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Australian Beef

Financial performance of beef farms, 2014–15 to 2016–17

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Industry overview

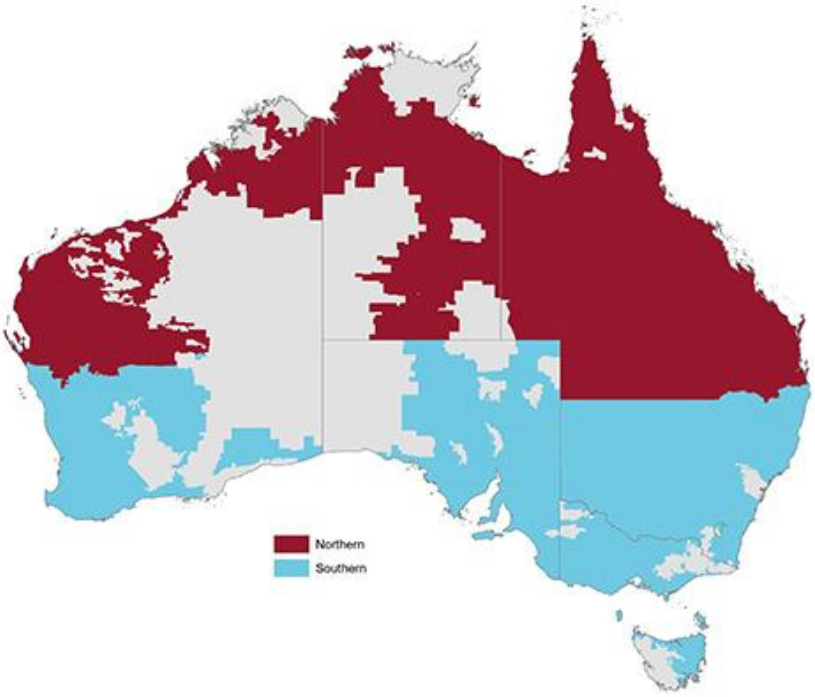
The beef cattle industry makes an important contribution to the Australian economy. In 2015–16 it accounted for around 23 per cent ($13.1 billion) of the total gross value of farm production and around 22 per cent of the total value of farm export income.

Around 57 per cent of all Australian farms carry beef cattle (ABS 2016), making this the most common and widely dispersed agricultural activity in Australia. Beef cattle farms are an important part of the rural economy in almost all regions of Australia. Farms running beef cattle manage more than 75 per cent of the total area of agricultural land in Australia.

The results below are for farms included in the Australian Agricultural and Grazing Industries (AAGIS) survey that had at least 100 head of beef cattle on hand at 30 June. Farm businesses with fewer than 100 head of cattle represent just 2 per cent of the national beef herd and contribute around 3 per cent to the total value of beef cattle sales.

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 grains industry farm performance. Data are provided at national and regional scales, with regions based on those used by MLA—the Northern and Southern regions.

Map 1 MLA beef regions



Source: ABARES

1 Farm financial performance

Summary

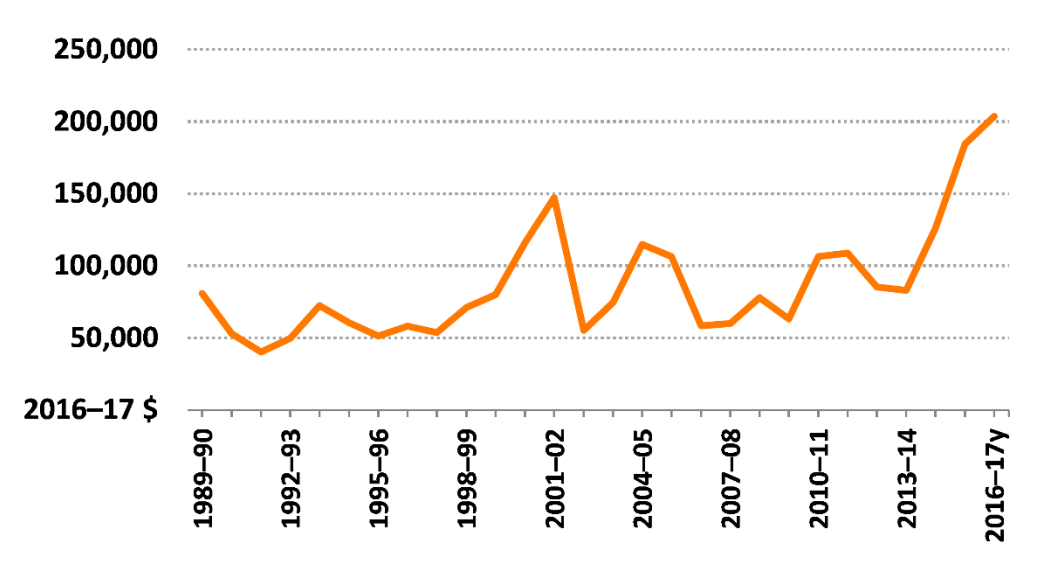
- In 2015–16 and 2016–17 farm cash incomes of Australian beef-producing farms are estimated to be the highest in over 20 years in real terms.
- Higher beef cattle prices in 2015–16 and 2016–17 contributed to strong increases in cash receipts of Australian beef-producing farms.
- Increased farm input expenditure contributed to an increase in total farm cash costs in 2015–16 and 2016–17 but was partly offset by lower interest rates on farm borrowing.
- Higher beef cattle turn-off for the three years ending 2015–16 resulted in reduced average herd sizes in most regions of Australia.
- Better seasonal conditions in 2016–17 are expected to result in some herd rebuilding, with lower turn-off of cattle for slaughter and higher calf-branding rates.

Farm cash income and profit

Average farm cash income of Australian beef farms increased by an estimated 48 per cent in 2015–16 to around $181,300 per farm (Table 1). This was the result of higher total cash receipts, partly offset by a relatively smaller increase in total cash costs. Average farm cash income is projected to increase further in 2016–17, up by 12 per cent to $204,000 per farm. In real terms, estimated average farm incomes for 2015–16 and 2016–17 will be the highest in over 20 years (Figure 1).

Figure 1 Farm cash income, beef farms, Australia, 1989–90 to 2016–17

average per farm



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

Table 1 Farm financial performance, beef farms, 2014–15 to 2016–17

average per farm

Australia	Unit	2014–15	2015–16p	2016–17y
All beef farms				
Total cash receipts	$	391,590	485,300	513,000
Total cash costs	$	269,350	303,900	309,000
Farm cash income	$	122,240	181,300	204,000
Farm business profit	$	–5,510	73,000	125,000
Rate of return[a]	%	0.6	2.1	2.9
Northern region				
Total cash receipts	$	446,610	568,800	618,000
Total cash costs	$	315,070	342,200	357,000
Farm cash income	$	131,550	226,600	262,000
Farm business profit	$	–49,160	84,600	185,000
Rate of return[a]	%	–0.1	2.2	3.6
Southern region				
Total cash receipts	$	367,790	445,900	449,000
Total cash costs	$	249,580	285,900	280,000
Farm cash income	$	118,220	160,000	169,000
Farm business profit	$	13,380	67,500	89,000
Rate of return[a]	%	1.0	2.1	2.4

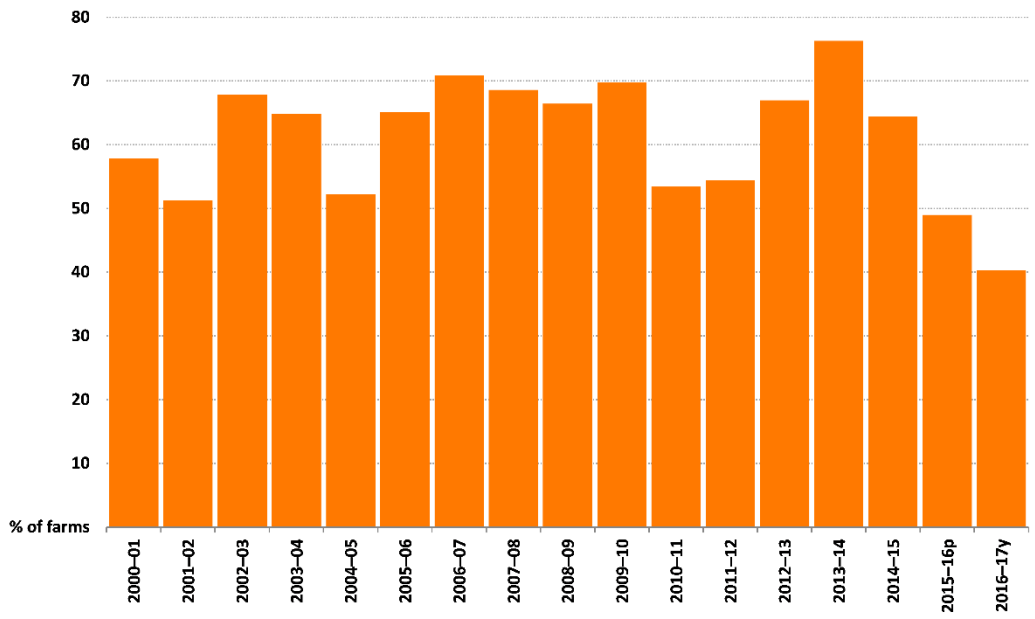
a Rate of return excluding capital appreciation. **p** Preliminary estimate. **y** Provisional estimate.
Source: ABARES Australian Agricultural and Grazing Industries Survey

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 a farm.

In 2016–17 expected increases in the size of beef cattle herds and high cattle prices will increase farm inventory values. As a result, the increase in average farm business profit is projected to be larger than the increase in farm cash income. Farm business profit of beef farms is projected to average $125,000 per farm in 2016–17, around 72 per cent higher than in 2015–16 and the highest in the past 20 years in real terms.

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 incomes fluctuate. However, ongoing low or negative profits affect long-term viability because farms have reduced capacity to invest in newer and more efficient technologies. Over the 10 years to 2015–16, the proportion of beef farms recording negative farm business profits averaged 64 per cent a year. Improved farm financial performance in 2016–17 is projected to result in a decline in the proportion of farms recording negative farm business profit to 40 per cent (Figure 2).

Figure 2 Proportion of beef farms with negative farm business profit, Australia, 2000–01 to 2016–17



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

Total cash receipts

In 2015–16 average total cash receipts for beef-producing farms increased by 24 per cent to around $485,300 per farm (Table 1), largely as a result of higher beef cattle receipts. Higher receipts were mainly driven by a significant rise in average unit cattle prices and increased turn-off of beef cattle in some areas affected by dry seasonal conditions. When averaged over the three years to 2016–17, receipts from beef cattle accounted for around 62 per cent of total cash receipts for beef-producing farms at the national level. On average, the next largest proportion of receipts was from sales of crops, followed by smaller receipts from sheep, lambs and wool.

Average total cash receipts at the national level are projected to increase further in 2016–17 to around $513,000 per farm, largely driven by higher beef cattle receipts. Rising cattle prices are estimated to more than offset a projected decline in the number of cattle sold in 2016–17. Declining sales are expected to result from herd rebuilding in response to improved seasonal conditions in many beef-producing areas.

Total cash costs

Average total cash costs of Australian beef farms increased by 13 per cent to around $303,900 per farm in 2015–16 and are projected to rise by a further 2 per cent in 2016–17 (Table 1). Higher estimated cash costs in 2015–16 and 2016–17 were partly a result of higher prices paid for store and breeding cattle as well as increased expenditure on hired labour, fertiliser, fodder, crop and pasture chemicals, and repairs and maintenance.

