large initial investment that is paid off over multiple years. As a result, the age of the owner–manager can influence investment decisions on a farm. However, because farming properties are often handed down within a family, any succession plans in place will also influence how investment decisions are made.

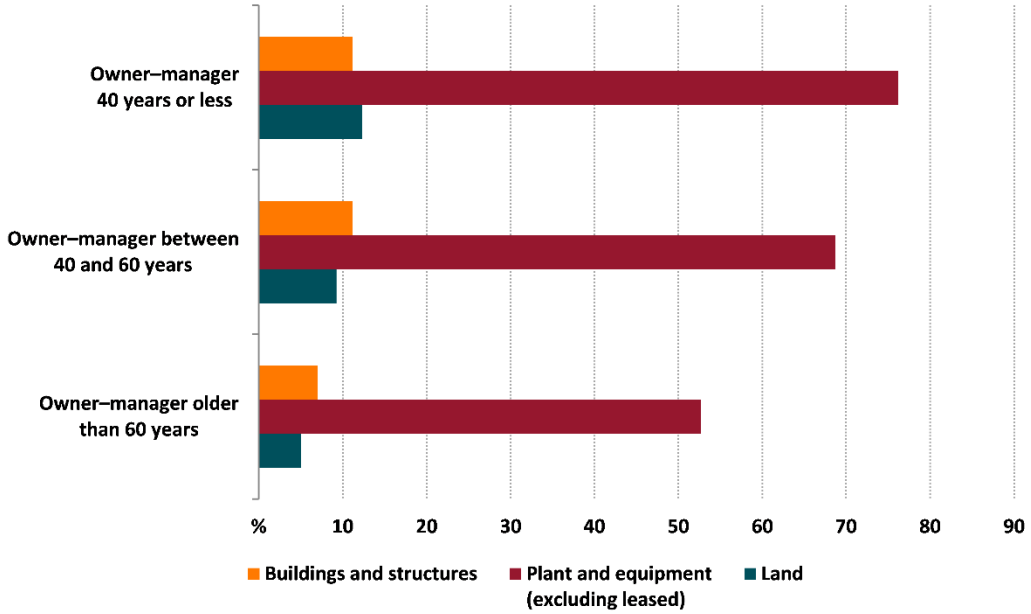
Figure 21 shows the percentage of farms making capital additions based on the age of the owner–manager. A higher proportion of the group of younger owner–managers (40 years or younger) made capital additions between 2012–13 and 2016–17 than the oldest age group (older than 60 years). Over the period 2012–13 to 2016–17, an average of around 12 per cent of farms with owner–managers 40 years or younger made land additions. Around 9 per cent of farms with owner–managers between 40 and 60 years old and around 5 per cent of farms with owner–managers over 60 years old made land additions.

The proportion of farms making additions to plant and equipment declined with the age of the owner–manager with 76 per cent of farms with owner–managers 40 years or younger,

69 per cent lamb-producing farms with owner–managers between 40 and 60 years and 53 per cent of lamb-producing farms with owner–managers older than 60 years making additions to plant and equipment.

Figure 21 Capital additions by age of owner–manager, lamb producers, Australia, 2012–13 to 2016–17

proportion of farms



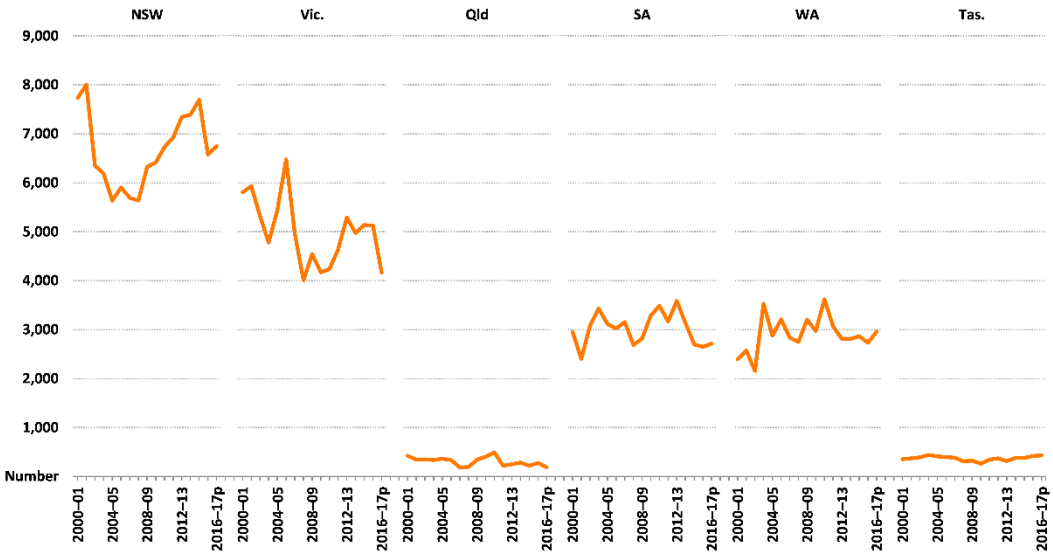
Source: ABARES Australian Agricultural and Grazing Industries Survey

4 Physical characteristics

In 2016–17 an estimated 17,200 Australian farms produced at least 200 lambs for slaughter. Around 39 per cent of these lamb-producing farms were in New South Wales, 24 per cent in Victoria, 17 per cent in Western Australia, 16 per cent in South Australia, 3 per cent in Tasmania and 1 per cent in Queensland.