Performance by region and herd size

Most of the increase in average farm cash income at the national level was due to large increases in the incomes of beef farms in the Northern region (Table 1), particularly large and

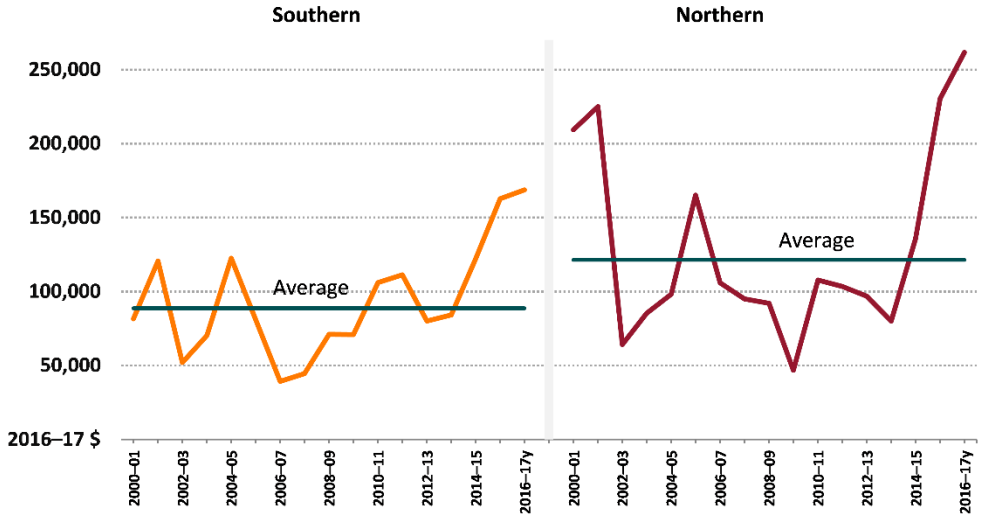
medium-large farms (Figure 3 and Figure 4). The Northern and Southern regions recorded year-on-year increases in average farm cash incomes in 2015–16, but the Northern region recorded a much larger increase in absolute and percentage terms. In 2016–17 the average farm cash incomes in both regions is projected to be the highest on record at around $169,000 in the Southern region and $262,000 in the Northern region (Figure 3).

In the Southern region, average farm cash income between 2000–01 and 2015–16 was around $89,000 per farm (in 2016–17 dollars) (Figure 3). Extended drought conditions in 2006–07 resulted in the lowest recorded average farm cash income over the period.

Average farm cash income for the Northern region between 2000–01 and 2015–16 was around $121,000 per farm (in 2016–17 dollars). In 2009–10 low beef prices and reduced turn-off because of restocking activities resulted in the lowest average farm cash income over the 16-year period.

Figure 3 Farm cash income, by region, 2000–01 to 2016–17

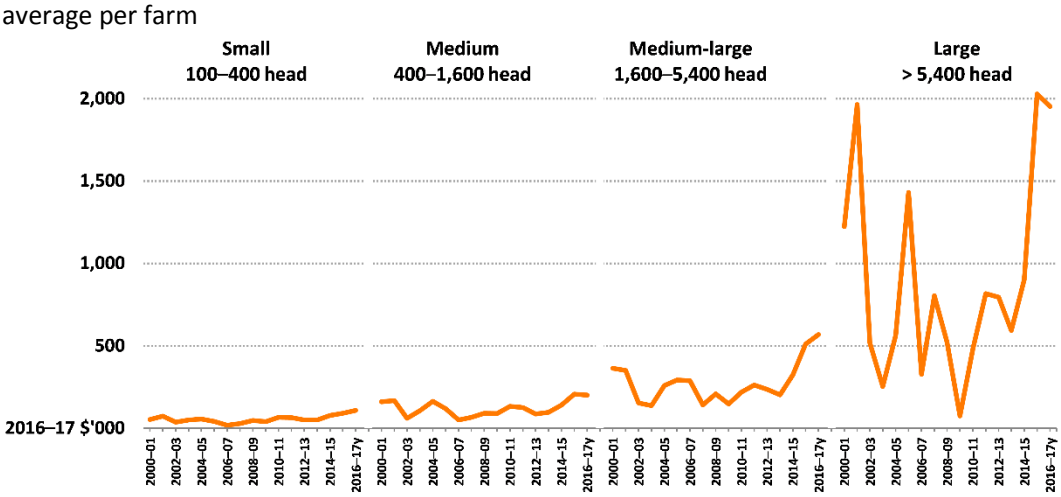
average per farm



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

On average, farm cash incomes for large beef-producing farms (more than 5,400 head of cattle) increased by 128 per cent in 2015–16, compared with a projected slight fall in 2016–17 (Figure 4). Incomes of large farms are projected to fall because of reduced beef receipts arising from herd rebuilding. The average farm cash incomes for small (100–400 head), medium (400–1,600 head) and medium-large (1,600–5,400 head) beef farms also increased significantly in 2015–16. Incomes for small and medium-large farms are projected to increase in 2016–17 because higher crop receipts more than offset lower beef receipts. Incomes for medium size farms are projected to fall slightly because of herd rebuilding and consequent lower beef receipts.

Figure 4 Farm cash income, by herd size, Australia, 2000–01 to 2016–17



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

Total cash receipts

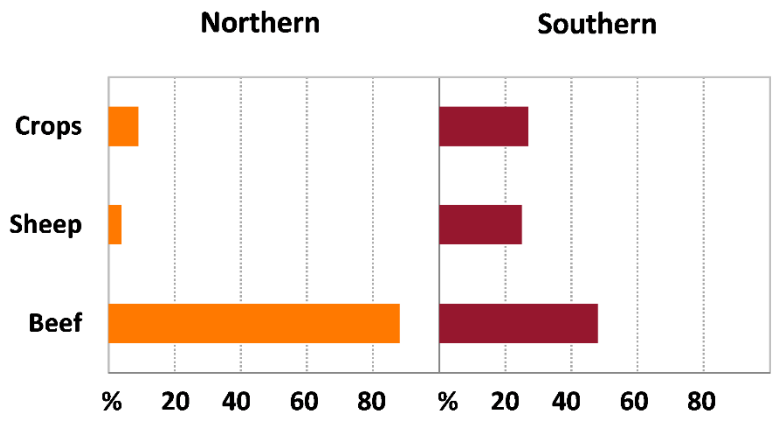
In the Northern region, total cash receipts increased by more than 27 per cent to around $568,800 per farm in 2015–16 (Table 1). In the Southern region, total cash receipts increased by around 21 per cent to an estimated $445,900 per farm in the same year. In 2016–17 total cash receipts are projected to increase by around 9 per cent in the Northern region and 1 per cent in the Southern region.

In the Northern region, beef cattle receipts accounted for an average of 88 per cent of total enterprise receipts between 2000–01 and 2015–16 (Figure 5). In 2016–17 receipts from all enterprises are projected to rise in the Northern region (Figure 6). Receipts from the sale of beef cattle are projected to account for 85 per cent of total enterprise receipts.

In the Southern region, between 2000–01 and 2015–16 beef cattle receipts accounted for an average of 48 per cent of total enterprise receipts, crops accounted for 27 per cent and sheep for 25 per cent. In 2016–17 crop and sheep receipts for beef-producing farms in the Southern region are projected to increase, but beef receipts are projected to decline.

Figure 5 Contribution of receipts, by enterprise, by region, 2000–01 to 2015–16

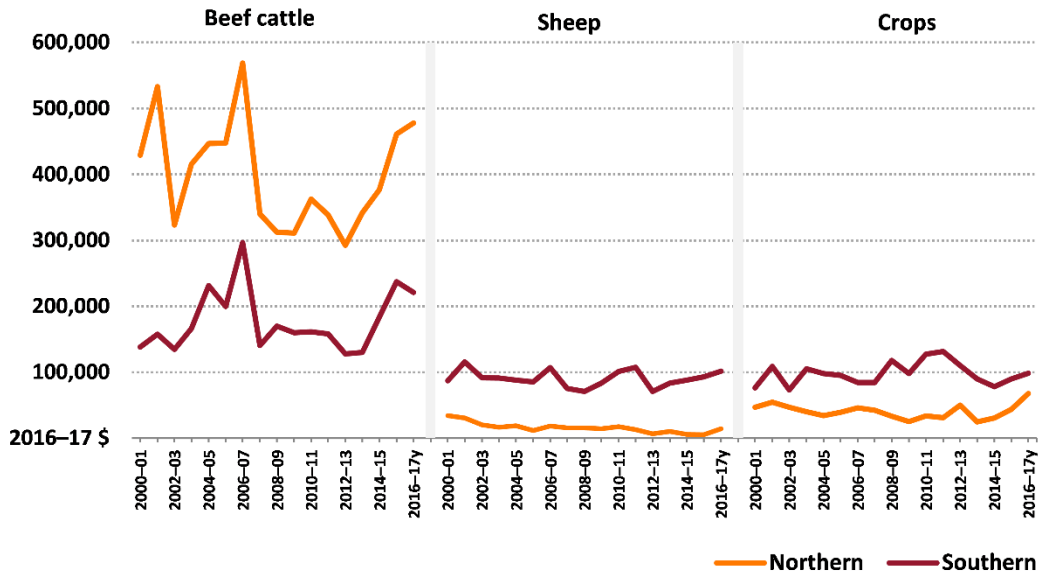
average per farm



Source: ABARES Australian Agricultural and Grazing Industries Survey

Figure 6 Cash receipts by source, by region, 2000–01 to 2016–17

average per farm



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

Total cash costs

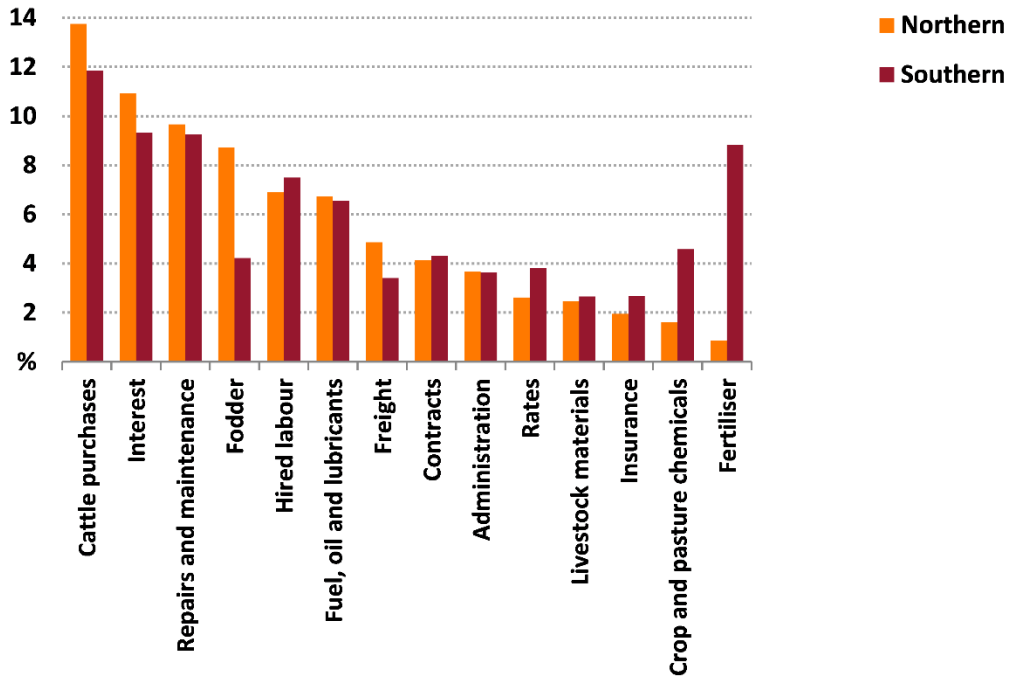
In the Southern region, total cash costs increased by 15 per cent in 2015–16. The largest rises were in beef cattle purchases, electricity, hired labour, and fertiliser expenditure. In 2016–17 total cash costs in the region are projected to fall by around 2 per cent.

In the Northern region, total cash costs rose by around 9 per cent in 2015–16 and are projected to rise by a further 4 per cent in 2016–17. Increased expenditure on hired labour, chemicals, repairs and maintenance, contracts and beef cattle purchases was partly offset by declines in other cost items in 2015–16.

Between 2000–01 and 2015–16 cattle purchases, interest, and repairs and maintenance accounted for the largest shares of total cash costs in the Southern and Northern regions (Figure 7). Other items accounting for more than 5 per cent of total cash costs in the Northern region in that period were fodder, hired labour, and fuel, oil and lubricants. In the Southern region, fertiliser, hired labour, and fuel, oil and lubricants each accounted for more than 5 per cent of total cash costs.

Figure 7 Components of total costs, beef farms, by region, 2000–01 to 2015–16

average per farm



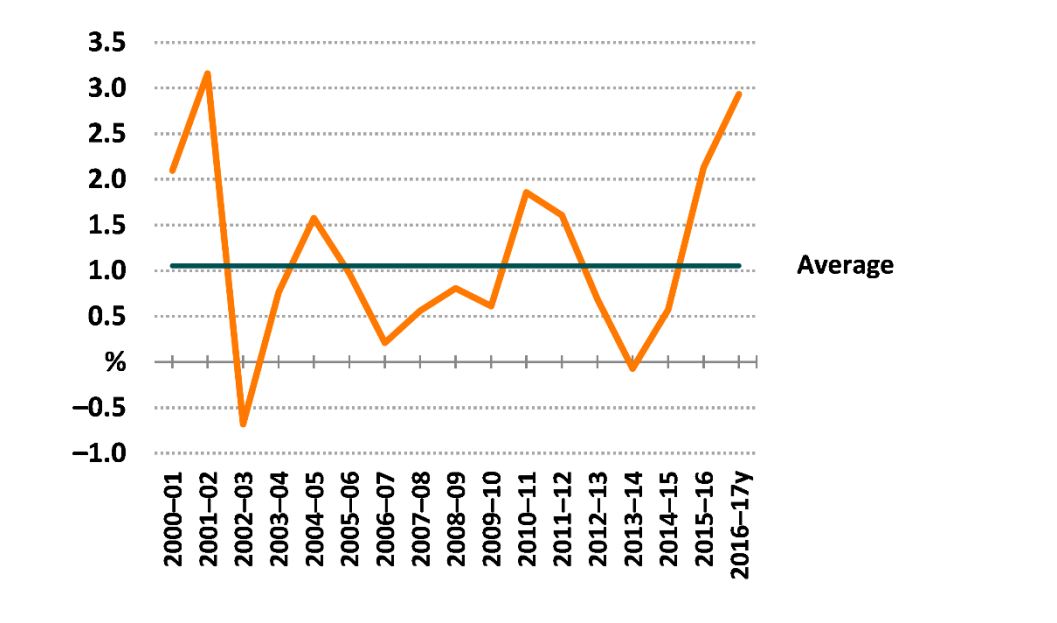
Source: ABARES Australian Agricultural and Grazing Industries Survey

Rate of return

The average rate of return (excluding capital appreciation) of Australian beef cattle farms increased from 0.6 per cent in 2014–15 to 2.1 per cent in 2015–16 (Figure 8). This reflects the large increases in farm incomes. The average rate of return is projected to increase further in 2016–17 to around 2.9 per cent, the highest since 2001–02. Between 2000–01 and 2015–16 the average rate of return (excluding capital appreciation) was 1.1 per cent.

Figure 8 Rate of return, beef farms, Australia, 2000–01 to 2016–17

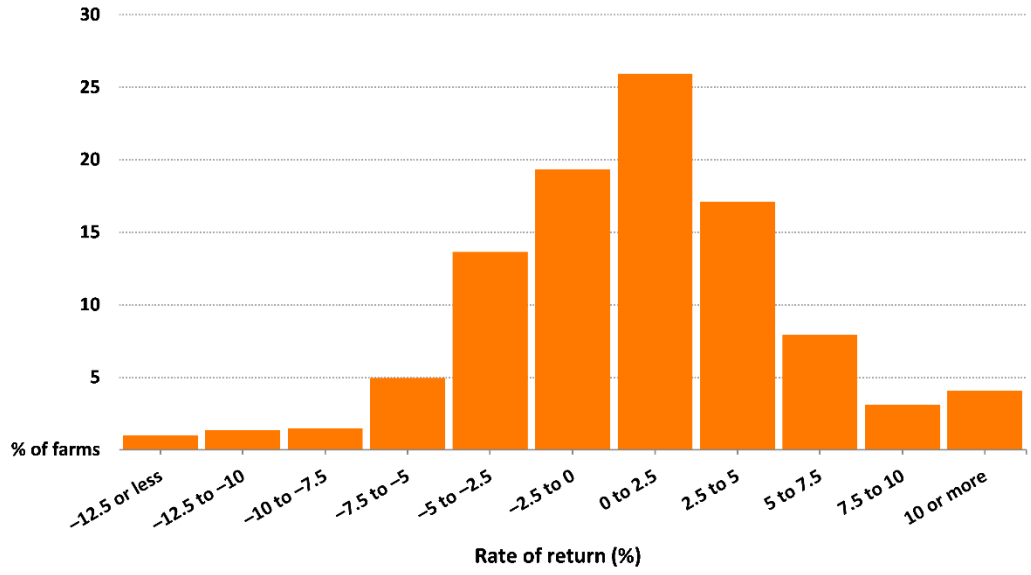
average per farm



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

Figure 9 shows that the performance of beef cattle farms varied widely in 2015–16. Nearly 20 per cent of beef farms recorded a rate of return (excluding capital appreciation) of between –2.5 per cent and 0, compared with over one-quarter of farms with a rate of return of between 0 and 2.5 per cent. Improved financial performance in 2015–16 resulted in a larger proportion of beef farms recording a rate of return (excluding capital appreciation) greater than 2.5 per cent (up from 19 to 32 per cent). This reduced the proportion of farms with rates of return below –2.5 per cent (down from 19 to 9 per cent).

Figure 9 Distribution of beef farms, by rate of return, 2015–16



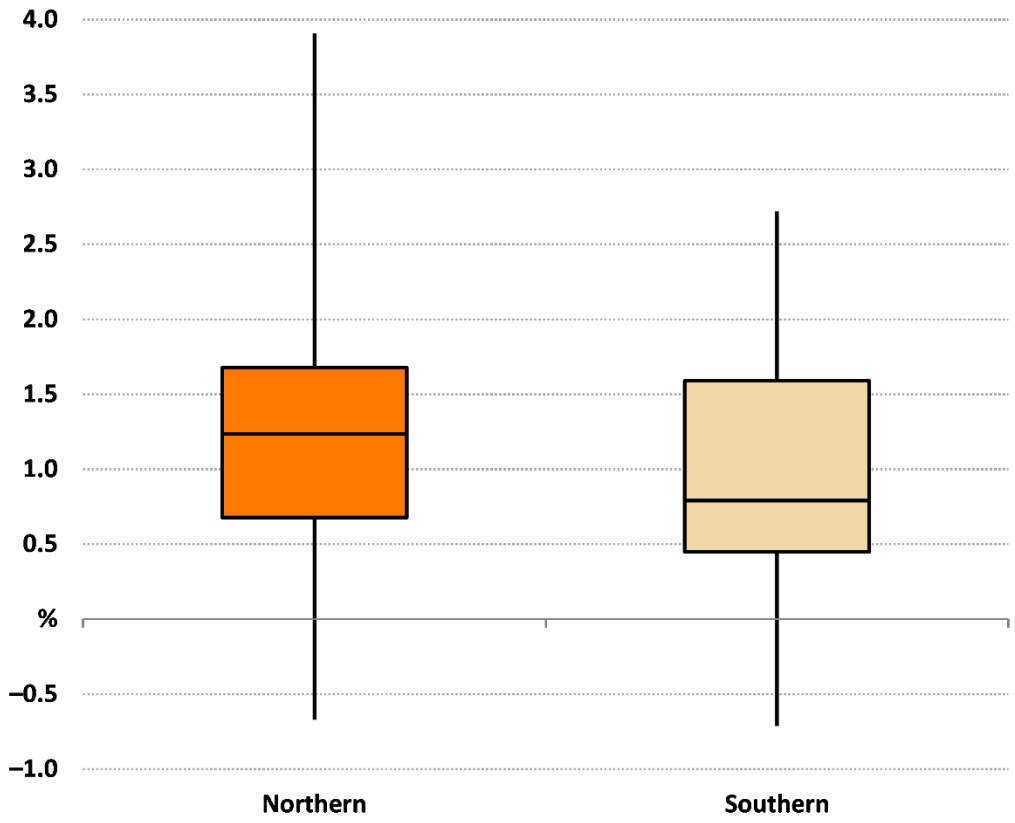
Source: ABARES Australian Agricultural and Grazing Industries Survey

Variation in rates of return

The long-term performance of farm businesses is determined by the level and variability of profits. Figure 10 shows the variation in the average farm rate of return to capital (excluding capital appreciation) between 2000–01 and 2015–16. The variation in returns reflects changes over time in average seasonal conditions, commodity prices and the cost of farm inputs recorded in each region. Individual farms are likely to have experienced different variations in returns over the period, depending on seasonal conditions and commodity prices that were realised and other farm-specific factors such as enterprise mix and the skill of the manager.

The Northern region performed slightly better in the best 25 per cent of years and had a higher median rate of return.

Figure 10 Rate of return variability, by region, 2000–01 to 2015–16



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 line in each box is the median.
Source: ABARES Australian Agricultural and Grazing Industries Survey

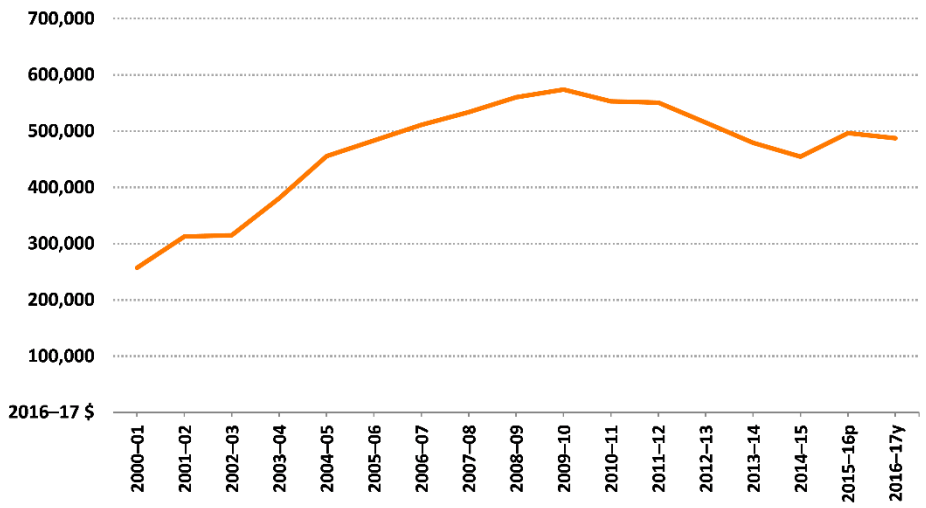
2 Farm debt and equity

Trends in average debt per farm

Debt is an important source of funds for investment and ongoing working capital for many beef farms. At the national level, from 2000–01 to 2009–10 average debt of beef farms at 30 June rose significantly in real terms before falling in the years to 2014–15 (Figure 11). From 2014–15 to 2015–16 average debt per farm increased by around 9 per cent to $496,700 (in 2016–17 dollars). This can largely be attributed to increases in debt for working capital. Average debt of beef farms for 2016–17 is projected to decline slightly.