From 2000–01 to 2016–17 the total number of Australian farms producing lambs for slaughter fell by 12 per cent. Most of this decline was in Victoria (1,630 farms) and New South Wales (990 farms), this decline was partially offset by an increase in lamb-producing farms in Western Australia (560 farms) (Figure 22).

Figure 22 Number of lamb-producing farms, by state, 2000–01 to 2016–17



p Preliminary estimate.
Source: ABARES Australian Agricultural and Grazing Industries Survey

Most lamb-producing farms have a diversified mix of enterprises, typically including a combination of wool, lambs, sheep, beef cattle and crops. The vast majority produce wool as a co-product and only a small proportion of farms have slaughter lambs as their only output. This heavily influences the number and characteristics of lamb-producing farms. From the mid-2000s the number of larger grain farms producing lambs for slaughter increased but the number of smaller farms focusing on sheep, lamb and wool production decreased.

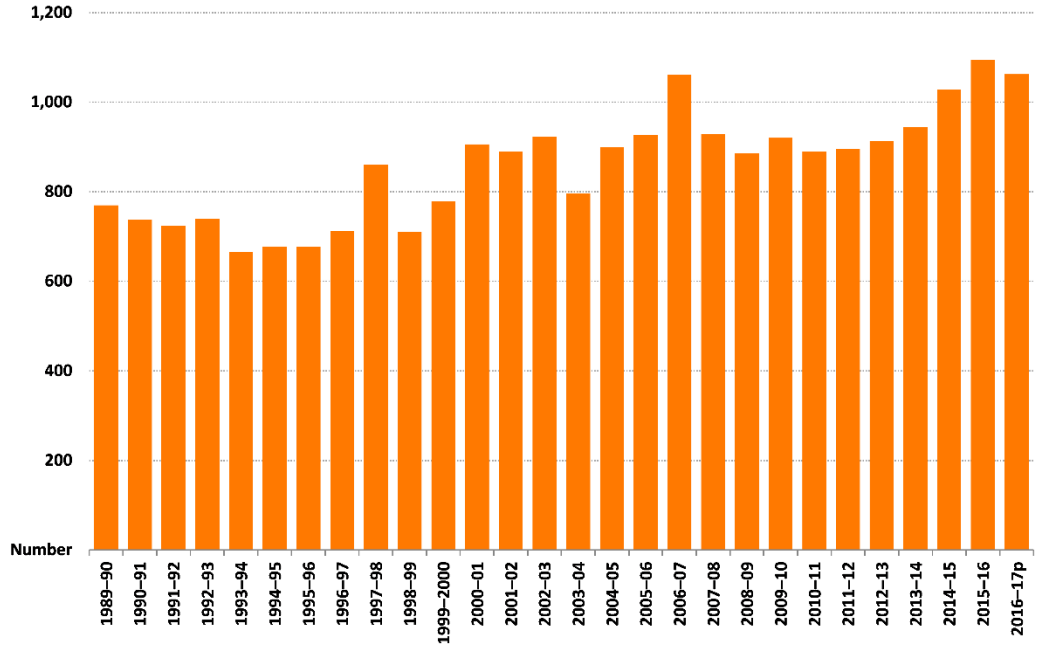
Before 1994–95 lamb-producing farms were concentrated in the high rainfall and wheat-sheep zones of New South Wales and Victoria, as well as Tasmania, south-east South Australia and a small region north of Perth, Western Australia. Over the decade to 2004–05, lamb production expanded throughout these regions and into other regions such as Gippsland in Victoria, south-west Western Australia, the south western pastoral and Darling Downs regions in Queensland and the North West Slopes and Central Tablelands in New South Wales.

From 1989–90 to 2016–17 total lamb production increased despite declining Australian sheep numbers. The number of sheep in Australia peaked in 1989–90 at over 170 million before

falling to around 70 million by 2016–17. Conversely, from 1989–90 to 2016–17 the number of sheep on lamb-producing farms increased by 27 per cent, from around 42 million to 54 million. This reflects a change in the composition of the national sheep flock resulting from increased use of non-Merino sheep for wool and meat production. Accordingly, from 1989–90 to 2016–17 the total number of lambs sold per farm rose by 38 per cent (Figure 23).

Figure 23 Number of lambs sold, lamb producers, Australia 1989–90 to 2016–17

average per farm



p Preliminary estimate.
Source: ABARES Australian Agricultural and Grazing Industries Survey

Trends in physical characteristics, by state

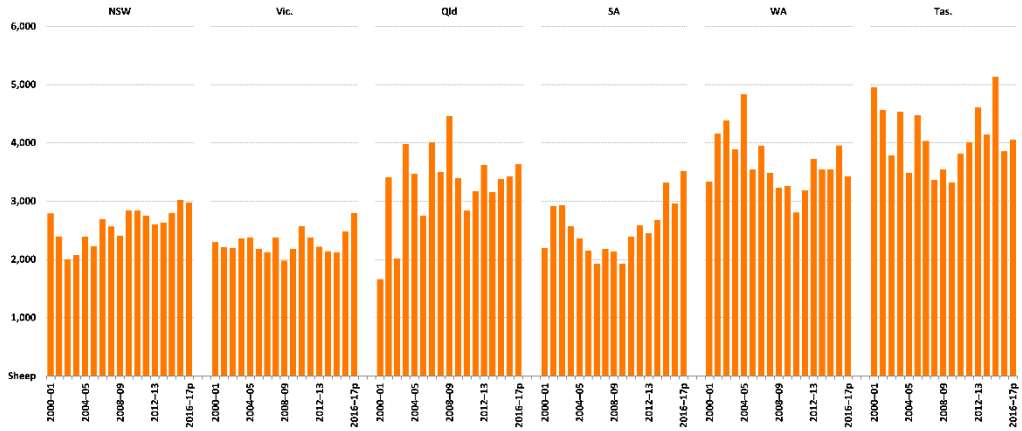
From 2000–01 to 2016–17 the share of lamb production by state changed slightly. This reflected changes in the regional concentration of lamb-producing farms and increases in the number of lambs sold for slaughter in every state. In 2016–17 New South Wales accounted for 42 per cent of the number of lambs sold for slaughter, followed by Victoria (22 per cent), South Australia (16 per cent), Western Australia (16 per cent), Tasmania (3 per cent) and Queensland (1 per cent).

These changes in the share of lamb production are a result of increases in the number of sheep per farm, the demographics of sheep flocks, higher lamb marking rates and a shift from wool production to lamb production.

Changes in flock sizes have not been uniform across all states. From 2000–01 to 2016–17 average flock sizes increased in New South Wales, Queensland, South Australia and Western Australia. In Tasmania, average flock sizes increased from 2000–01 to 2014–15 but fell substantially in 2015–16 because of drought. In Victoria, average flock sizes have stayed relatively similar (Figure 24).

Figure 24 Flock size on hand at 30 June, lamb producers, by state, 2000–01 to 2016–17

average per farm



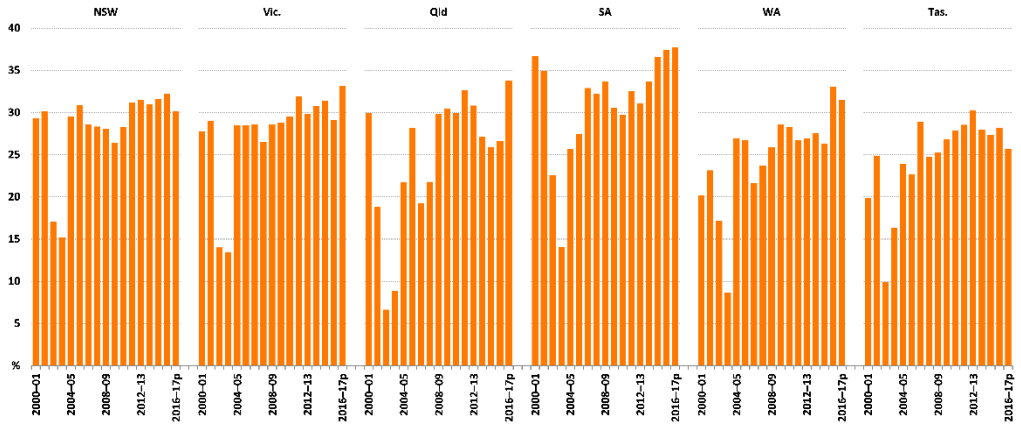
p Preliminary estimate.
Source: ABARES Australian Agricultural and Grazing Industries Survey

The demographics of sheep flocks have changed since the 1990s, with fewer wethers and more ewes and lambs at 30 June in all states (Figure 25). The increase in the number of lambs on hand at 30 June reflects changes in lambing patterns, including an increase in the proportion of autumn lambing.

Lambing patterns tend to vary by region and producers adjust them to suit the availability of feed. The breed of lamb influences how long an animal is kept and how long it takes to reach a saleable weight. Market conditions also affect flock composition at 30 June because farmers often hold lambs longer when prices are higher to maximise sale weight.

Figure 25 Lambs as proportion of total sheep, lamb producers, by state, 2000–01 to 2016–17

average per farm



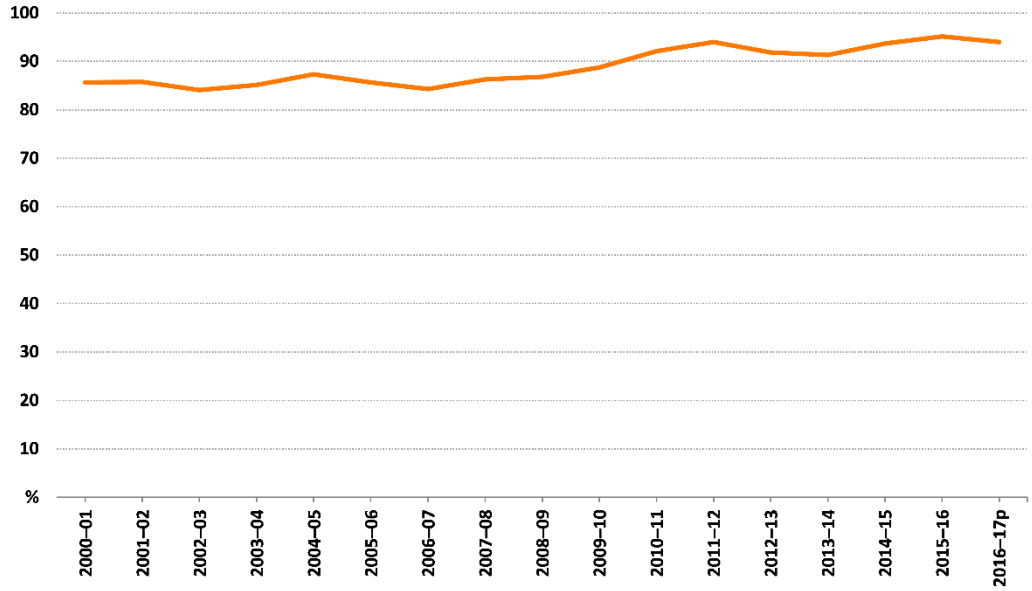
p Preliminary estimate.
Source: ABARES Australian Agricultural and Grazing Industries Survey