Figure 11 Total farm debt at 30 June, beef farms, Australia, 2000–01 to 2016–17

average per farm



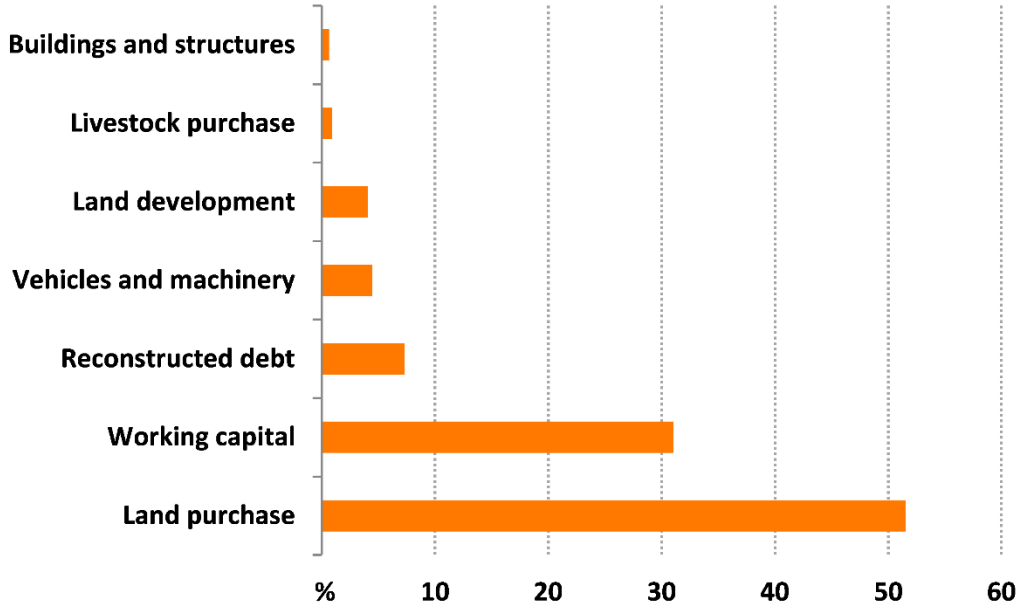
p Preliminary estimate. **y** Provisional estimate.
Source: ABARES Australian Agricultural and Grazing Industries Survey

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 2015–16 land purchases accounted for the largest proportion of total farm debt, at 52 per cent on average (Figure 12). A further 31 per cent of debt was for working capital. The remaining debt was for a range of purposes such as vehicles and machinery, and buildings and structures.

Figure 12 Main purpose of farm debt, beef farms, Australia, 2013–14 to 2015–16

average proportion per farm



Source: ABARES Australian Agricultural and Grazing Industries Survey

Equity ratio

Changes in average debt per farm over the medium to long term were largely matched by changes in total farm equity. As a consequence, the average equity ratio of beef farms at the national level remained steady from 2000–01 to 2015–16 at an average of around 90 per cent. A decline in land values in 2008–09 reduced beef farm equity in some regions and the average equity ratio declined slightly, to less than 90 per cent.

In 2015–16 an estimated 76 per cent of beef farms had an equity ratio of 90 per cent or more (Table 2). On average, these farms were relatively small and most were in the Southern region. They focused primarily on beef cattle production, receiving a relatively high proportion of total cash receipts from sales of beef cattle. Those farms with an equity ratio of less than 70 per cent make up 6 per cent of all beef farms. These farms are relatively large and more diversified than the higher-equity farms.

Table 2 Farm performance, by equity ratio, beef farms, Australia, 2015–16

average per farm

Equity ratio	Units	More than 90%	70 to 90%	Less than 70%
Proportion of farms	%	76	19	6
Total area operated	ha	6,100	12,900	13,100
Beef receipts as a proportion of total receipts	%	72	54	48
Proportion in Northern region	%	31	31	48
Proportion in Southern region	%	69	69	52

Source: ABARES Australian Agricultural and Grazing Industries Survey

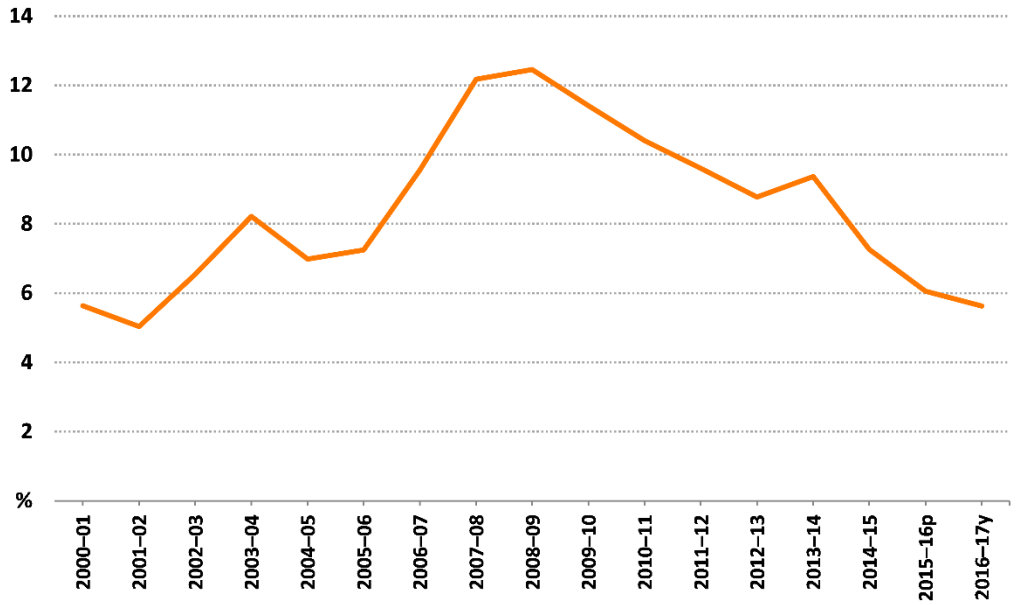
Debt-servicing capacity

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.

From 2000–01 to 2015–16 the proportion of farm receipts needed to fund interest payments fluctuated, averaging around 9 per cent (Figure 13). In 2016–17 interest paid is projected to be around 6 per cent of total cash receipts. Increases in cash receipts and reduced interest rates over the 7 years to 2016–17 resulted in a large decline in the ratio of interest paid to total cash receipts.

Figure 13 Ratio of interest paid to total cash receipts, beef farms, Australia, 2000–01 to 2016–17

average per farm

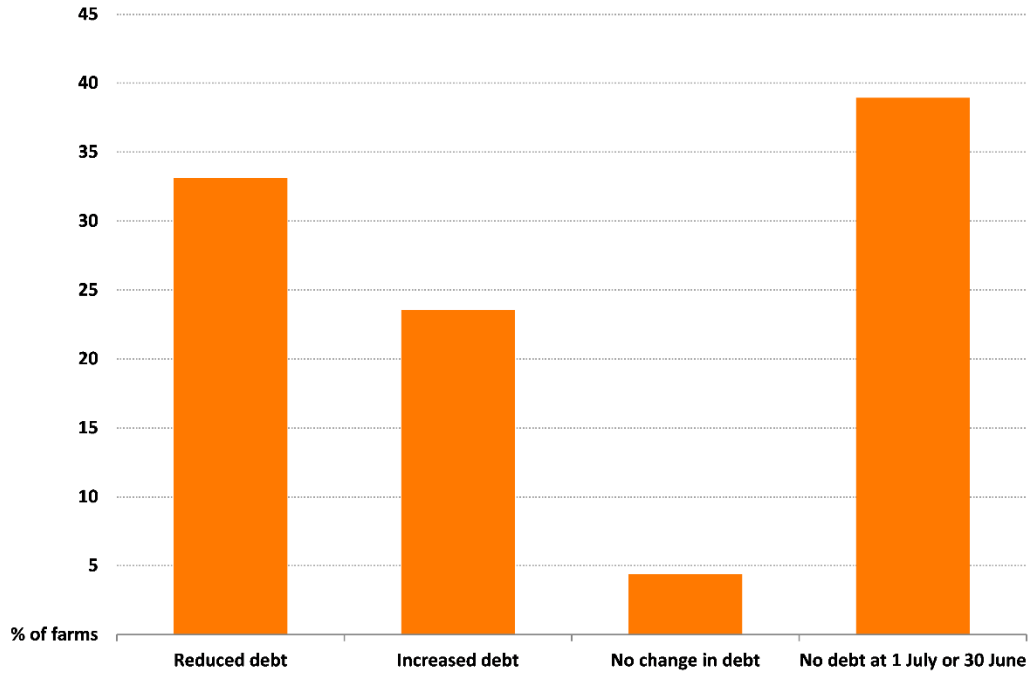


p Preliminary estimate. **y** Provisional estimate.
Source: ABARES Australian Agricultural and Grazing Industries Survey

At the national level, around 33 per cent of beef farms reduced their total debt in 2015–16 (Figure 14). An estimated 24 per cent of beef farms increased their debt, and around 4 per cent of farms had no change in debt. The remaining 39 per cent of farms had no debt at 1 July 2015 and 30 June 2016.

Figure 14 Distribution of farms, by change in debt, beef farms, Australia, 2015–16

proportion of farms

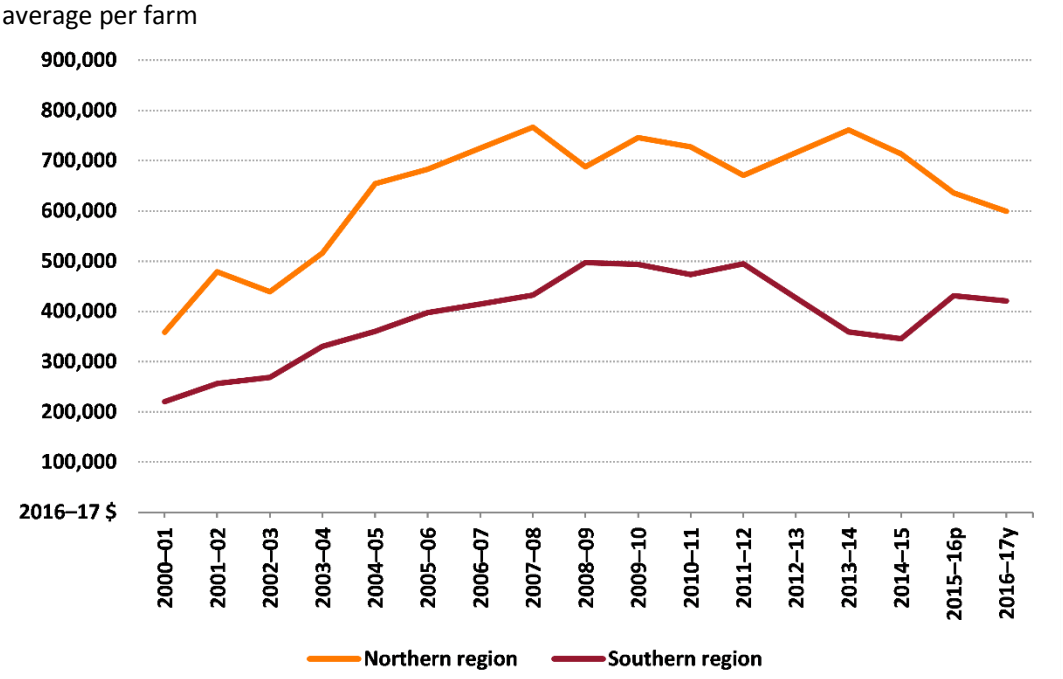


Note: Change in debt from 1 July 2015 to 30 June 2016.
Source: ABARES Australian Agricultural and Grazing Industries Survey

Debt and equity, by region

Debt and equity of beef farms varied significantly by region and scale of cattle production. Beef farms in the Northern region had higher average debt and lower farm equity ratios than those in the Southern region, mainly because the Northern region had a higher proportion of large farms. Around 19 per cent of beef cattle farms in the Northern region had more than 1,600 head of cattle, compared with 4 per cent in the Southern region. Despite differences in average debt per farm, from 2000–01 to 2016–17 trends in farm debt were similar in both regions (Figure 15).