The shift in focus from wool production to lamb production resulted in the lamb marking rate (lambs marked as a proportion of ewes mated) rising substantially. From 2000–01 to 2016–17 the average lamb marking rate rose from 86 per cent to 94 per cent (Figure 26). Meat-sheep breeds such as Border Leicesters have significantly higher rates of twinning than Merino sheep,

meaning greater use of meat-sheep breeds produces more offspring per ewe mated, on average. Greater reliance on improved pastures and supplementary feeding to enhance ewe fertility rates also contribute to rising lamb marking rates.

Figure 26 Lamb marking rate, lamb producers, Australia, 2000–01 to 2016–17

average per farm



p Preliminary estimate.
Source: ABARES Australian Agricultural and Grazing Industries Survey

Physical characteristics, by scale of lamb production

From 2000–01 to 2016–17 Australian sheep flock numbers on lamb-producing farms increased, on average. The proportion of farms with between 200 and 500 sheep fell from 9 per cent to 6 per cent, the proportion of farms with between 500 and 2,000 sheep fell from 41 per cent to 37 per cent and the proportion of farms with more than 2,000 sheep increased from 36 percent to 54 per cent.

In 2016–17 an estimated 51 per cent of lamb-producing farms produced from 500 to 2,000 lambs for slaughter, accounting for 50 per cent of total lamb production (Table 6). Large-scale lamb producers accounted for 9 per cent of lamb-producing farms and 22 per cent of lamb production. Small lamb-producing farms accounted for 14 per cent of lamb production and very large lamb-producing farms accounted for 15 per cent of lamb production.

Table 6 Proportion of farms and lambs sold, lamb producers, by size, 2016–17

Farm size	Number of farms (no.)	Share of farms (%)	Share of lambs sold (%)
Small (200 to 500 lambs)	6,590	38	14
Medium (500 to 2,000 lambs)	8,710	51	50
Large (2,000 to 4,000 lambs)	1,470	9	22
Very large (More than 4,000 lambs)	460	3	15
Australia	17,230	100	100

Note: Column totals may not sum to 100 due to rounding.
Source: ABARES Australian Agricultural and Grazing Industries Survey

In 2016–17 lamb marking rates ranged from 88 per cent on small farms to 100 per cent on very large farms (Table 7). Larger lamb-producing farms operate larger areas and have a more diverse enterprise mix, on average. Larger farms have higher lamb marking rates because they have a greater focus on managing lambs, compared with smaller farm enterprises.

Table 7 Physical characteristics, lamb producers, by size, 2016–17

average per farm

Characteristic	Unit	Small (200 to 500 lambs)	Medium (500 to 2,000 lambs)	Large (2,000 to 4,000 lambs)	Very large (more than 4,000 lambs)
Area operated	ha.	1,760	4,200	8,370	10,240
Area sown to crops	ha.	420	850	1,170	1,220
Beef cattle on hand	no.	120	130	260	470
Sheep on hand	no.	1,820	3,200	6,180	10,820
Lambs on hand	no.	590	1,050	1,920	3,390
Adult sheep sold	no.	630	1,500	3,490	7,050
Lambs sold	no.	380	1,040	2,750	5,850
Turn-on rate	%	4	6	8	14
Turn-off rate	%	36	48	58	67
Ewes mated	no.	900	1,690	3,610	6,580
Lambs marked	no.	800	1,590	3,530	6,570
Lamb marking rate	%	88	94	98	100
Wool production	kg	8,160	13,910	29,310	45,170

Source: ABARES Australian Agricultural and Grazing Industries Survey

5 Cost of production

Cost of sheep production

Between 2014–15 and 2016–17 prices for sheep, lambs and wool increased. The cost of sheep production increased by around 20 cents per kilogram live weight between 2014–15 and 2015–16 and increased by around 6 cents between 2015–16 and 2016–17 (in real terms). Nationally, total costs of sheep production averaged 315 cents per kilogram live weight for all sheep producers and 306 cents per kilogram for slaughter lamb producers (Table 8) for the three years to 2016–17.

Box 1 Calculation of the per kilogram live weight cost of sheep production

The Australian Agricultural and Grazing Industries Survey of Australian broadacre farms collects detailed financial, physical and production data. ABARES included additional questions in the 2007–08, 2008–09 and 2012–13 to 2016–17 surveys so it could calculate the per kilogram live weight cost of beef cattle and sheep production.

These additional questions covered the live weight of cattle, calves, sheep and lambs sold or transferred off-farm and the proportion of key variable costs attributable to beef, sheep and cropping enterprises on mixed enterprise farms. Key variable costs included crop and pasture chemicals, fertiliser, fodder, fuel, repairs and maintenance, contracts paid, veterinary and livestock materials, and hired and family labour.

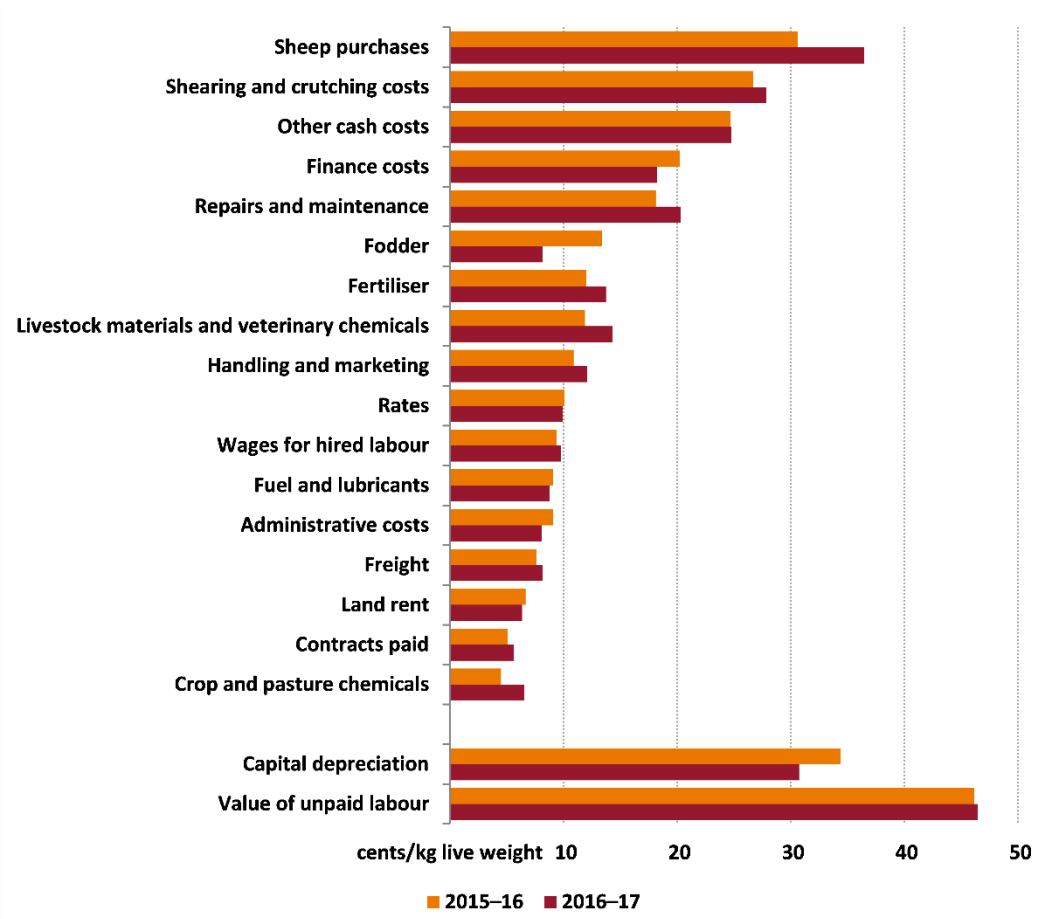
Fixed (overhead) costs such as accountancy, telephone, insurance and capital depreciation were attributed to enterprises on the basis of their share of total farm cash receipts.

ABARES calculated total live weight of sheep production as the total live weight sold and transferred off-farm, adjusting for changes in total live weight of the flock at the beginning and end of each financial year. Total live weight of the flock at the beginning and end of each financial year was calculated by applying average live weights to the categories of sheep on hand (ewes, lambs, wethers and rams) at the beginning and end of each financial year.

Per kilogram live weight costs of production were calculated by dividing the sheep enterprise share of costs by the total live weight of sheep produced. The methodology used did not disaggregate wool production costs from sheep and lamb production costs.

Slaughter lamb producers increased expenditure on purchase of sheep and lambs as a result of higher sheep and lamb prices and increased expenditure on repairs and maintenance, livestock materials and veterinary chemicals in 2016–17 (Figure 27). Change in expenditure on most other inputs was small. Expenditure on fodder decreased by 28 per cent (in real terms) as a result of improved seasonal conditions, particularly in Victoria.

Figure 27 Production costs, slaughter lamb producers, 2015–16 and 2016–17



Source: ABARES Australian Agricultural and Grazing Industries Survey

The on-farm costs of sheep production vary across farm businesses depending on size, enterprise mix, the farm's location, the quality of farm management and climatic and other production conditions during the year.

In the short term, to continue operating an enterprise, farm businesses need to generate only sufficient receipts to cover cash operating costs. This enables them to avoid drawing on receipts from other enterprises or borrowing or using financial assets to cover cash shortfalls.

Over a longer period, farm businesses need to replace farm capital (such as vehicles, machinery, plant, sheds and fencing) to maintain productivity as capital wears out. This cost is mostly captured in capital depreciation, but repairs and maintenance included in cash costs also include replacement and upgrade of some farm capital. Farms often vary their expenditure on capital items depending on need, available cashflow and access to finance. In some years, farms invest more than the calculated depreciation and in other years much less. A farm business that continually invests less than the calculated depreciation will lose production capacity over the medium to long term.

ABARES includes the value of unpaid labour in its measurement of farm financial performance. Family-operated farms use a large amount of owner–manager, partner and family labour. These farms generally do not pay wages or salaries to family and partners who provide labour for the

farm's operation. Valuation of this labour input enables ABARES to compare the performance of all farm businesses equally regardless of the (paid or unpaid) labour arrangements in place. Valuation of unpaid labour also captures the requirement for the farm's operators to receive a fair return for their labour input. ABARES values unpaid labour inputs at standard industry award wage rates.