Figure 15 Total farm debt, beef farms, by region, 2000–01 to 2016–17



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

Between 2000–01 and 2015–16 the equity ratio of beef farms in both the Southern and Northern regions averaged around 90 per cent.

Debt and equity, by size

From 2000–01 to 2016–17 small and medium beef farms (100–1,600 head) accounted for most of the change in national average farm debt. Combined, these sized farms accounted for 70 per cent of Australian beef farm debt in 2016–17. From 2000–01 to 2016–17, the average debt of all size groups rose, however from 2008–09 average debt trended downwards.

Larger farms tend to have lower equity ratios than smaller farms (Table 3). This is because larger farms usually have higher turnover and are better able to service debt. Larger beef farms also often have access to non-farm equity and smaller farms are mostly family-owned businesses that rely heavily on the farmer's own capital. Since the early 2000s, the equity ratio of medium and very large farms has declined. The fall is most pronounced for very large farms, where the average equity ratio fell from over 93 per cent in 2005–06 to around 78 per cent in 2015–16. This can be attributed to very large farms having higher debt and being more affected by falling land values than smaller farms (Martin 2013). The equity ratio of large farms also trended downwards until 2010–11 to around 85 per cent but has since risen.

Table 3 Equity ratio and total farm debt, beef farms, by size, 2013–14 to 2015–16

average per farm

Size	Equity ratio (%)			Total farm debt ($)		
	2013–14	2014–15	2015–16p	2013–14	2014–15	2015–16p
Small 100–400 head	92	92	92	209,830	220,910	223,700
Medium 400–1,600 head	89	89	89	576,800	545,150	665,200
Large 1,600–5,400 head	88	88	89	1,339,930	1,366,270	1,427,300
Very large > 5,400 head	77	80	78	5,564,500	4,920,010	5,604,600

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

Distribution of farms, by debt and equity

Table 4 shows the distribution of beef farms by debt and equity ratio at 30 June 2016. An estimated 43 per cent of beef farms in Australia held no debt at 30 June 2016. A further 16 per cent held less than $100,000 in debt. An estimated 12 per cent of farms had debt in excess of $1 million. Around 76 per cent of beef farms had an equity ratio of more than 90 per cent in 2015–16.

Table 4 Distribution of farms, by farm business debt and equity ratio, beef farms, Australia, 30 June 2016

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%	43	16	9	5	2	1	0	76
80 to less than 90%	0	0	1	4	4	2	1	12
70 to less than 80%	0	0	0	0	2	2	2	6
60 to less than 70%	0	0	0	0	1	1	2	3
Less than 60%	0	0	0	0	0	1	1	2
Total	43	16	10	9	9	6	6	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

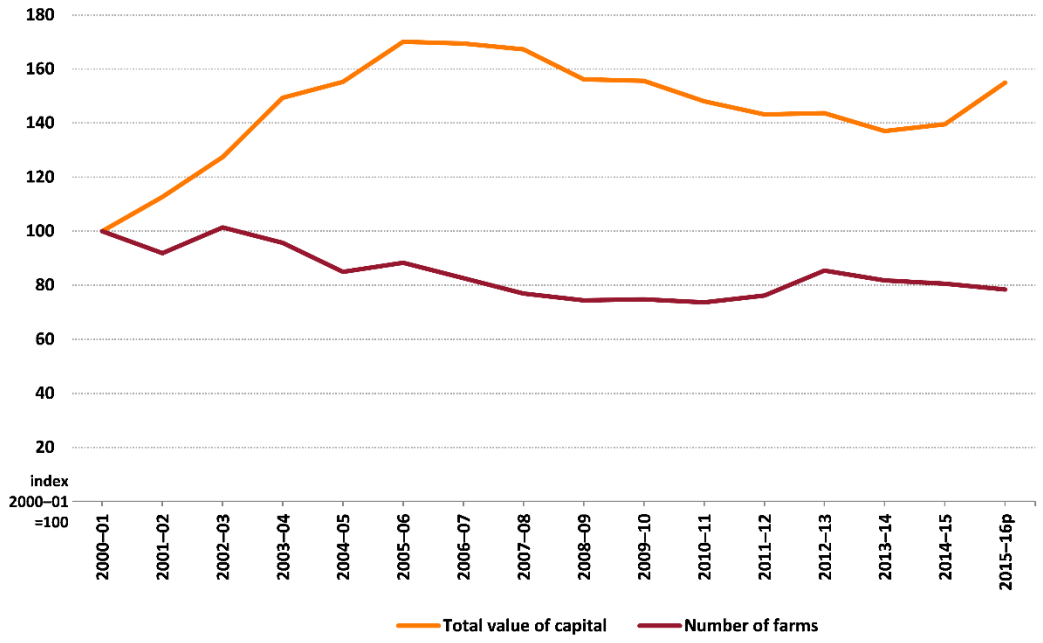
Total farm capital

From 2000–01 to 2015–16 the gross value of Australian cattle and calf production increased by around 47 per cent in real terms to an estimated $14 billion. Over the same period the number of beef farms declined by 22 per cent and, consequently, the gross value of production per farm increased.

Investment in farm capital is important for the ongoing development of the Australian beef 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 beef farmers' capacity to generate farm outputs.

The total value of capital for Australian beef farms increased by around 55 per cent in real terms from 2000–01 to 2015–16, although the number of beef farms declined (Figure 16). On a per farm basis, total capital increased by 98 per cent to an estimated $5.4 million per farm in 2015–16, largely as a result of appreciation in land values.

Figure 16 Total value of capital and number of farms, beef farms, Australia, 2000–01 to 2015–16

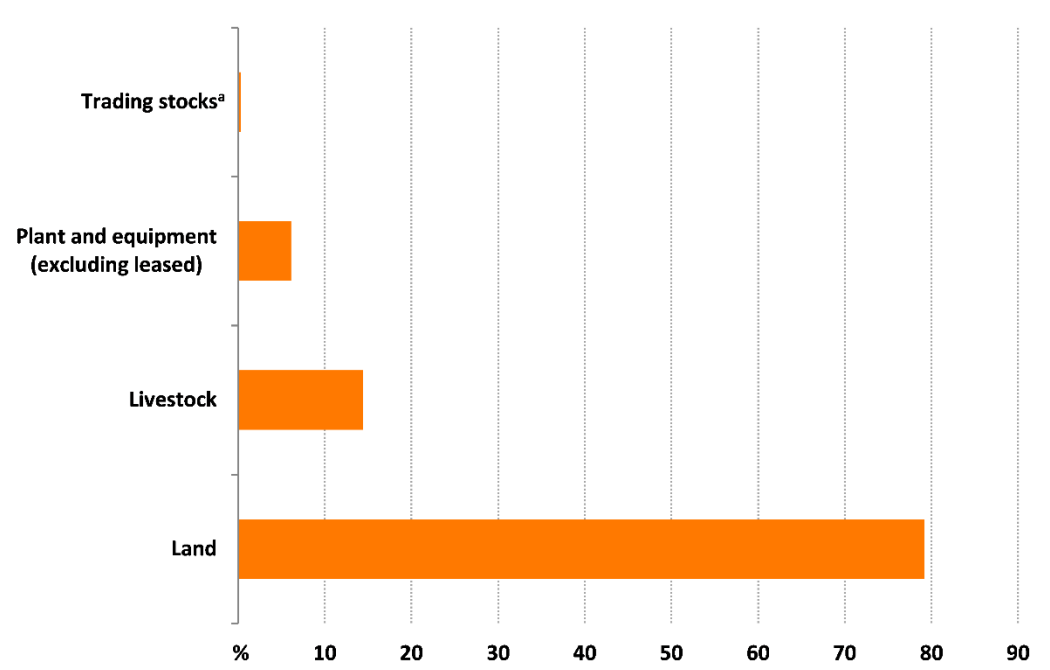


p Preliminary estimate.
Source: ABARES Australian Agricultural and Grazing Industries Survey

Land accounted for an average of 79 per cent of total capital per farm between 2011–12 and 2015–16 (Figure 17). Livestock accounted for a further 14 per cent of total capital, and plant and equipment accounted for about 6 per cent. In 2014–15 and 2015–16 higher beef prices raised the value of livestock on hand. The resulting increase in the capital value of livestock was partly offset by falling herd sizes on average as beef producers sold cattle in response to higher prices and dry conditions in some areas (particularly Queensland).

Figure 17 Components of capital, beef farms, Australia, 2011–12 to 2015–16

average per farm



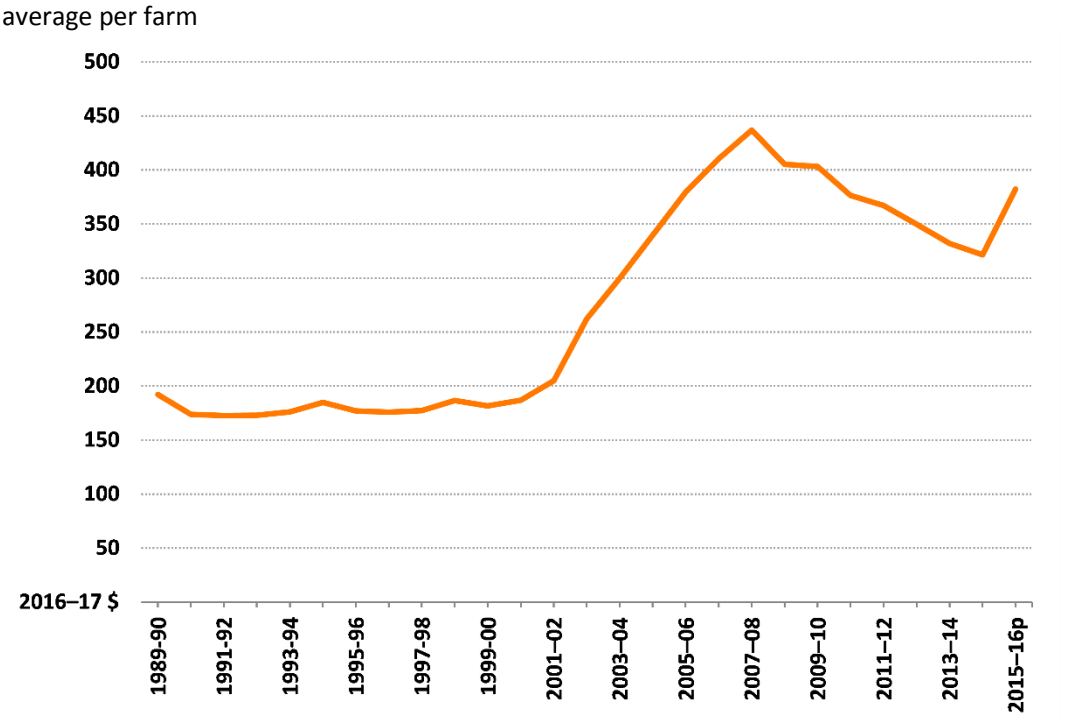
a The value of all inventories including herd, flock, stocks of wool, fruit and grains held on the farm at 30 June.
Source: ABARES Australian Agricultural and Grazing Industries Survey

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 18 shows the average value of land and fixed improvements per hectare. In real terms, the average value for beef farms increased by 105 per cent from 2000–01 to 2015–16, with an average annual return from land appreciation of 5.2 per cent. From 1990–91 to 1999–2000 the average annual return from land appreciation was –0.5 per cent before stronger demand for farmland led to sharp increases in land values. From 2000–01 to 2006–07 the average annual return from land appreciation was 12.6 per cent before declining to an average of –0.5 per cent for 2007–08 to 2015–16.