Revenue from sheep production comes from three sources: adult sheep, lambs and wool. Over the three years to 2016–17, on average, sheep producers generated 379 cents of output per kilogram live weight produced and slaughter lamb producers 373 cents (Table 8). The proportion of revenue generated from sheep meat production averaged 61 per cent for all sheep producers, 63 per cent for all slaughter lamb producers and 67 per cent for the largest slaughter lamb producers (selling more than 2,000 lambs). The reduced contribution of wool to sheep enterprise revenue for larger slaughter lamb producers is a result of lower average wool prices received by larger producers. This resulted in the total value of sheep enterprise per kilogram of live weight generally declining as lamb production increased (Table 8)

Table 8 Per kilogram live weight cost of sheep production and operating margins for sheep producers, 2014–15 to 2016–17

average per farm

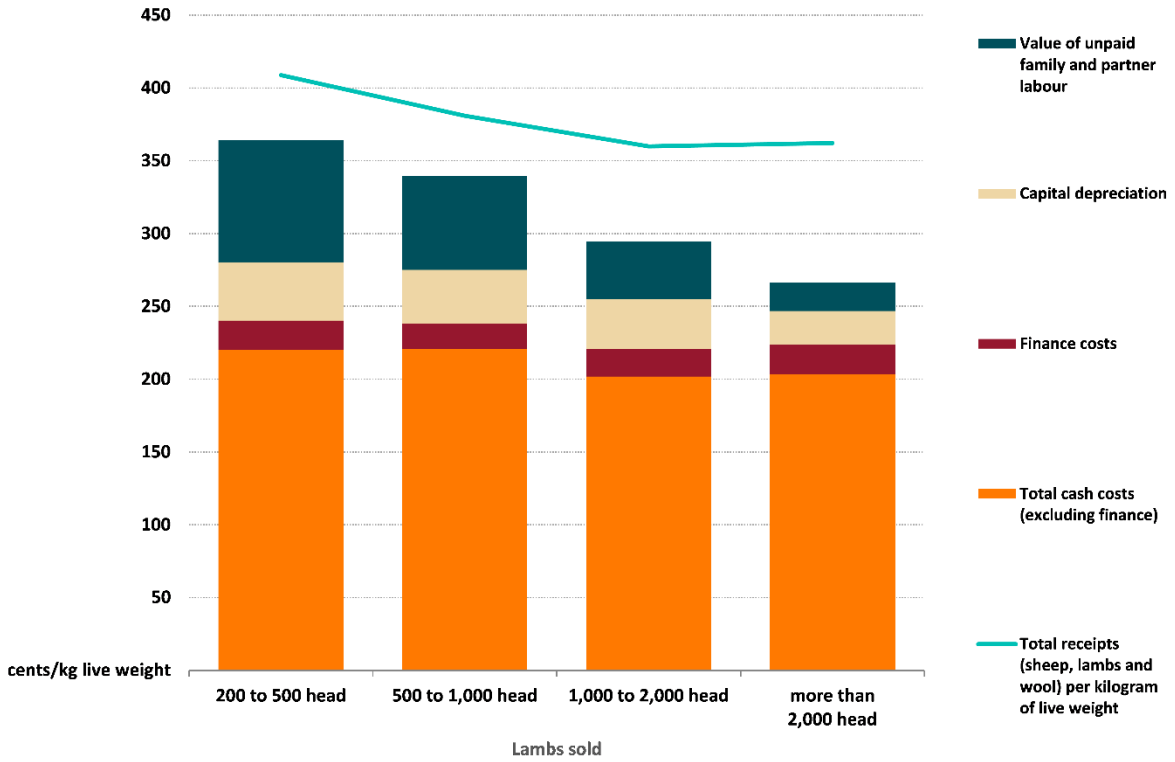
Production	unit	Slaughter lamb producers										All sheep producers	
		200 to 500 head		500 to 1,000 head		1,000 to 2,000 head		more than 2,000 head		average			
Total live weight of sheep produced	tonnes	17	(5)	31	(3)	63	(3)	155	(3)	49	(2)	40	(3)
Total live weight of lambs produced	tonnes	20	(7)	24	(6)	39	(6)	72	(6)	32	(3)	31	(3)
Total weight of wool produced	tonnes	8	(5)	10	(3)	17	(4)	35	(4)	14	(2)	13	(2)
Receipts per kilogram of live weight produced													
Sheep and lambs	c/kg	226	(4)	230	(1)	231	(1)	243	(2)	234	(1)	231	(1)
Wool	c/kg	183	(4)	151	(3)	129	(3)	119	(3)	139	(2)	148	(2)
Total	c/kg	409	(3)	381	(2)	360	(1)	362	(2)	373	(1)	379	(1)
Production costs													
Sheep and lamb purchases	c/kg	23	(14)	28	(7)	29	(7)	36	(6)	30	(4)	30	(4)
Shearing and crutching costs	c/kg	29	(5)	28	(3)	26	(3)	26	(3)	27	(2)	29	(2)
Administration	c/kg	11	(6)	10	(5)	8	(4)	7	(4)	8	(3)	9	(2)
Hired labour	c/kg	4	(15)	8	(10)	9	(8)	14	(5)	10	(4)	10	(4)
Crop and pasture chemicals	c/kg	5	(13)	5	(9)	6	(10)	5	(9)	5	(5)	5	(5)
Fertiliser	c/kg	15	(9)	13	(7)	12	(7)	12	(6)	13	(3)	13	(3)
Fodder	c/kg	11	(11)	12	(10)	9	(19)	11	(9)	11	(6)	11	(5)
Freight	c/kg	8	(7)	8	(4)	8	(5)	8	(4)	8	(2)	8	(2)
Handling and marketing	c/kg	9	(8)	11	(6)	11	(6)	12	(4)	11	(3)	11	(3)
Fuel and lubricants	c/kg	12	(8)	11	(4)	9	(4)	7	(4)	9	(2)	10	(2)
Livestock materials and veterinary chemicals	c/kg	16	(8)	14	(5)	13	(5)	12	(4)	13	(3)	13	(2)
Contracts paid	c/kg	5	(19)	6	(12)	5	(9)	5	(9)	5	(6)	5	(5)
Land rent	c/kg	6	(19)	6	(13)	6	(10)	7	(8)	6	(6)	6	(6)
Rates	c/kg	11	(5)	11	(4)	10	(6)	8	(7)	10	(3)	10	(3)
Repairs and maintenance	c/kg	22	(5)	21	(4)	19	(5)	15	(5)	19	(2)	20	(2)

Other cash costs	c/kg	32	(6)	27	(4)	22	(4)	20	(3)	24	(2)	25	(2)
Finance costs	c/kg	20	(11)	17	(6)	19	(6)	21	(5)	19	(3)	19	(3)
Capital depreciation	c/kg	40	(4)	37	(3)	34	(3)	23	(3)	32	(2)	32	(2)
Value of unpaid owner–manager, partner and family labour	c/kg	84	(5)	65	(3)	40	(3)	20	(3)	45	(2)	49	(2)
Total cash costs excluding finance costs	c/kg	220	(3)	221	(2)	202	(2)	203	(2)	210	(1)	214	(1)
Total cash costs including finance costs	c/kg	240	(3)	238	(2)	221	(2)	224	(2)	229	(1)	233	(1)
Total cash, finance and depreciation costs	c/kg	280	(3)	275	(2)	255	(2)	247	(2)	261	(1)	266	(1)
Total costs (all cash costs, finance, depreciation and the value of unpaid labour)	c/kg	364	(3)	340	(2)	295	(2)	266	(2)	306	(1)	315	(1)
Operating margin over:													
Cash costs	c/kg	188	(5)	160	(3)	158	(3)	159	(4)	163	(2)	165	(2)
Cash and finance costs	c/kg	169	(6)	143	(4)	139	(4)	138	(5)	144	(2)	146	(2)
Cash, finance and depreciation costs	c/kg	128	(8)	106	(5)	105	(5)	115	(6)	112	(3)	114	(3)
All costs including unpaid labour costs	c/kg	45	(25)	41	(15)	65	(9)	96	(7)	67	(5)	64	(5)

Note: Figures in parentheses are standard errors expressed as a percentage of the estimate. Estimates have been rounded to the nearest whole number and are presented in 2016–17 dollars. Cash costs include all expenditure on materials, interest, rent, services and labour such as fodder, rates, irrigation water, fuel, fertiliser, accountancy, electricity, veterinary chemicals and repairs incurred in the production of farm income. Cash costs do not include expenditure on items of farm capital such as purchase of vehicles, machinery, land, structures or improvements or value of labour and other inputs where no direct cash expenditure is made.
Source: ABARES Australian Agricultural and Grazing Industries Survey

The value of sheep production declined as lamb production increased up to 2000 head, but the average cost of production declined at a faster rate. Over the three years to 2016–17, the total cost of production (including the value of unpaid labour) for the smallest slaughter lamb enterprises averaged 364 cents per kilogram, compared with 266 cents per kilogram for slaughter lamb producers selling more than 2,000 lambs. As production increases, cash costs of production reduce by a relatively small amount, but capital depreciation and particularly input of unpaid owner–manager, partner and partner labour show a larger reduction (Figure 28).

Figure 28 Production costs, slaughter lamb producers, by number of lambs sold, 2014–15 to 2016–17



Source: ABARES Australian Agricultural and Grazing Industries Survey

These results suggest significant economies of size in the sheep meat industry provide producers with a strong economic incentive to expand sheep meat production and enhance profitability. Economies of size for sheep producers mainly arise from greater efficiency in the use of farm capital and labour as the scale of the sheep enterprise increases. Generally, increases in the scale of sheep enterprises bring only small reductions in cash operating costs per kilogram in both variable and fixed cash costs (overhead costs such as administrative costs, insurance and rates).

The total cost of sheep production was not significantly different across the states for the three years from 2014–15 to 2016–17. Cost of production for Queensland was lower averaged across the three years than the other states, but also had the largest variation between years (Table 9). This partly reflects the effects of dry seasonal conditions in Queensland during this period and also the small number of slaughter lamb producers and resulting low sample in Queensland.

Table 9 Per kilogram live weight cost of sheep production and operating margins for slaughter lamb producers, by state, 2014–15 to 2016–17

average per farm

Receipts per kilogram of live weight produced	unit	New South Wales		Victoria		Queensland		South Australia		Western Australia		Tasmania	
Sheep and lambs	c/kg	248	(2)	241	(2)	253	(8)	227	(2)	201	(2)	219	(3)
Wool	c/kg	130	(3)	126	(4)	117	(22)	148	(5)	163	(3)	167	(7)
Total	c/kg	378	(2)	367	(2)	370	(9)	376	(2)	364	(2)	386	(3)
Production costs													
Total cash costs excluding finance costs	c/kg	209	(2)	207	(2)	194	(12)	207	(2)	216	(3)	220	(4)
Total cash costs including finance costs	c/kg	227	(2)	228	(2)	214	(13)	225	(2)	235	(3)	249	(4)
Total cash, finance and depreciation costs	c/kg	257	(2)	263	(2)	240	(12)	260	(2)	267	(3)	270	(4)
Total costs (all cash costs, finance, depreciation and the value of unpaid labour)	c/kg	302	(2)	318	(2)	286	(10)	300	(2)	307	(3)	303	(4)
Operating margin over:													
Cash costs	c/kg	169	(4)	161	(4)	175	(12)	168	(4)	147	(4)	165	(6)
Cash and finance costs	c/kg	151	(4)	140	(5)	156	(16)	150	(4)	129	(5)	136	(7)
Cash, finance and depreciation costs	c/kg	121	(5)	105	(6)	130	(20)	115	(5)	97	(7)	116	(8)
All costs including unpaid labour costs	c/kg	76	(9)	49	(14)	83	(33)	76	(9)	57	(12)	83	(10)

Note: Figures in parentheses are standard errors expressed as a percentage of the estimate. Estimates have been rounded to the nearest whole number and are presented in 2016–17 dollars. Cash costs include all expenditure on materials, interest, rent, services and labour such as fodder, rates, irrigation water, fuel, fertiliser, accountancy, electricity, veterinary chemicals and repairs incurred in the production of farm income. Cash costs do not include expenditure on items of farm capital such as purchase of vehicles, machinery, land, structures or improvements or value of labour and other inputs where no direct cash expenditure is made.
Source: ABARES Australian Agricultural and Grazing Industries Survey

Operating margins

Operating margins (receipts per kilogram less costs of production) increased slightly in 2015–16 and by a large amount in 2016–17 as prices for sheep, lambs and wool increased and increase in production costs was small. Prices received for sheep increased 30 per cent, 11 per cent for lambs and 13 per cent wool in 2016–17.

From 2014–15 to 2016–17 operating margins for sheep producers were positive—even when the value of unpaid owner–manager, partner and other family labour is included in the costs of production. A large amount of unpaid labour is used in family-operated sheep-producing farms, particularly smaller farms.

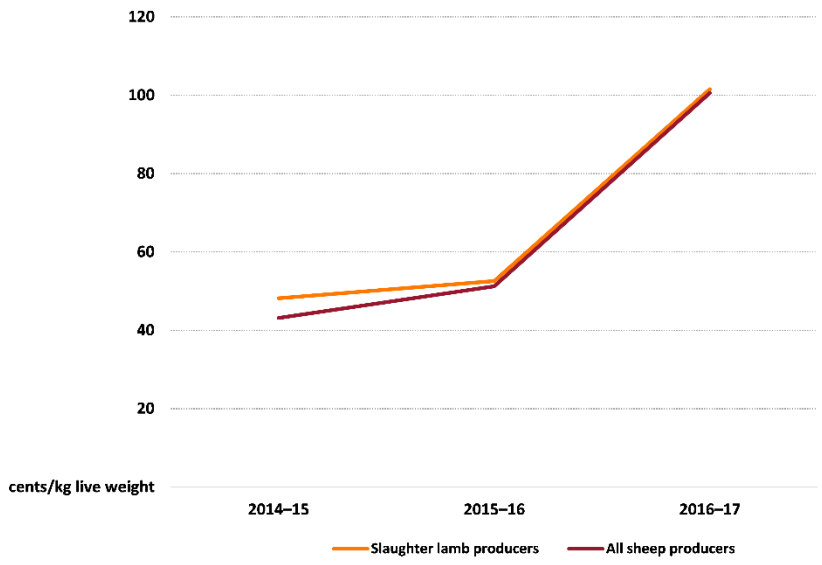
For all sheep producers operating margins averaged 43 cents per kilogram live weight produced in 2014–15, increased slightly to 51 cents in 2015–16 and then increased by a large

amount to 101 cents per kilogram in 2016–17. For slaughter lamb producers, operating margins averaged 48 cents per kilogram live weight produced in 2014–15, increased to 53 cents in 2015–16, then to 102 cents per kilogram in 2016–17 (Figure 29).

Higher operating margins for slaughter lamb producers compared to all sheep producers that were recorded throughout the period 2012–13 to 2014–15. However, in 2015–16 and 2016–17 margins for all sheep producers were similar to those for slaughter lamb producers as prices received for sheep and wool increased by more than prices received for lamb.

Operating margins also increased as the scale of slaughter lamb production increased, reflecting the decline in costs relative to the value of sheep products per kilogram live weight produced. Over the period 2014–15 to 2016–17, operating margins after accounting for all costs averaged 45 cents per kilogram for farms selling 200 to 500 lambs for slaughter and increased to 96 cents per kilogram for farms selling more than 2,000 lambs (Table 8).

Figure 29 Operating margins, sheep producers, 2014–15 to 2016–17



Note: Operating margins after accounting for cash, finance, depreciation and unpaid labour costs.
Source: ABARES Australian Agricultural and Grazing Industries Survey