Figure 18 Value of land and fixed improvements per hectare, beef farms, Australia, 1989–90 to 2015–16



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

New farm investment

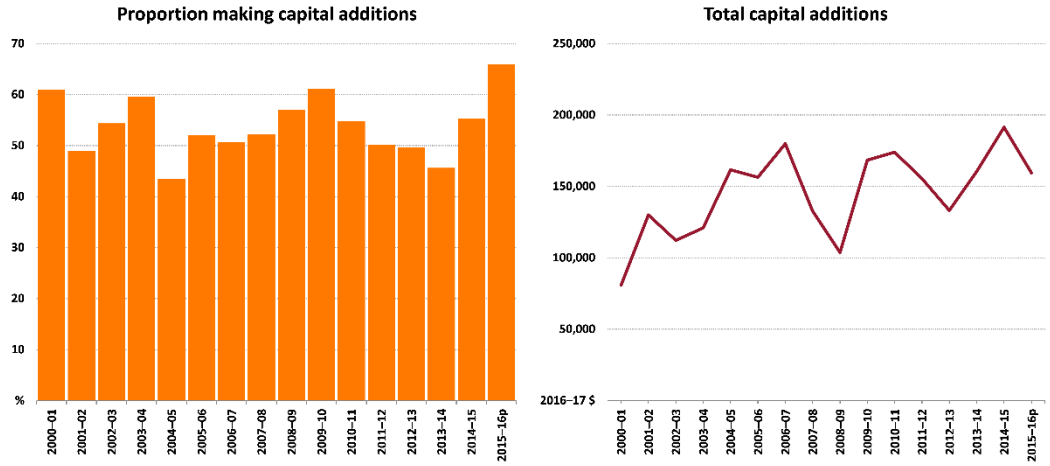
Most farmers make new investments each year to add to the existing capital stock or to replace capital items that have reached the end of their useful life. Farm investments are usually made with longer-term outcomes in mind and based on expected returns over the life of the investment.

On average, 54 per cent of beef farms each year made additions to their total capital over the 10 years to 2015–16 (Figure 19). The average amount invested each year by those making capital additions fluctuated around an average of $156,000, broadly in line with movements in farm cash incomes.

In 2015–16 an estimated 66 per cent of beef farms made capital additions at an average of $159,400 per farm. More farms made capital additions than in any of the previous 16 years, in response to significantly higher average farm cash incomes.

Figure 19 Total capital additions, beef farms, Australia, 2000–01 to 2015–16

proportion of farms and average per farm



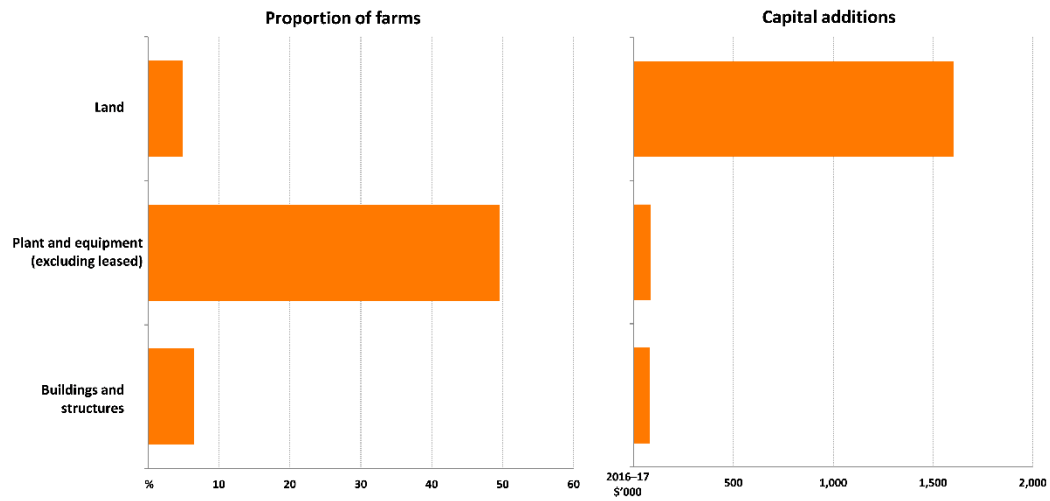
p Preliminary estimate.
Note: Total capital additions is the average of those farms making capital additions.
Source: ABARES Australian Agricultural and Grazing Industries Survey

Figure 20 shows the average proportion of beef producers that made capital additions each year from 2011–12 to 2015–16 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 less than 5 per cent of beef producers bought land each year on average between 2011–12 and 2015–16. Average expenditure on land for those making purchases was around $1.6 million per farm.

Around 50 per cent of all beef producers made additions to plant and equipment on average each year over the period, at an average of around $86,000 per farm. Around 7 per cent of beef producers made additions to buildings and structures. Expenditure on these capital additions averaged around $83,000 per farm.

Figure 20 Components of capital additions, beef farms, Australia, 2011–12 to 2015–16

proportion of farms and average per farm in category



Source: ABARES Australian Agricultural and Grazing Industries Survey

Farm capital and investment by region

Trends in the total value of farm capital were similar in the Northern and Southern regions from 2000–01 to 2015–16. In each region, the total value of capital increased and the number of farms decreased.

The Northern region has fewer farms but larger land area and higher capital per farm than the Southern region. In the Northern region, the total value of capital of all beef farms increased by 55 per cent in real terms from 2000–01 to 2015–16. The number of farms declined by around 6 per cent and average capital per farm increased by 66 per cent. The Northern region accounted for 37 per cent of total Australian beef farm capital in 2015–16, the same proportion as in 2000–01.

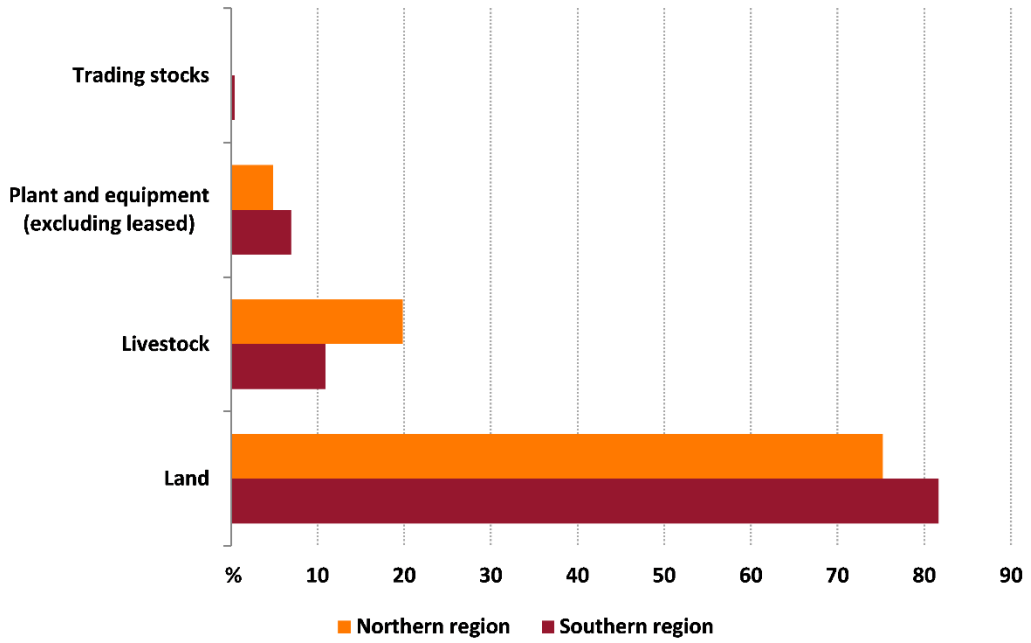
In the Southern region, the total value of capital of all beef farms also increased by 55 per cent in real terms from 2000–01 to 2015–16. The number of farms declined by an estimated 27 per cent and average capital per farm increased by 113 per cent. The Southern region accounted for 63 per cent of total beef farm capital in 2015–16, the same proportion as in 2000–01.

From 2011–12 to 2015–16 beef farms in the Southern region had a higher proportion of farm capital in land (82 per cent) on average than those in the Northern region (75 per cent) (Figure 21). This is partly attributable to the higher average unit value of land in the Southern region, which is more than double the per hectare value in the Northern region (Figure 22), despite farms in the Northern region operating larger areas on average.

Because of the mixed nature of many beef farms in the Southern region, livestock accounts for a smaller proportion of total capital in that region than in the Northern region.

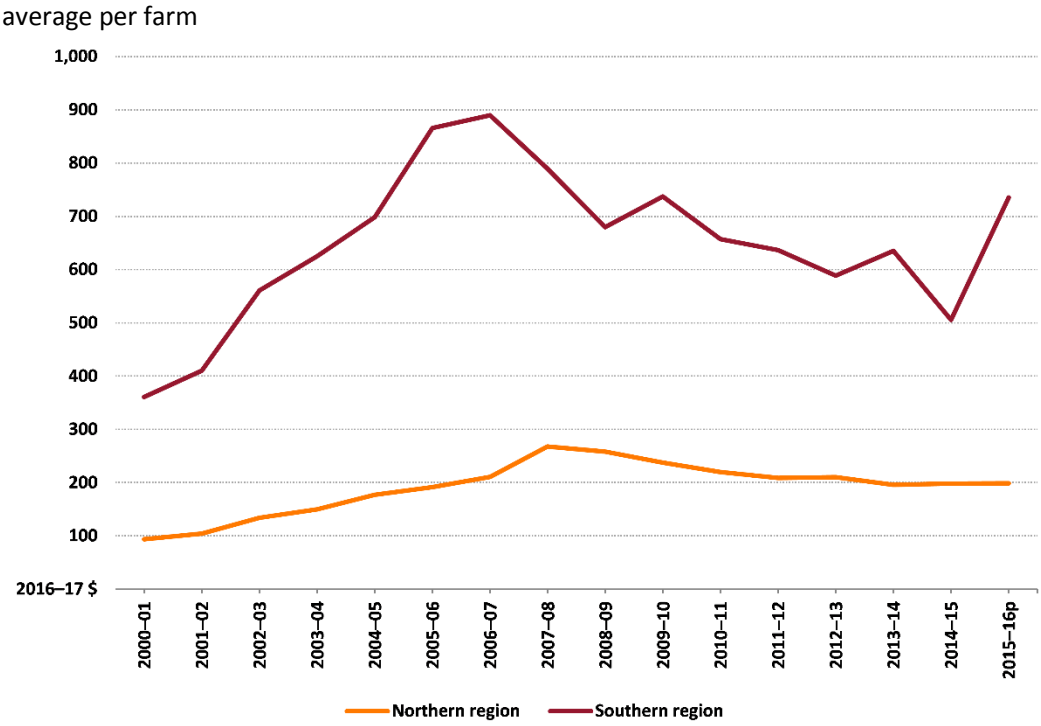
Figure 21 Components of capital, beef farms, by region, 2011–12 to 2015–16

average per farm



Source: ABARES Australian Agricultural and Grazing Industries Survey

Figure 22 Value of land and fixed improvements per hectare, beef farms, by region, 2000–01 to 2015–16



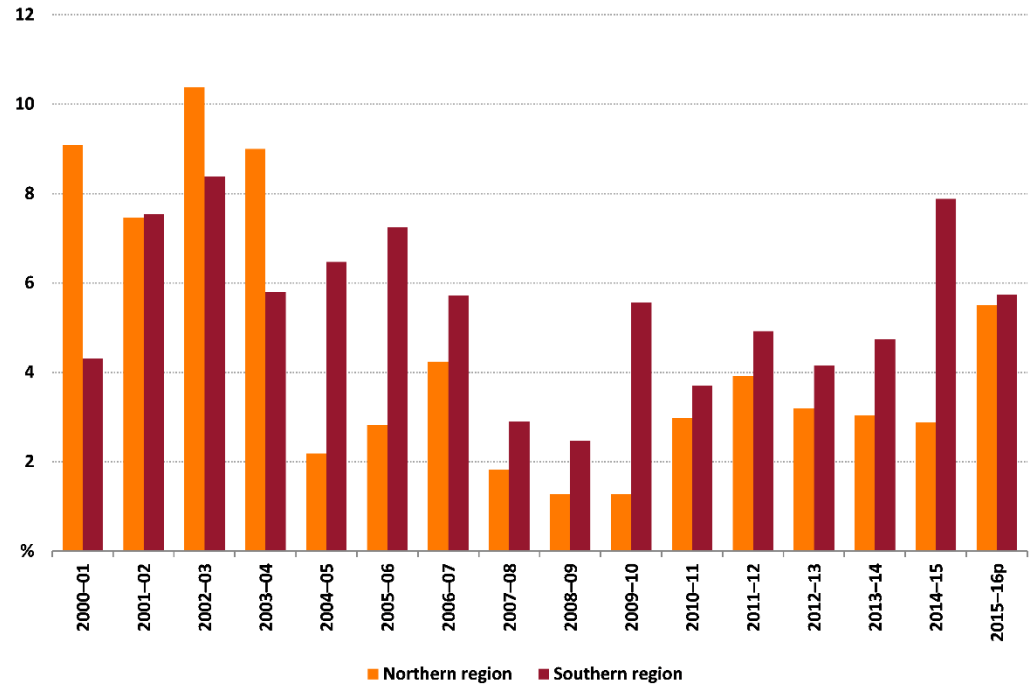
p Preliminary estimate.
Source: ABARES Australian Agricultural and Grazing Industries Survey

The proportion of beef farmers making additions to total capital stock varies in each region from year to year depending on farm incomes, although the average over the 10 years to 2015–16 was similar in both regions.

In most years the proportion of beef farms purchasing land is higher in the Southern region than the Northern region (Figure 23). However, average land expenditure of those making land additions in the Northern region is around double that in the Southern region as a result of the significantly larger average farm size in the Northern region.

Figure 23 Proportion of farms making land additions, beef farms, by region, 2000–01 to 2015–16

proportion of farms



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

Farm capital and investment by size

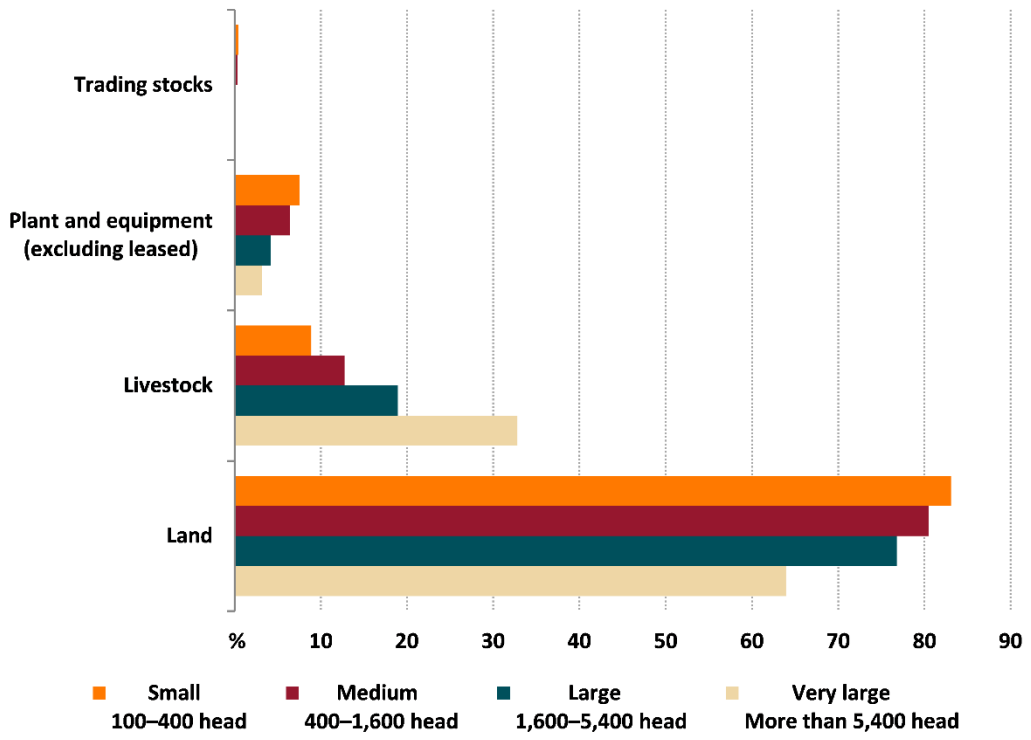
Beef farms in all size groups became more capital intensive between 2000–01 and 2015–16. The average amount of labour used per farm declined over the period, which resulted in an increase in the proportion of non-land capital used per unit of labour.

Small beef farms (100–400 head) owned the largest proportion of national beef farm capital in 2015–16 (37 per cent) and made up 57 per cent of beef farms. From 2000–01 to 2015–16 the aggregate value of capital of small beef farms rose by around 37 per cent despite a 26 per cent decline in the number of small beef farms.

Small beef farms often have mixed enterprises and are mostly located in areas with higher rainfall, which have higher land values. Land makes up the largest proportion of total capital for these farms out of all beef farm size groups, at around 83 per cent (Figure 24). Small beef farms also have a greater proportion of total capital from plant and equipment than other size groups due to cropping and other activities.

Figure 24 Components of capital, beef farms, by size, 2011–12 to 2015–16

average per farm



Source: ABARES Australian Agricultural and Grazing Industries Survey

Medium beef farms (400–1,600 head) owned about 36 per cent of the national beef farm capital stock in 2015–16 and made up 33 per cent of the number of beef farms. The aggregate value of capital of medium-sized beef farms rose by around 60 per cent between 2000–01 and 2015–16, despite the number of farms decreasing by about 15 per cent.

The aggregate value of capital of large beef farms (1,600–5,400 head) represented 18 per cent of national beef farm capital in 2015–16 and these farms made up 8 per cent of Australian beef farms. The value of capital rose by about 79 per cent from 2000–01 to 2015–16, despite the number of large beef farms remaining steady.

Very large beef farms (more than 5,400 head) owned around 10 per cent of Australian beef farm capital in 2015–16 and made up 2 per cent of the total number of beef farms. The aggregate value of very large beef farm capital rose by 78 per cent from 2000–01 to 2015–16, although the number of farms fell by around 7 per cent.

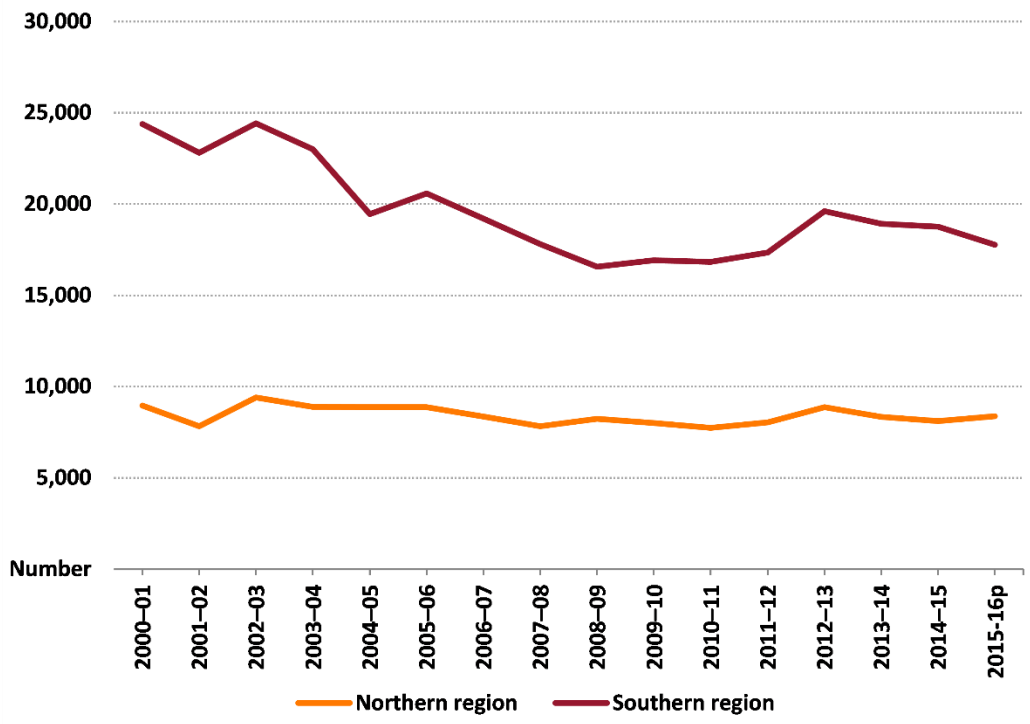
Very large beef farms are generally pastorally focused and have a greater quantity of less fertile land with a lower average value per hectare than other size groups. Combined with the greater number of cattle on hand, this results in very large farms having a significantly lower proportion of total capital held in land and a greater proportion embodied in the cattle stock (Figure 24).

4 Physical characteristics

In 2015–16 an estimated 26,000 Australian farms had at least 100 head of cattle at 30 June. Around 68 per cent of these farms were in the Southern region and the remaining 32 per cent were in the Northern region (Map 1).

From 2000–01 to 2015–16 the total number of Australian beef farms fell by around 22 per cent. Most of this decline was in the Southern region, where the number of beef farms fell by 27 per cent (Figure 25). The number of beef farms in the Northern region remained relatively unchanged.

Figure 25 Number of beef farms, by region, 2000–01 to 2015–16



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

In 2015–16 around 61 per cent of beef farms were classified as small (100 to 400 head), accounting for 17 per cent of the national beef herd (Table 5). Medium beef farms (400 to 1,600 head) made up 31 per cent of Australian beef farms and accounted for about 30 per cent of the beef herd. Around 7 per cent of beef farms were in the large category (1,600 to 5,400 head), accounting for 25 per cent of the beef herd. Only 2 per cent of beef farms were very large (more than 5,400 head), but they accounted for 28 per cent of the national beef herd.

Table 5 Proportions of farms and cattle, by herd size, Australia, 2015–16

Farm size	Number of farms (no.)	Share of farms (%)	Share of beef cattle (%)	Share of area operated (%)
Small (100 to 400 head)	15,960	61	17	7
Medium (400 to 1,600 head)	8,000	31	30	17
Large (1,600 to 5,400 head)	1,800	7	25	31
Very large (More than 5,400 head)	400	2	28	45
Total head	26,160	100	100	100

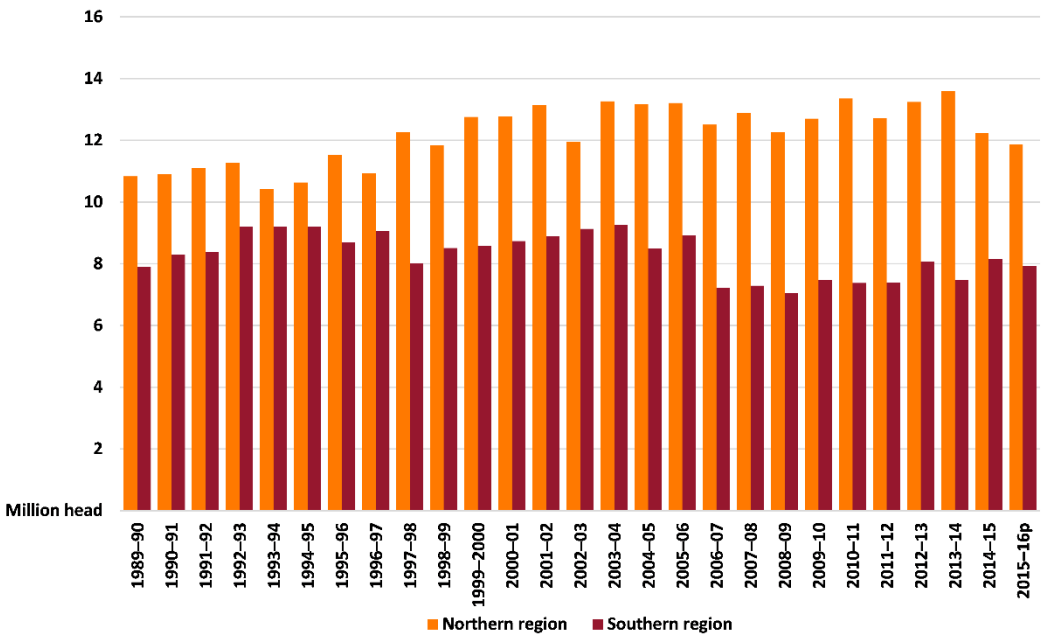
Note: Row and column totals may not sum to 100 due to rounding.
Source: ABS; ABARES Australian Agricultural and Grazing Industries Survey

Trends in physical characteristics, by region

Climate, pastures, industry infrastructure and proximity to markets differ markedly between the Northern and Southern regions and within each region. These factors have affected the development and nature of the beef industry and associated farm businesses in each region.

From 1989–90 to 2015–16 the total size of the Australian beef herd (excluding feedlots and dairy) fluctuated between around 19 million and 23 million head, averaging around 20.5 million head. Overall, in the same period the proportion of the Australian beef herd held on farms in the Northern region trended upwards slightly (Figure 26).

Figure 26 Total herd size, beef farms, by region, 1989–90 to 2015–16



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

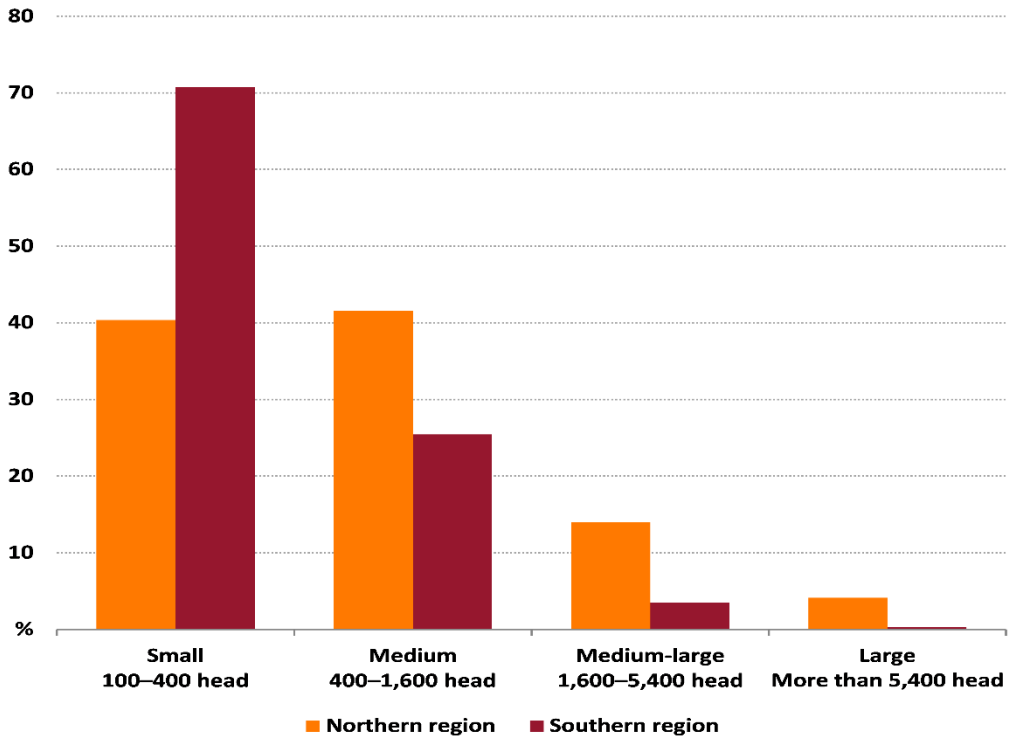
Northern region

From 2000–01 to 2015–16 the Northern region accounted for around 61 per cent of the Australian beef herd each year, on average. The Northern region beef herd varies widely from

year to year depending on prevailing seasonal and market conditions. In 2015–16, following a 10-year peak in total turn-off in 2013–14 in the Northern region, producers began rebuilding herds in response to improved seasonal conditions. In 2015–16 the Northern region's share of the Australian beef herd fell slightly to 60 per cent.

In 2015–16 around 15 per cent of Northern region beef farms had an average herd of between 1,600 and 5,400 head and 4 per cent of farms had more than 5,400 head (Figure 27). An estimated 40 per cent of Northern region beef farms had 100 to 400 head of cattle.

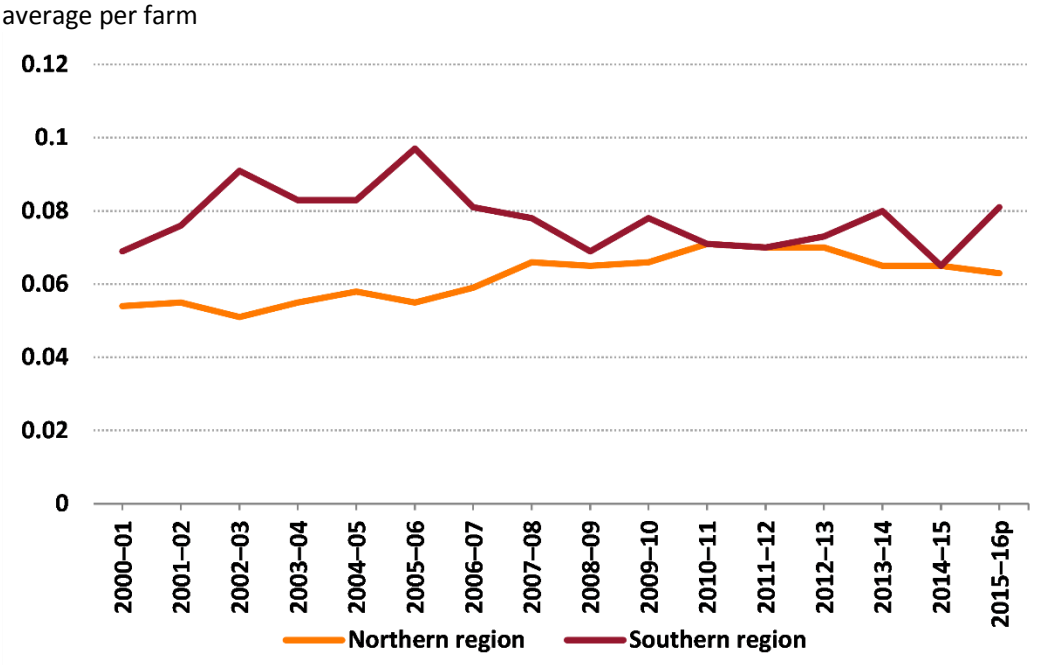
Figure 27 Proportion of farms in each size group, beef farms, by region, 2015–16



Source: ABARES Australian Agricultural and Grazing Industries Survey

In the Northern region, during the 2000s average stocking rates per hectare operated for beef farms increased slightly (Figure 28). In 2015–16 the average number of beef cattle per hectare operated was 17 per cent higher than in 2000–01.

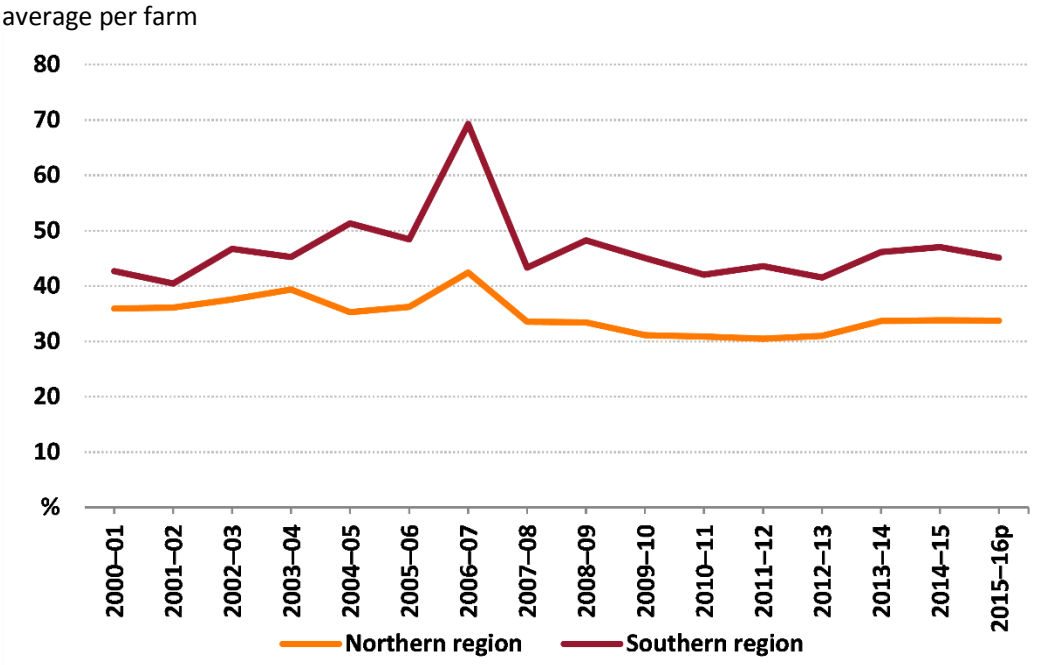
Figure 28 Beef cattle per hectare operated, beef farms, by region, 2000–01 to 2015–16



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

Despite increases in average stocking rates, the rate of turn-off (sales and transfers off farm as a proportion of opening cattle numbers) has fluctuated from year to year and shows no apparent trend (Figure 29).

Figure 29 Turn-off rate, beef farms, by region, 2000–01 to 2015–16



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

Branding rates (calves branded as a percentage of cows mated) are also typically lower and more variable in the Northern region than in the Southern region, reflecting less favourable

pasture conditions. Branding rates in the Northern region averaged 70 per cent over the 10 years to 2015–16.

Southern region

The total number of beef cattle in the Southern region is less variable from year to year than in the Northern region. More favourable pasture conditions, higher and less variable branding rates, and higher cattle growth rates in the Southern region contribute to more stable production.

In 2015–16 around 71 per cent of Southern region beef farms had between 100 and 400 head of beef cattle (Figure 27). Only 4 per cent of beef farms in the Southern region had a herd of between 1,600 and 5,400 head and less than 1 per cent had more than 5,400 head.

Average stocking rates per hectare for beef farms in the Southern region have fluctuated since the early 2000s (Figure 28). In 2015–16 the average number of beef cattle per hectare operated was 17 per cent higher than in 2000–01. Branding rates in the Southern region averaged 87 per cent over the 10 years to 2015–16.

5 References

Martin, P 2013, 'Farm debt: farm level analysis', Agricultural commodities: September quarter 2013, Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra.