



Australian lamb

Financial performance of slaughter lamb producing farms, 2007-08 to 2009-10

10.1

Stephen Hooper



May 2010

abare.gov.au



Contents

Introduction	3
Characteristics of slaughter lamb producers	5
Slaughter lamb production	7
Selling methods for adult sheep and lambs	8
Farm financial performance 2008-09 and 2009-10	10
Farm performance by hectare operated	12
Financial performance by market targeted	13
Grain finishing of lambs	14
Farm investments	16
Survey methodology and definitions	21

© Commonwealth of Australia 2010

This work is copyright. The *Copyright Act 1968* permits fair dealing for study, research, news reporting, criticism or review. Selected passages, tables or diagrams may be reproduced for such purposes provided acknowledgment of the source is included. Major extracts or the entire document may not be reproduced by any process without the written permission of the Executive Director, ABARE.

ISBN 978-1-921192-38-8

ABARE 2010, *Australian lamb: Financial performance of slaughter lamb producing farms, 2007–08 to 2009–10*, 10.1, Canberra.

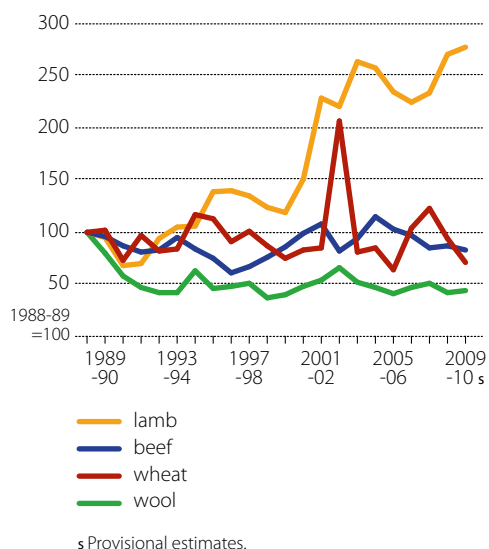
ABARE project 3364

ABARE is a professionally independent government economic research agency.

Introduction

Over the past decade, Australian lamb producers have been experiencing historically higher prices for lambs. This is a result of strong growth in international demand for Australian lamb meat and constrained growth in supplies because of falling sheep numbers and adverse seasonal conditions (figure a). At the same time, wool prices have remained at historically low levels, despite a sharp contraction in wool production.

a Index of real commodity prices



Many sheep producers have responded to these market signals by switching their focus from wool to meat production, particularly lamb meat. This change in focus has been associated with a sharp decline in the number of wethers in the Australian sheep flock (figure b). The proportion of ewes in the adult sheep flock has increased from around 55 per cent in 1989-90 to around 75 per cent in 2008-09 as producers dedicate proportionally more resources to ewes and lamb production.

The change in focus has resulted in many existing slaughter lamb producers expanding their scale of lamb production. The change in the relative profitability of lamb and wool production has also resulted in many wool producing sheep farms commencing slaughter lamb production. Overall, this has led to the number of sheep producing farms that sold lambs for slaughter increasing by 21 per cent during the 15 years to 2009-10 (figure c). During this period, ABARE's Australian Agriculture and Grazing Industries Survey (AAGIS) indicates that the number of slaughter lamb farms of all scales have increased,

with the largest changes occurring in the number of farms selling more than 2000 slaughter lambs (up 62 per cent) and fewer than 200 lambs (up 81 per cent).

The greater focus on lamb meat production has resulted in the number of lambs slaughtered in Australia increasing by 30 per cent between 1999 and 2009, despite sheep numbers falling by 37 per cent during this period (table 1). The increase in the number of lambs slaughtered, combined with a 6 per cent increase in average slaughter weights, has led to total lamb meat production rising by 37 per cent since 1999. Around 80 per cent of the additional meat produced was exported.

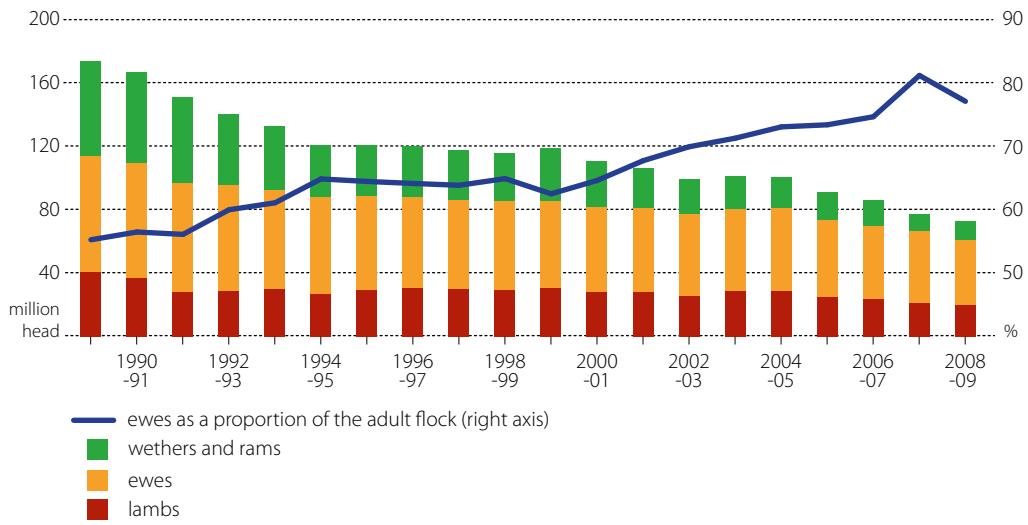
1 Sheep numbers and lamb production

	sheep numbers million head	lambs slaughtered '000	slaughter weight a kg/head	lamb meat production a kt	lamb meat exports a kt
1999	115	16 346	19.5	319	101
2000	119	18 507	19.9	368	125
2001	111	17 897	19.7	353	125
2002	106	17 086	19.8	338	116
2003	99	16 430	20.1	330	123
2004	101	16 675	20.4	340	131
2005	101	18 228	20.6	375	170
2006	91	19 483	20.5	400	176
2007	86	21 154	20.8	439	193
2008	77	20 342	20.3	414	179
2009	73	21 273	20.6	438	194
Percentage change between 1999 and 2009	% -37	% 30	% 6	% 37	% 92

a Carcass weight.

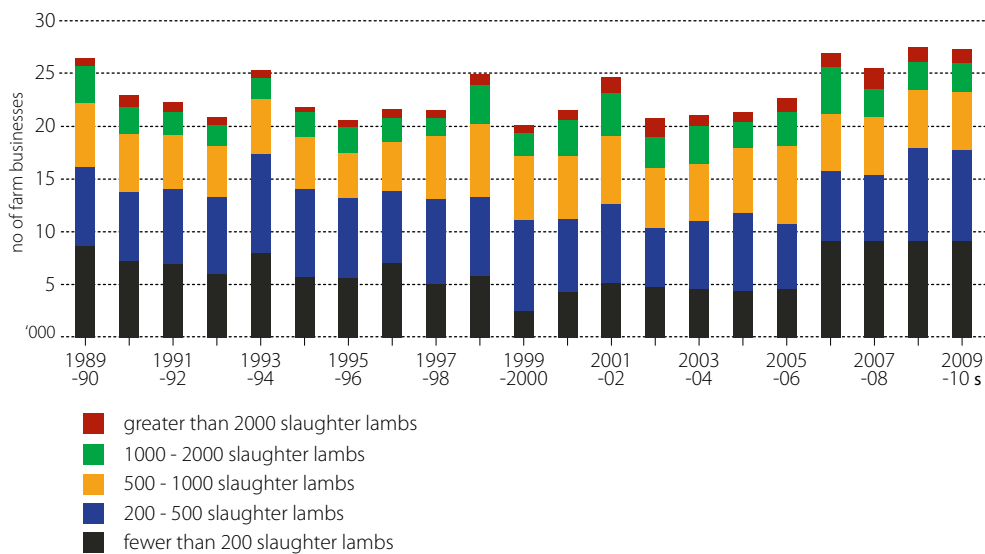
Source: Australian Bureau of Statistics.

b Compositon of the Australian sheep flock



Source: Australian Bureau of Statistics.

c Number of slaughter lamb producing farms



s Provisional estimates.

In order to monitor the production and financial performance of the Australian slaughter lamb industry, Meat and Livestock Australia (MLA) funds a range of surveys and analytical research. This report draws heavily on the information obtained from ABARE's annual Australian Agricultural and Grazing Industries Survey (AAGIS) that is partly funded by MLA. Issues examined in this report include the financial performance of farms that grain finish lambs and target different markets, as well as slaughter lamb producers' capacity to continue to invest in new capital to expand production and productivity.

For the purposes of this report, broadacre farms are classified as being slaughter lamb producing farms if they sold more than 200 lambs for slaughter in a year.

To investigate the physical and financial characteristics of slaughter lamb producers of different scales surveyed by ABARE, farms have been classified into four groups based on the number of slaughter lambs sold:

- small scale farms: 200 to 500 lambs sold for slaughter
- medium scale farms: 500 to 1000 lambs sold for slaughter
- large scale farms: 1000 to 2000 lambs sold for slaughter
- very large scale farms: more than 2000 lambs sold for slaughter.

Between 2001-02 and 2008-09, an average of around 23 000 broadacre farms sold lambs for slaughter (table 2). One-quarter of these producers sold fewer than 200 lambs for slaughter and represented just 3 per cent of the gross value of slaughter lamb production. On average, these businesses generated around 3 per cent of total farm cash receipts from the sale of slaughter lambs and as such have been excluded from the analysis. In contrast, 6 per cent of broadacre producers sold more than 2000 lambs for slaughter and accounted for almost one-third of gross value of broadacre slaughter lamb production.

2 Distribution of broadacre slaughter lamb producing farms, 2001-02 to 2008-09, by number of slaughter lambs sold

	number of producers	share of producers	share of slaughter lamb value of production
	no.	%	%
Less than 200 slaughter lambs	5 616	25	3
200 to 500 slaughter lambs	6 808	30	14
500 to 1000 slaughter lambs	5 944	26	26
1000 to 2000 slaughter lambs	3 101	14	26
More than 2000 slaughter lambs	1 389	6	32
Broadacre producers	22 858	100	100

Note: ABARE's AAGIS only includes broadacre farms with an estimated value of agricultural operations greater than \$40 000.

Characteristics of slaughter lamb producers

Broadacre slaughter lamb producers generally operate highly diversified farm businesses, with producers of all scales, on average, sowing crops and running beef cattle in addition to producing wool, sheep and lambs.

The decision to place a greater focus on slaughter lamb production requires some significant changes in flock demographics and management. As a producer increases their business's specialisation in slaughter lamb production, they generally increase the female composition of their flock to maximise lamb production, and decrease the proportion of wethers to free up resources (table 3).

The greater focus on the production of lambs for slaughter is also associated with an increase in the proportion of ewes mated and the lambing rate (figure d). This latter observation reflects an increase in the use of non-merino rams to produce first cross lambs as well as the production of specialty sheep meat breeds. First cross and specialty sheep meat breeds have a higher incidence of twinning. Also, increased reliance on improved pastures and supplementary feeding enhances ewe fertility and reduces lamb mortality rates.

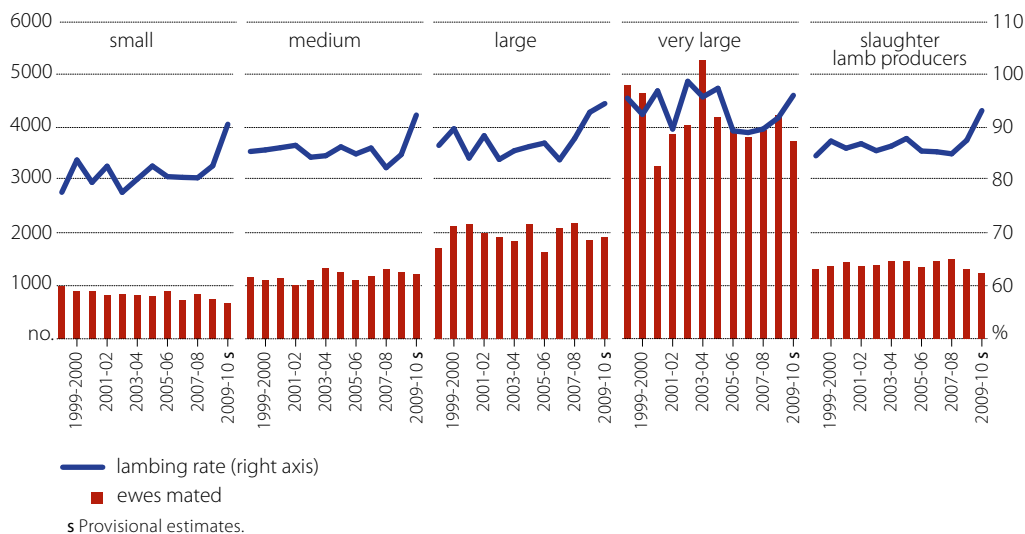
In addition, sheep and lamb turn-off rates generally increase as producers expand their production of lambs to be sold for slaughter (figure e). In the 10 years to 2009-10, very large scale slaughter lamb producers' turn-off rate averaged 70 per cent, while the rate for small scale producers averaged 43 per cent.

Between 2001-02 and 2008-09, very large slaughter lamb producers had, on average, more than four times more sheep than their small scale counterparts (table 3). However, the changes in management practices

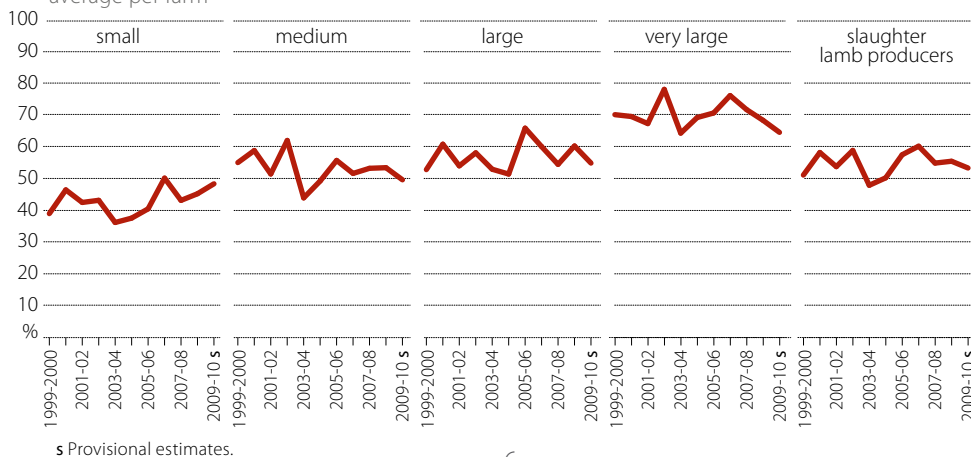
3 Physical characteristics, 2001-02 to 2008-09, by number of lambs sold for slaughter average per farm

		small	medium	large	very large	slaughter lamb producers
Area operated	ha	1 596	2 321	3 363	4 946	2 434
– sown to crops	ha	434	543	666	846	547
Number of beef cattle, 30 June	no.	94	96	154	324	124
Number of sheep, 30 June	no.	1 628	2 199	3 479	6 586	2 557
– rams	%	2	1	1	1	1
– ewes	%	58	60	61	66	61
– wethers	%	15	10	9	6	10
– lambs	%	27	28	29	26	27
Numbers of ewes mated	no.	809	1 188	1 947	4 098	1 409
Lambs marked	no.	655	1 009	1 690	3 780	1 215
Lambing rate	%	81	85	87	92	86
Number of lambs sold	no.	363	728	1 392	3 622	937
– prime lambs	no.	228	462	944	2 660	633
– other lambs for slaughter	no.	108	239	415	918	274
– lambs not for slaughter	no.	27	27	33	43	29
Number of sheep and lambs shorn	no.	1 759	2 391	3 860	7 849	2 845
Wool production	kg	7 598	10 326	16 291	31 643	12 039
Wool cut per head shorn	kg/hd	4.3	4.3	4.2	4.0	4.2
Average price received						
Wool	c/kg	596	560	562	529	563
Adult sheep	\$/hd	58	54	50	50	54
Prime lambs	\$/hd	83	85	85	86	85

d Number of ewes mated and lambing rate, by the number of lambs sold for slaughter average per farm

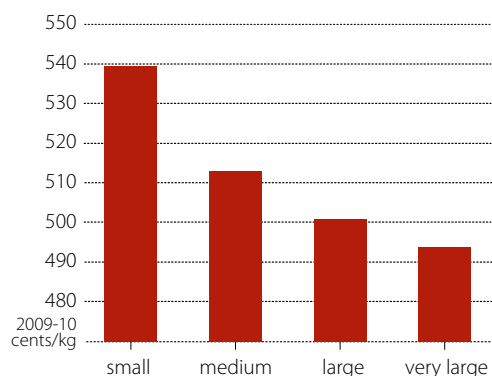


e Sheep turn-off rate, by the number of lambs sold for slaughter average per farm



associated with greater specialisation in slaughter lamb production resulted in very large producers joining more than five times as many ewes and selling almost 10 times more lambs for slaughter. Furthermore, very large scale slaughter lamb producers, on average, realised a 4 per cent price premium in real terms during this period, reflecting the production of lambs specifically bred and finished for slaughter.

f Average price received for wool, 2005-06 to 2009-10



However, the greater focus on slaughter lamb production results in a decrease in wool production and quality. Production of wool per head shorn decreases, largely because of a steady increase in the proportion of sheep being shorn as lambs and a reduction in the number of wethers shorn, as the scale of slaughter lamb production increases. On average, wool production per sheep shorn fell from 4.3 kilograms a head for small scale farms to 4 kilograms a head for very large scale farms in the eight years to 2008-09.

Wool quality is adversely affected by the greater focus on sheep produced with desirable meat traits, rather than specifically for fine wool producing traits. In recent years, this has resulted in producers realising a lower average price for wool (figure f). Between 2001-02

and 2008-09, very large scale slaughter lamb producers realised an 11 per cent discount in the real price received for wool relative to the price received by their small scale counterparts (table 3).

Slaughter lamb production

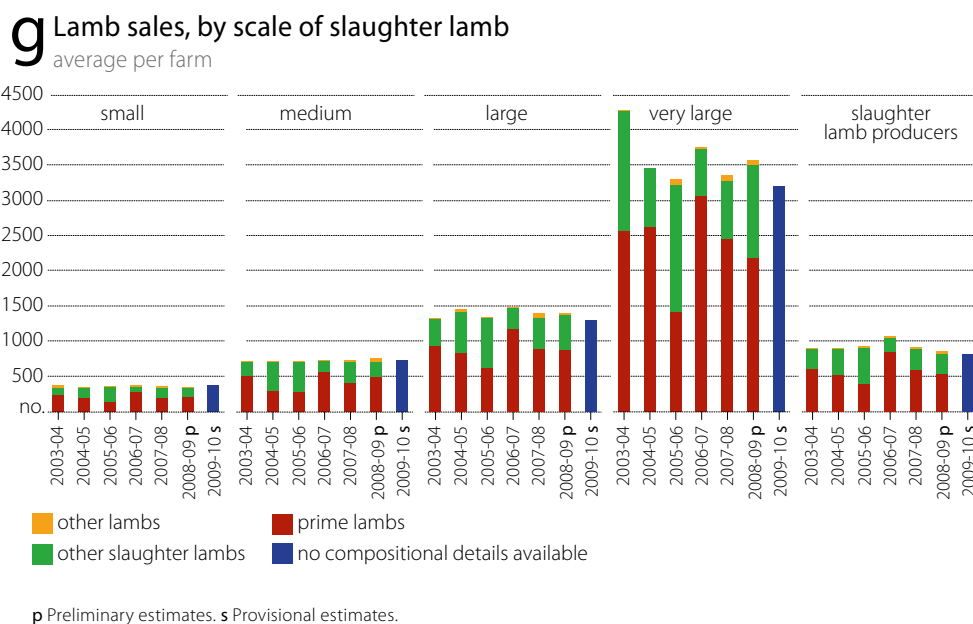
In recent years, strong prices for lamb and depressed wool prices have encouraged many sheep producers to either commence slaughter lamb production or expand their existing enterprise. However, these moves to expand production have been adversely affected by below average rainfall in recent years.

4 Selected physical characteristics, slaughter lamb industry, ranked by slaughter lambs sales average per farm

	area operated ha	change in sheep numbers a %	ewes mated no.	lambs marked no.	lambing rate %	sheep and lambs sold no.	prime lambs sold no.	other slaughter lambs no.	area sown to crops ha	change in beef cattle numbers a %
Small										
2007-08	1 845	-2.3	920	732	80%	745	200	130	484	4.8
2008-09 p	2 038	-1.3	836	681	81%	659	202	135	361	4.6
2009-10 s	2 130	-1.1	786	708	90%	705	na	na	382	0.0
Medium										
2007-08	3 622	-3.5	1 368	1 124	82%	1 267	410	294	707	-3.1
2008-09 p	4 352	-7.6	1 305	1 109	85%	1 266	486	228	656	-1.7
2009-10 s	2 317	2.3	1 285	1 185	92%	1 144	na	na	571	2.9
Large										
2007-08	4 223	-0.3	2 221	1 944	88%	2 097	885	442	670	3.7
2008-09 p	3 018	-3.7	1 936	1 796	93%	1 966	889	486	839	2.4
2009-10 s	3 172	2.9	1 972	1 862	94%	1 796	na	na	734	2.5
Very large										
2007-08	4 915	-10.0	4 024	3 604	90%	4 621	2 444	855	983	2.6
2008-09 p	5 975	-3.0	4 307	3 944	92%	4 567	2 181	1 342	958	-9.4
2009-10 s	5 702	2.6	3 815	3 661	96%	4 039	na	na	902	-2.8
Slaughter lamb producers										
2007-08	3 187	-3.8	1 597	1 352	85%	1 527	602	310	642	1.8
2008-09 p	3 236	-4.2	1 429	1 248	87%	1 363	555	313	579	-0.1
2009-10 s	2 642	1.6	1 384	1 287	93%	1 290	na	na	544	1.1

a Change in animal numbers between 1 July and 30 June. p Preliminary estimates. s Provisional estimates.

In 2008-09, reduced sheep flocks, owing to destocking in the previous years, resulted in many producers joining fewer ewes to produce slaughter lambs. However, during 2008, favourable autumn and winter conditions boosted ewe fertility rates and, on average, resulted in higher lambing rates (figure d). A return to hot and dry conditions in many of the main slaughter lamb producing regions in southern and eastern Australia adversely affected on-farm feed availability during the critical spring and early summer period. This caused many producers to continue to destock and impeded the finishing of lambs for slaughter. Consequently, for many producers, the recovery in lamb production was not reflected in increased sales of prime lambs (table 4, figure g).



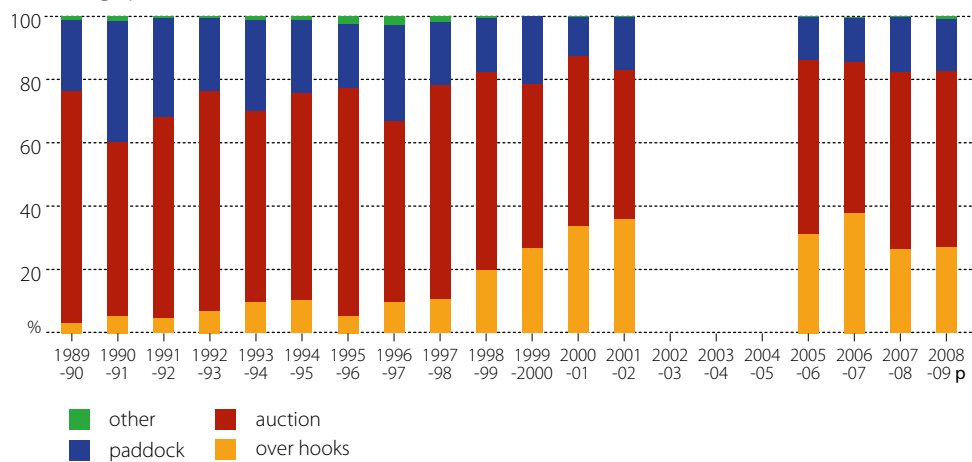
The continued destocking by many slaughter lamb producers in 2008-09 is forecast to result in the average number of ewes mated falling by a further 3 per cent in 2009-10 (table 4). Lambing rates are forecast to increase markedly as a result of some improvement in seasonal conditions, especially in south-eastern Australia, and increased production of first cross and specialty sheep meat breeds, particularly by small and medium scale producers (figure d). However, lamb sales are expected to fall as many producers respond to the favourable seasonal conditions by reducing turn-off to rebuild animal numbers. Despite this, sales of prime lambs are likely to recover as improved on-farm feed availability is expected to enable producers to finish a greater proportion of their lambs prior to sale.

Selling methods for adult sheep and lambs

Over the past decade, the greater focus on the production of lambs specifically bred for slaughter, as well as better finishing of lambs prior to sale, has resulted in producers changing their method of sale (figure h). In the early 1990s, almost all of the lambs sold by slaughter lamb producing farms were sold via auction or in the paddock. Since the early 1990s, the proportion of lambs sold over the hooks has increased from less than 5 per cent to average around 30 per cent since 2005-06. In 2008-09, reduced production of prime lambs in south-eastern Australia resulted in the proportion of lambs sold over the hooks falling to average slightly more than 27 per cent.

When slaughter lamb producers were ranked by farm financial performance (as measured by rate of return, excluding capital appreciation) for the period 2005-06 to 2008-09, considerable differences in selling methods were apparent for the top 25 per cent of producers compared with those used by the other 75 per cent of

h Lamb selling methods, slaughter lamb producing farms average per farm

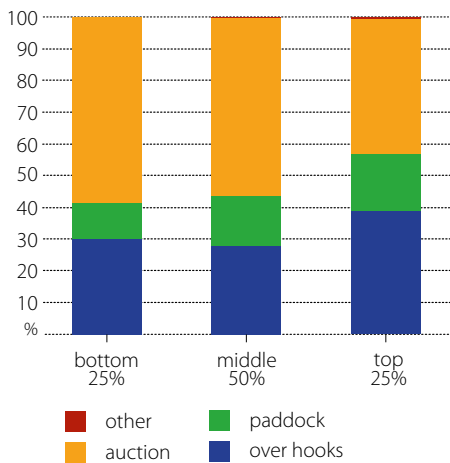


p Preliminary estimates.

Note: Because of changes in the data collected, consistent results cannot be provided for the period 2002-03 to 2004-05.

i Lamb selling methods used, by farm performance group, 2005-06 to 2008-09

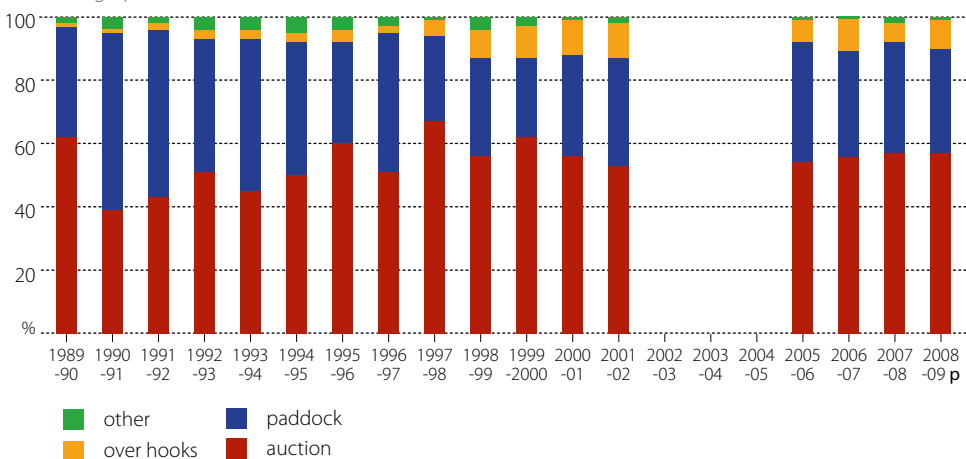
farms ranked by rate of return, excluding capital appreciation



producers (figure i). During this period, the better performing slaughter lamb producers, on average, sold a greater proportion of their lambs over the hook and markedly fewer via auction than producers in other performance groups.

The production of more meat breeds of sheep also appears to have resulted in some changes in the method used to sell adult sheep (figure j). Historically, adult sheep have either been sold via auction or in the paddock. Although these methods of sale still dominate, during the late 1990s and most of the 2000s the proportion of adult sheep sold over the hooks has increased modestly. In the four years to 2008-09, around 10 per cent of adult sheep were sold over the hooks.

j Adult sheep selling methods, slaughter lamb producing farms average per farm



p Preliminary estimates.

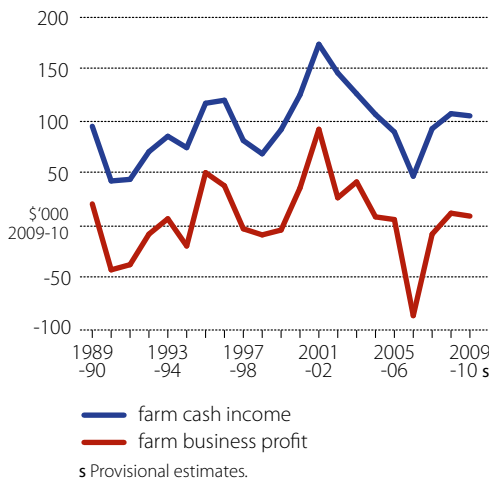
Note: Because of changes in the data collected, consistent results cannot be provided for the period 2002-03 to 2004-05.

Farm financial performance 2008-09 and 2009-10

2008-09

In 2008-09, farm financial performance in the slaughter lamb industry continued to strengthen as a result of costs falling by more than receipts. Slaughter lamb producers are estimated to have realised a farm cash income of \$105 330 a farm, on average, in 2008-09, compared with an average of \$89 906 a farm in the previous financial year (table 5, figure k).

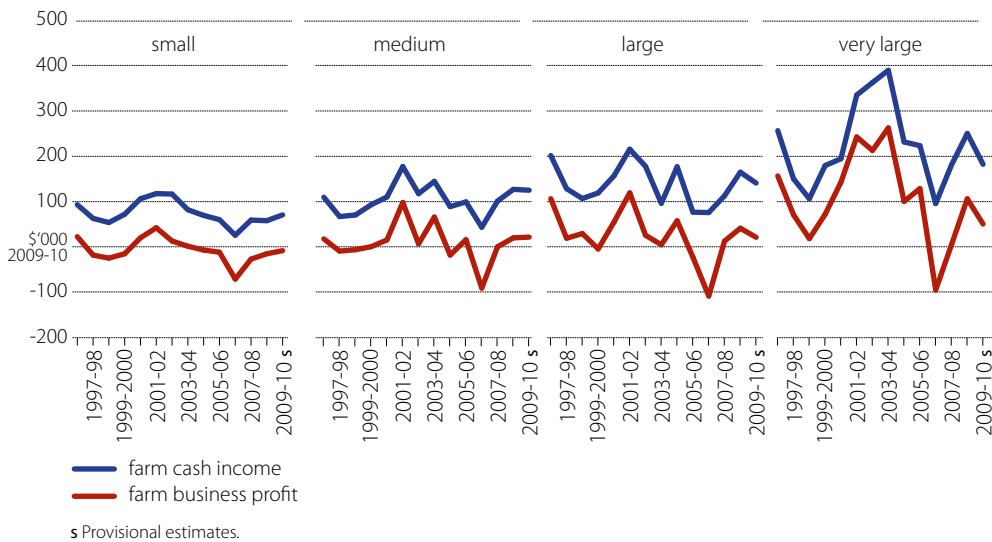
k Financial performance, slaughter lamb producers
average per farm



In 2008-09, farm cash receipts fell by 2 per cent, on average, as the effect of higher lamb and sheep prices was partially offset by reduced sales of prime lambs. Receipts were also adversely affected by weaker grain, wool and beef cattle prices. Increased sales of unfinished lambs in 2008-09 partially offset the benefit of the generally higher lamb prices because of the resultant loss of the premium realised by prime lambs. In 2008-09, the average price of non-prime lambs sold for slaughter rose by 18 per cent to average \$74 a head, but remained at a 15 per cent discount to the average price realised by prime lambs.

Farm cash costs fell by 7 per cent, on average, in 2008-09, principally because of fewer purchases of livestock and reduced plantings of winter crops, which led to decreased spending on cropping inputs.

l Financial performance by number of lambs sold for slaughter
average per farm



Financial performance did not improve consistently across all scales of slaughter lamb production. With the exception of small scale producers, on average slaughter lamb producing farms of all scales realised a profit in 2008-09 (table 5, figure l). Very large scale slaughter lamb producing farms realised the largest recovery in profitability, with farm business profit jumping, on average, from around \$55 000 a farm in 2007-08 to more than \$108 000 a farm in 2008-09. In contrast, small scale producers realised an improvement in profitability but, on average, continued to realise significant business losses. On average, farm business losses for small scale producers recovered from \$24 000 a farm in 2007-08 to almost \$15 000 a farm in 2008-09.

2009-10

In 2009-10, slaughter lamb producers' farm financial performance is forecast to strengthen as growth in receipts is expected to slightly exceed growth in farm costs. On average, farm cash income is expected to rise by 4 per cent to \$109 700 a farm.

Growth in farm performance is expected for small and medium scale slaughter lamb producing farms, because of a recovery in grain production and continued high turn-off of lambs. On average, farm cash income for small and medium scale producing farms is expected to increase by 34 per cent and 11 per cent, respectively, in 2009-10. For large and very large scale producers, farm cash income is expected to weaken as producers reduce turn-off of lambs to rebuild sheep numbers. Cropping receipts are also expected to fall for these farms as weaker grain prices and reduced plantings offset the effect of higher grain yields. Consequently, farm cash income for large and very large scale producing farms is expected to fall by 13 per cent and 25 per cent, respectively.

Nonetheless, very large scale producers are expected to continue to realise the highest rate of return excluding capital appreciation in 2009-10, averaging 2 per cent compared with the industry average of 1.4 per cent.

5 Financial performance of slaughter lamb producers, by scale of slaughter lamb sales

average per farm

	small			medium			large					
	2007-08	2008-09 p	2009-10 s	2007-08	2008-09 p	2009-10 s	2007-08	2008-09 p	2009-10 s			
Receipts												
Sheep and lambs	\$ 41 974	42 250	(8)	49 900	75 275	85 160	(4)	87 400	126 259	142 060	(3)	139 000
– adult sheep	\$ 18 396	15 470	(20)	18 200	25 285	24 820	(12)	25 500	28 954	28 150	(10)	30 000
– lambs	\$ 23 578	26 770	(4)	31 700	49 990	60 340	(3)	61 900	97 305	113 910	(3)	109 000
Composition of lamb receipts												
– prime lambs	\$ 14 221	16 720	(9)	na	29 774	41 310	(8)	na	64 341	73 940	(9)	na
– other slaughter lambs	\$ 7 659	8 600	(13)	na	19 019	16 330	(15)	na	28 937	38 900	(16)	na
– lambs not for slaughter	\$ 1 698	1 460	(43)	na	1 198	2 700	(34)	na	4 028	1 070	(89)	na
Beef cattle	\$ 19 539	26 810	(24)	26 900	28 181	33 100	(22)	26 600	53 192	53 620	(21)	54 700
Wool	\$ 48 215	35 140	(17)	33 600	61 601	51 640	(9)	51 900	95 383	71 100	(7)	67 300
Crops	\$ 130 633	97 650	(17)	124 900	202 870	218 100	(12)	232 500	175 826	340 150	(10)	321 000
Off-farm share farming	\$ 2 711	2 310	(31)	na	6 125	2 850	(40)	na	10 066	4 020	(65)	na
Off-farm contracts	\$ 7 287	3 880	(34)	4 110	7 895	6 210	(31)	31	6 343	12 060	(32)	12 065
Total cash receipts	\$ 273 819	229 670	(11)	259 900	411 524	424 910	(7)	428 700	517 888	656 270	(6)	621 900
Costs												
Beef cattle purchases	\$ 3 389	3 890	(34)	2 200	4 912	4 220	(27)	1 700	12 208	11 750	(37)	7 100
Contracts	\$ 8 517	7 230	(23)	na	11 217	9 720	(13)	na	13 521	18 470	(14)	na
Crop and pasture												
chemicals	\$ 20 597	14 150	(13)	15 200	26 674	27 450	(12)	28 300	30 928	42 380	(15)	43 100
Fertilisers	\$ 31 863	23 950	(18)	24 900	52 483	44 850	(8)	43 300	59 721	83 680	(10)	70 700
Fodder	\$ 4 167	3 950	(18)	3 300	5 767	5 950	(58)	2 500	11 739	7 710	(29)	4 600
Fuel, oil and grease	\$ 19 638	15 570	(9)	17 400	29 539	27 250	(6)	29 100	32 801	38 570	(8)	40 600
Handling and marketing	\$ 8 063	7 310	(14)	10 100	10 155	15 000	(8)	17 000	15 689	23 980	(9)	24 000
Hired labour	\$ 5 380	4 090	(17)	5 000	7 358	8 980	(22)	7 700	13 719	16 080	(15)	17 000
Interest	\$ 25 129	21 360	(18)	20 500	35 302	35 200	(13)	32 400	50 352	69 400	(11)	64 800
Repairs and maintenance	\$ 18 372	17 190	(9)	17 800	24 528	24 570	(9)	24 600	30 807	38 400	(8)	38 400
Shearing and crutching	\$ 8 309	6 980	(17)	6 700	10 896	12 590	(9)	12 100	18 017	18 860	(7)	19 500
Sheep purchases	\$ 5 051	4 130	(18)	5 000	11 501	11 170	(13)	10 800	18 971	15 000	(12)	15 400
Total cash costs	\$ 216 746	178 980	(10)	192 200	314 783	307 390	(7)	298 800	415 138	494 940	(7)	480 800
Financial performance												
Farm cash income	\$ 57 073	50 690	(25)	67 700	96 741	117 520	(15)	129 900	102 750	161 330	(14)	141 100
Farm business profit	\$ –24 082	–14 770	(71)	–11 300	2 247	15 790	(135)	29 600	8 947	42 130	(63)	21 700
Rate of return												
– excl. cap. appreciation	% 0.2	0.4	(100)	0.6	1.3	1.5	(36)	1.8	1.4	2.1	(20)	1.6
– incl. cap. appreciation	% 3.2	0.7	(107)	na	4.4	2.5	(31)	na	2.8	4.2	(62)	na

p Preliminary estimates. s Provisional estimates.

Note: Figures in parenthesis are Relative Standard Errors (RSEs), which are standard errors expressed as a percentage of the estimate provided. A guide on how to use RSEs is in the methodology section at the back of the report.

continued...

5 Financial performance of slaughter lamb producers, by scale of slaughter lamb sales

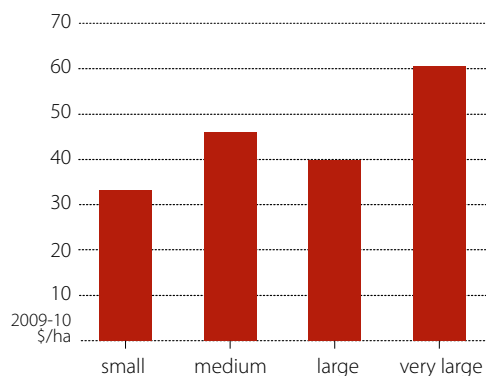
average per farm *continued*

	very large				Australia				
	2007-08	2008-09 ^p	2009-10 ^s	2007-08	2008-09 ^p	2009-10 ^s	2007-08	2008-09 ^p	2009-10 ^s
Receipts									
Sheep and lambs	\$ 288 853	340 870	(7)	324 900	91 430	94 930	(3)	98 400	
– adult sheep	\$ 54 144	45 170	(13)	48 200	25 985	22 790	(8)	24 900	
– lambs	\$ 234 709	295 700	(7)	276 800	65 445	72 140	(2)	73 500	
Composition of lamb receipts									
– prime lambs	\$ 180 886	186 360	(12)	na	43 909	46 800	(5)	na	
– other slaughter lambs	\$ 51 160	104 050	(19)	na	19 499	23 260	(9)	na	
– lambs not for slaughter	\$ 2 663	5 290	(135)	na	2 037	2 080	(33)	na	
Beef cattle	\$ 125 834	115 540	(21)	82 800	38 333	39 930	(11)	35 800	
Wool	\$ 156 945	126 400	(10)	130 400	71 394	53 230	(6)	52 800	
Crops	\$ 341 452	340 690	(16)	304 300	183 418	194 570	(7)	207 500	
Off-farm share farming	\$ 4 021	1 950	(47)	na	5 391	2 740	(24)	na	
Off-farm contracts	\$ 6 373	14 600	(33)	33	7 246	6 790	(16)	23	
Total cash receipts	\$ 975 707	1 006 940	(8)	910 300	430 456	421 120	(4)	426 900	
Costs									
Beef cattle purchases	\$ 34 637	11 760	(27)	18 000	8 356	5 890	(17)	4 100	
Contracts	\$ 28 528	33 170	(21)	na	12 189	11 830	(9)	na	
Crop and pasture									
chemicals	\$ 48 567	46 610	(13)	41 700	27 159	25 510	(7)	26 300	
Fertilisers	\$ 113 800	73 620	(12)	75 400	51 639	44 250	(6)	42 700	
Fodder	\$ 29 948	26 070	(29)	16 000	8 441	6 870	(20)	4 200	
Fuel, oil and grease	\$ 56 284	56 000	(15)	57 400	28 852	26 150	(4)	28 300	
Handling and marketing	\$ 29 871	29 720	(11)	37 600	12 165	14 210	(5)	16 800	
Hired labour	\$ 40 854	37 500	(15)	33 500	10 799	10 150	(9)	10 100	
Interest	\$ 100 879	110 180	(17)	93 400	40 170	40 410	(7)	37 600	
Repairs and maintenance	\$ 43 025	56 840	(11)	53 300	25 052	26 040	(5)	26 300	
Shearing and crutching	\$ 40 481	38 730	(10)	37 000	13 899	13 130	(6)	13 000	
Sheep purchases	\$ 42 176	58 210	(22)	66 100	13 227	12 240	(10)	13 300	
Total cash costs	\$ 802 819	757 250	(9)	723 600	340 550	315 800	(4)	317 200	
Financial performance									
Farm cash income	\$ 172 888	249 690	(15)	186 700	89 906	105 330	(9)	109 700	
Farm business profit	\$ 5 466	108 200	(38)	54 200	-6 036	13 660	(72)	12 700	
Rate of return									
– excl. cap. appreciation	% 1.7	2.7	(15)	2.0	1.1	1.6	(15)	1.4	
– incl. cap. appreciation	% 4.0	1.8	(47)	na	3.6	2.3	(31)	na	

^p Preliminary estimates. ^s Provisional estimates.

Note: Figures in parenthesis are Relative Standard Errors (RSEs), which are standard errors expressed as a percentage of the estimate provided. A guide on how to use RSEs is in the methodology section at the back of the report.

m Average farm cash income per hectare operated, 2005-06 to 2009-10



Farm performance by hectare operated

Expressing farm cash income on a per hectare operated basis enables a comparison of the financial performance of farms after the effect of different scales of operation has been taken into account. In the five years to 2009-10, very large scale slaughter lamb producers realised the highest farm cash income per hectare operated, averaging slightly more than \$60 a year (figure m). In contrast, small scale slaughter lamb producers realised the lowest farm cash income per hectare operated, averaging \$33 a year.

Financial performance by market targeted

Broadacre lamb producers have the option of selling lambs for slaughter or to other sheep producers for breeding or store purposes. Animals produced for slaughter in Australia can be sold to three types of buyers: directly to the abattoir, to live exporters or to feedlots. To explore the financial performance of producers targeting these different markets, broadacre producers who sold more than 100 lambs were allocated to one of four groups based on which market they predominantly sold their lambs to during the period 2006-07 to 2008-09. These groups are:

- producers who predominantly sell their lambs directly for slaughter
- producers who predominantly sell their lambs for live export
- producers who predominantly sell their lambs to feedlots or for backgrounding
- producers who predominantly sell their lambs to breeders or for store purposes.

In the three years to 2008-09, broadacre lamb producers who targeted the live export markets had the largest sheep flocks and sold the most lambs, averaging 1160 lambs a year, of which 84 per cent were sold to live exporters (table 6). In contrast, producers who sold lambs directly to slaughter had the smallest sheep flocks but sold the second highest number of lambs, 98 per cent of which went directly for slaughter.

6 Physical and financial performance indicators, grouped by main market targeted, 2006-07 to 2008-09 average per farm

		direct for slaughter		live export		feedlot/ backgrounding		breeders or store		
Area operated, 30 June	ha	2 201	(6)	5 225	(58)	11 507	(71)	4 649	(22)	
Area sown to crops	ha	531	(2)	924	(11)	548	(32)	485	(14)	
Number of beef cattle, 30 June	hd	119	(5)	97	(53)	109	(22)	141	(26)	
Number of sheep, 30 June	hd	2 199	(2)	4 286	(10)	3 204	(14)	2 716	(9)	
Number of ewes mated	hd	1 234	(2)	2 624	(10)	1 964	(12)	1 518	(8)	
Number of lambs marked	hd	1 052	(2)	2 125	(10)	1 470	(11)	1 221	(8)	
Lambing rate	%	85	(1)	81	(2)	75	(6)	80	(2)	
Number of lambs sold	hd	815	(2)	1160	(10)	721	(14)	774	(8)	
– direct for slaughter	hd	800	(2)	107	(28)	62	(43)	56	(24)	
– for live export	hd	1	(109)	979	(10)	0	(0)	1	(341)	
– to feedlots/backgrounding	hd	2	(79)	15	(89)	649	(13)	2	(95)	
– to breeders or for store	hd	12	(19)	58	(49)	11	(63)	715	(8)	
Sheep turn-off rate	%	56	(2)	56	(10)	50	(11)	51	(5)	
Sheep death rate	%	4	(4)	6	(26)	8	(25)	5	(11)	
Total labour used	wks	104	(1)	112	(6)	113	(8)	104	(4)	
Prices received										
Wool	c/kg	498	(1)	519	(3)	540	(6)	546	(3)	
Adult sheep	\$/hd	50	(2)	42	(4)	37	(6)	47	(6)	
Lambs	\$/hd	76	(1)	59	(3)	52	(6)	51	(4)	
Farm financial performance										
Farm cash receipts	\$	385 596	(2)	708 982	(9)	362 993	(15)	373 890	(9)	
Farm cash costs	\$	313 269	(2)	507 671	(9)	340 640	(17)	296 542	(9)	
Farm cash income	\$	72 327	(5)	201 310	(15)	22 353	(110)	77 348	(26)	
– per hectare operated	\$/ha	33	(8)	39	(60)	2	(139)	17	(30)	
Farm business profit	\$	–21 677	(18)	81 368	(37)	–97 861	(32)	–36 982	(52)	
Rate of return										
– excluding capital appreciation	%	0.6	(18)	2.7	(19)	–1.5	(49)	0.0	(1737)	
– including capital appreciation	%	3.6	(9)	4.7	(28)	3.4	(46)	3.0	(48)	

Note: Financial statistics are expressed in 2008-09 dollars. Figures in parenthesis are Relative Standard Errors (RSEs), which are standard errors expressed as a percentage of the estimate provided. A guide on how to use RSEs is in the methodology section at the back of the report.

During this period, producers who sold lambs directly for slaughter realised the highest price for lambs, averaging \$76 a head, while producers who predominantly sold lambs to feedlots and breeders realised the lowest prices, averaging \$52 a head and \$51 a head, respectively. This largely reflects the type of animals being sold by these producers — that is, lighter and younger animals. Producers selling finished lambs for live export also received relatively low prices, averaging \$59 a head or 22 per cent less than that realised by producers who sold lambs directly for slaughter.

Nonetheless, producers who sold lambs to live exporters realised the strongest financial performance during this period, with an average real annual farm business profit of \$81 368 per farm. In contrast, producers in the other groups on average realised business losses, with producers selling directly for slaughter recording the smallest annual losses and those selling to feedlots having the largest losses.

One factor influencing this outcome is likely to be the location of these producers. Around 90 per cent of lamb producers who sold to live exporters during this period were located in Western Australia and also sold large quantities of grain. In contrast, lamb producers in the other three groups were more evenly distributed throughout the country. This means that the financial performance of non-live exporting lamb producers is likely to have been more adversely affected by drought during this period. The adverse seasonal conditions are likely to have constrained the area sowed to grain crops and reduced grain yields as well as livestock reproduction and finishing rates.

Grain finishing of lambs

In the two years to 2008-09, almost 7 per cent of slaughter lamb producers finished some of their lambs with grain. To gain some insights into the possible economic benefits of grain finishing lambs prior to sale, the slaughter lamb producers surveyed by ABARE were classified into one of two groups depending on their use of grain to finish lambs for sale during this period (table 7).

7 Physical and financial performance indicators, grouped by use of grain finishing for lambs, 2007-08 and 2008-09 average per farm

		grain finishing of lambs		no grain finishing of lambs	
Area operated, 30 June	ha	2 027	(24)	2 766	(4)
Area sown to crops	ha	810	(20)	514	(3)
Number of beef cattle, 30 June	hd	71	(24)	122	(5)
Number of sheep, 30 June	hd	2 083	(13)	2 181	(2)
Number of ewes mated	hd	1 295	(16)	1 236	(2)
Number of lambs marked	hd	1 080	(14)	1 037	(2)
Lambing rate	%	83	(4)	84	(1)
Number of lambs sold	hd	884	(17)	748	(2)
– direct for slaughter	hd	814	(19)	617	(3)
Grain finishing					
Number of lambs grain finished	hd	558	(16)	–	
Average length of grain finishing	days	59	(8)	–	
Prices received					
Adult sheep	\$/hd	55	(6)	45	(2)
Lambs sold direct for slaughter	\$/hd	81	(2)	73	(1)
Farm financial performance					
Farm cash income	\$	128 863	(32)	63 132	(7)
– per hectare operated	\$/ha	64	(20)	23	(8)
Farm business profit	\$	22 717	(187)	–36 892	(12)
Rate of return					
– excluding capital appreciation	%	2.0	(54)	0.2	(83)
– including capital appreciation	%	2.5	(71)	3.0	(12)

Note: Financial statistics are expressed in 2008-09 dollars. Figures in parenthesis are Relative Standard Errors (RSEs), which are standard errors expressed as a percentage of the estimate provided. A guide on how to use RSEs is in the methodology section at the back of the report.

Producers who used grain to finish lambs in 2007-08 and 2008-09 had farms that were generally smaller, operating 27 per cent less land, but on average planted more land to grain crops. Producers who grain finished their lambs had 4 per cent fewer sheep but mated 5 per cent more ewes and produced 4 per cent more lambs than their non-grain finishing counterparts. On average, grain finishing farms sold 884 lambs, of which 92 per cent were sold directly for slaughter, during this period. In contrast, non-grain finishing farms sold an average of 748 lambs of which 82 per cent were sold directly for slaughter.

On average, grain finishing farms fed grain to 558 lambs, or 63 per cent of the lambs sold, for an average of 59 days. While grain feeding increases producers' costs (because of grain production or purchasing costs) it also results in lambs that realise higher prices mainly because these lambs realise a higher carcass weight and have superior meat characteristics. Producers who grain finished lambs realised an average price for lambs sold directly to slaughter of \$81 a head, which was 11 per cent more than their non-grain finishing counterparts.

Farms that used grain to finish lambs achieved a significantly stronger farm financial performance on average in the two years to 2008-09. On average, grain finishing slaughter lamb producing farms generated a real net farm cash income per hectare operated of \$64 a year, almost three times greater than their non-grain finishing counterparts. In addition, grain finishing farms during this period realised a significant annual farm business profit, while non-grain finishing farms, on average, realised significant business losses.

To further explore these apparent benefits of grain finishing, slaughter lamb producers who grain finished lambs were divided into three groups based on the average length of time lambs were fed. These were:

- less than 40 days
- 40 to 60 days
- more than 60 days.

In 2007-08 and 2008-09, drought will have influenced producers' decisions to feed grain as well as the duration and intensity of grain feeding. During this period, more than 55 per cent of producers who fed lambs on grain for more than 60 days were experiencing drought. In comparison, just 13 per cent of producers feeding for less than 40 days and 21 per cent of producers feeding for 40 to 60 days considered their properties to be in drought.

During this period, the proportion of lambs sold that had been grain finished increased with the average length of time lambs were on feed. That is, the proportion of lambs sold that had been grain finished among the producers' who fed grain for more than 60 days averaged 77 per cent. In contrast, around half of the lambs sold by producers feeding for less than 40 days were grain finished (table 8).

In the two years to 2008-09, the average price received for lambs sold directly for slaughter was highest for lambs that were fed for more than 40 days and lowest for lambs fed for less than 40 days (table 8). Furthermore, the average price received for lambs fed for less than 40 days was comparable to the average price realised by non-grain finishing slaughter lamb producers (table 7). This suggests that producers who are grain finishing for less than 40 days are still selling animals that, on average, are either lighter or have inferior meat characteristics (or both) than their longer duration grain finishing counterparts. This may also indicate that these producers are using grain to get their lambs to a minimum acceptable weight prior to sale, rather than using grain to produce heavy lambs.

Producers feeding for more than 60 days realised a similar price to that received by producers feeding for 40 to 60 days. Many of these producers' abilities to grain finish may have been constrained by the drought, which reduced on-farm grain production and inhibited purchases by decreasing regional grain availability and increasing grain prices. Consequently, these producers may have used grain to supplement limited hay and pasture supplies and fed at a relatively low level over an extended period in order to sell heavy lambs, rather than accept a price discount by turning off lambs earlier and at a lighter weight.

8 Physical and financial performance indicators of producers' grain finishing lambs, by length of time on grain, 2007-08 and 2008-09 average per farm

		less than 40 days		40 to 60 days		more than 60 days	
Area operated, 30 June	ha	1 899	(17)	2 450	(25)	1 908	(27)
Grain production							
Area sown to crops	ha	860	(20)	998	(25)	688	(16)
Grain production	t	1 447	(33)	1 277	(19)	702	(19)
Grain sold	t	1 317	(35)	1 106	(19)	589	(19)
Grain stocks, 1 July	t	54	(23)	86	(16)	59	(37)
Grain purchases	t	10	(67)	29	(54)	26	(56)
Total grain available for on-farm use	t	193	(11)	288	(19)	199	(17)
Lamb production and sales							
Number of sheep, 30 June	hd	2 275	(26)	2 512	(18)	1 693	(16)
Number of ewes mated	hd	1 636	(18)	1 449	(24)	994	(16)
Number of lambs marked	hd	1 350	(22)	1 210	(25)	826	(12)
Lambing rate	%	82	(6)	84	(4)	83	(6)
Number of lambs sold	hd	890	(18)	1 101	(27)	664	(12)
– direct for slaughter	hd	762	(21)	1 054	(28)	612	(12)
Grain finishing of lambs							
Number of lambs grain finished	hd	466	(27)	687	(31)	513	(12)
Average length of grain finishing	days	25	(5)	44	(3)	94	(9)
Proportion of lambs sold that were grain finished	%	52	(19)	62	(14)	77	(7)
Prices received							
Adult sheep	\$/hd	51	(9)	59	(11)	52	(12)
Lambs sold direct for slaughter	\$/hd	73	(6)	85	(6)	83	(3)
Farm financial performance							
Farm cash income	\$	227 417	(35)	168 997	(21)	39 278	(65)
– per hectare operated	\$/ha	120	(30)	69	(23)	21	(68)
Farm business profit	\$	97 004	(63)	55 461	(88)	–49 357	(57)
Rate of return							
– excluding capital appreciation	%	3.5	(33)	2.8	(38)	0.0	(5636)
– including capital appreciation	%	4.6	(33)	3.7	(103)	–0.6	(216)

Note: Financial statistics are expressed in 2008-09 dollars. Figures in parenthesis are Relative Standard Errors (RSEs), which are standard errors expressed as a percentage of the estimate provided. A guide on how to use RSEs is in the methodology section at the back of the report.

During the two years to 2008-09, slaughter lamb producers who grain finished their lambs for fewer than 40 days realised the strongest farm financial performance. On average, these farms generated an annual net farm cash income of \$120 a hectare, compared with \$69 a hectare for producers in the 40 to 60 days group and \$21 a hectare in the more than 60 days group.

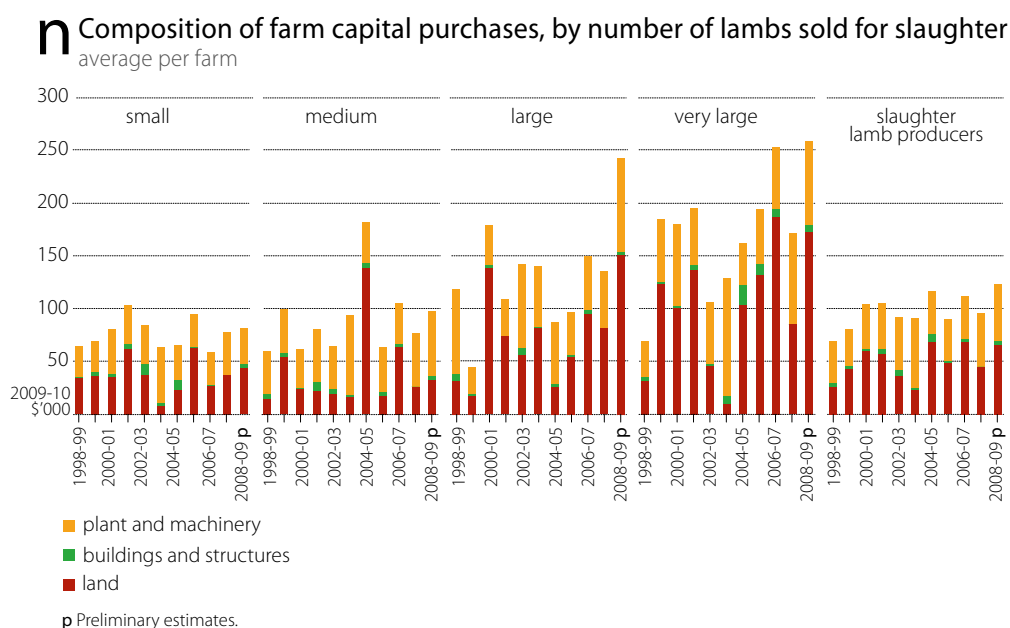
Farm investments

The capacity of producers' to boost income in coming years will be influenced by their past investments in additional land to expand the scale of their farming activities and in new infrastructure or machinery to boost productivity in the longer term. These latter investments are likely to have been stimulated by the investment allowance offered to businesses that committed to investing in depreciating assets between 31 December 2008 and 31 December 2009. This was part of the Australian Government's Nation Building and Jobs Plan to support economic activity during the global financial crisis. Data currently available only cover the first six months of this period.

Investments undertaken

Over the past decade, slaughter lamb producers have responded to rising lamb prices and improved financial performance by undertaking considerable new investments in land, plant and machinery. In real terms, the average slaughter lamb producer has increased their annual investments from almost \$90 000 a farm in the five years to 2002-03 to more than \$107 000 a farm in the five years to 2008-09.

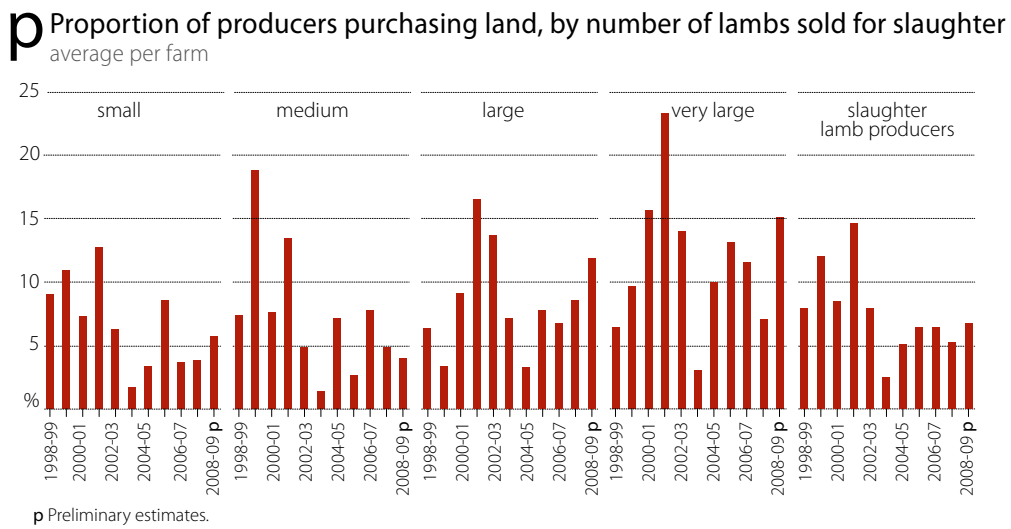
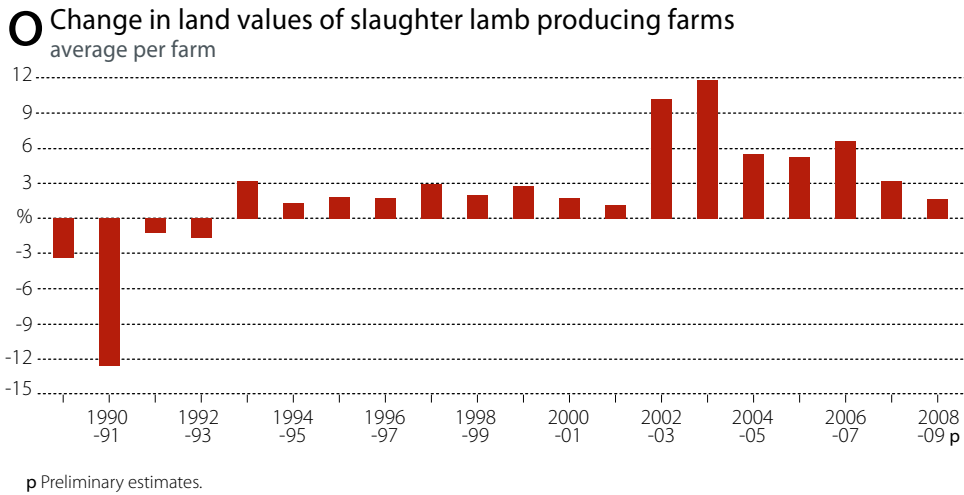
In 2008-09, producers of different scales of slaughter lamb production appear to have responded in markedly different ways to the investment allowance and the improvement in farm financial performance (figure n).



Small scale slaughter lamb producers' capacity to undertake new investments in plant and machinery was constrained by tight cash flows and low profitability in 2008-09. However, medium, large and very large scale producers had stronger cash flows and profitability and increased or maintained a high level of plant and machinery purchases. On average, medium and large scale slaughter lamb producers increased their purchases of plant and machinery in 2008-09 by 22 per cent and 61 per cent, respectively. While very large scale slaughter lamb producers had, on average, slightly lower expenditure on new plant and machinery compared with the previous year, their investments remained at levels almost 30 per cent greater than was sustained between 2000-01 and 2006-07.

Producers in the slaughter lamb industry continued to allocate the largest share of their investment spending to buying land, despite record land prices. For the sixteenth consecutive year, slaughter lamb producers' land values rose in 2008-09 (figure o). However, the rate of growth has continued to slow, averaging 1.7 per cent in 2008-09.

In 2008-09, the proportion of slaughter lamb producers who purchased land increased from 5.2 per cent in 2007-08 to 6.8 per cent (figure p). More small, large and very large scale slaughter lamb producers purchased land in 2008-09 than in 2007-08. Very large scale producers were the most active purchasers of land, with more than 15 per cent of these producers acquiring more land in 2008-09.

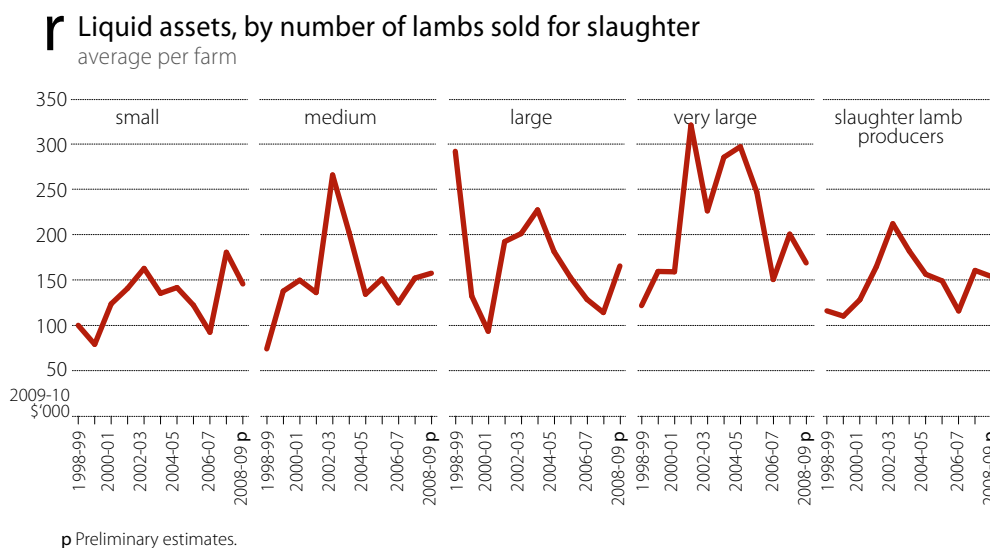
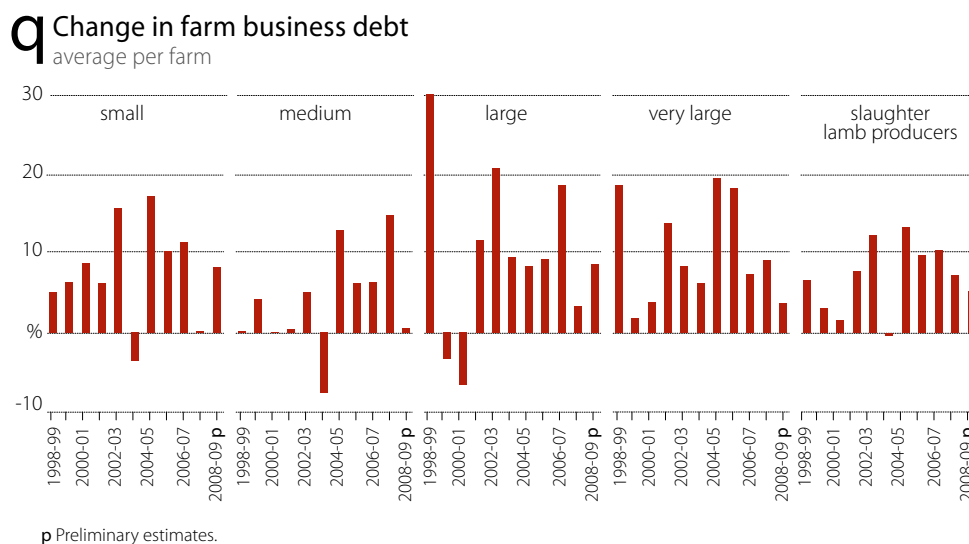


Financing investments

Producers have a number of options available to fund their new capital purchases, including using their farm business cash flows, increasing debt, running down liquid assets and using off-farm income sources.

In 2008-09, slaughter lamb producers of different scales appear to have used a different mix of these four funding sources. Very large scale slaughter lamb producers, on average, used their strong recovery in business cash flows, additional debt and liquid asset reserves to fund their purchases (figures q and r). In contrast, medium scale producers used their stronger business cash flows to largely fund their new capital investments and to replenish drought reduced liquid asset reserves. Large and small scale slaughter lamb producers were the most reliant on using debt facilities to fund their investments in 2008-09, with debt rising, on average, by 8 to 9 per cent during the year (figure q).

Reflecting these differences in the use of debt to finance farm investments, producers of different scales of slaughter lamb production experienced markedly different changes in the debt servicing costs in 2008-09 (figure s). Despite relatively low interest rates, large and very large scale producers, on average, used a greater proportion of farm receipts to fund interest payments, mainly because of an increase in debt used to finance additional capital investments. In contrast, the proportion of farm receipts used by medium sized farms to fund their interest payments fell largely because of low interest rates.

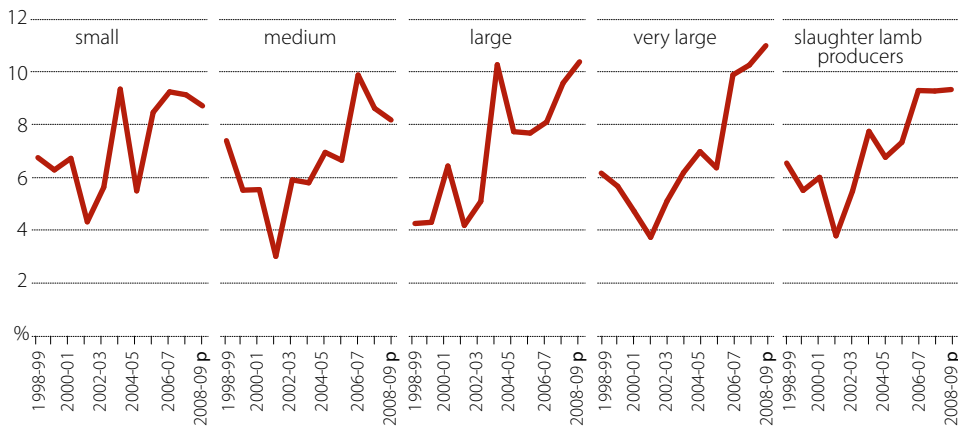


Nonetheless, producers of all scales are currently using a historically high proportion of farm receipts to meet their businesses interest payments, averaging 9.3 per cent in the three years to 2008-09 compared with an average of 6.2 per cent in the 10 years to 2005-06.

Average equity levels for large and very large scale slaughter lamb producers declined slightly in 2008-09 because land values grew at a slower rate than business debts (figure t). In the case of very large scale producers, the average operator’s equity ratio was 83 per cent, the lowest level since 1996-97. In contrast, medium scale producers’ equity was boosted as the growth in land values more than offset the effect of a slight increase in debt during 2008-09.

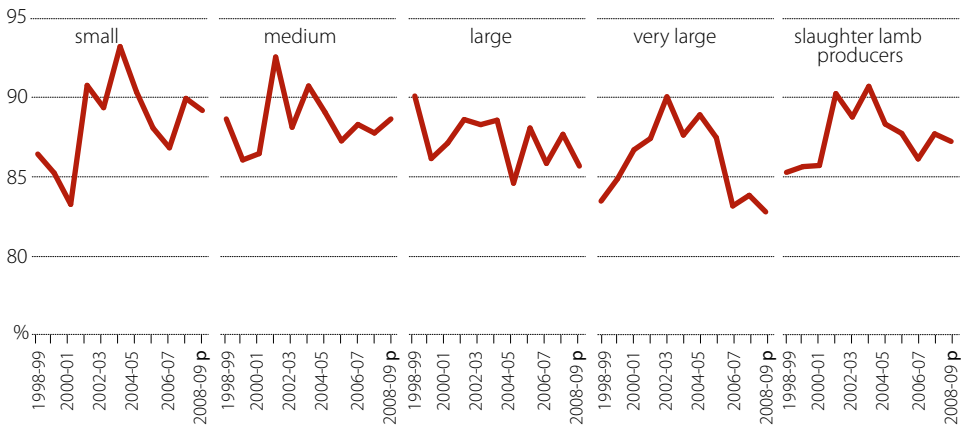
While large scale slaughter lamb farms have experienced a decline in equity in recent years, this has largely been caused by producers maintaining a high level of capital investments. If expectations of sustained high lamb prices are realised over the medium term, these investments provide the basis to increase their scale of agricultural activities and productivity, which will enable these businesses to continue to realise strong cash inflows.

S Ratio of interest payments to total cash receipts, by number of lambs sold for slaughter average per farm



p Preliminary estimates.

t Equity ratio, by number of lambs sold for slaughter average per farm



p Preliminary estimates.

Survey methodology and definitions

Target population

ABARE surveys are designed and samples selected on the basis of a framework drawn from the Business Register maintained by the Australian Bureau of Statistics (ABS). This framework includes agricultural establishments in each statistical local area classified by size and major industry. The estimates published in this report cover establishments with an estimated value of agricultural operations of \$40 000 or more. A definition of the estimated value of agricultural operations is given in Australian Standard Industrial Classification (ABS 1983, cat. no. 1201.0).

Survey design and sample weighting

The population was stratified by operation size using the estimated value of agricultural operation (EVAO). The size of each stratum was determined using the Dalenius-Hodges method. The sample allocation to each stratum was assigned using a mixture of the Neyman allocation, which takes into account variability within strata of the auxiliary variable, in this case EVAO, and proportional allocation, which only considers the population number in each stratum. The Neyman allocation allocates large proportions of sample to strata with large variability, in the case of this survey, strata of larger farms.

The estimates presented in this report are calculated by appropriately weighting the data collected from each sample farm and then using the weighted data to calculate population estimates. Generally, larger farms have smaller weights and smaller farms have larger weights, reflecting the strategy of sampling a higher fraction of larger farms than of smaller farms (the former having a wider range of variability of key characteristics).

Reliability of estimates

The reliability of the estimates of population characteristics presented in this report depends on the design of the sample and the accuracy of the measurement of characteristics for the individual sample farms.

Sampling errors

Only a small number of farms out of the total number of farms in a particular industry are surveyed. The data collected from each sample farm are weighted to calculate population estimates. Estimates derived from these farms are likely to be different from those that would have been obtained if information had been collected from a census of all farms. Any such differences are called 'sampling errors'.

The size of the sampling error is most influenced by the survey design and the estimation procedures, as well as the sample size and the variability of farms in the population. The larger the sample size, the lower the sampling error is likely to be. Hence, national estimates are likely to have smaller sampling errors than industry and state estimates.

To give a guide to the reliability of the survey estimates, sampling errors have been calculated for all estimates in this report. These estimated errors, expressed as percentages of the survey estimates and termed 'relative standard errors', are given next to each estimate in parentheses.

Calculating confidence intervals using relative standard errors

Relative standard errors (RSE) can be used to calculate 'confidence intervals' that give an indication of how close the actual population value is likely to be to the survey estimate.

To obtain the standard error, multiply the relative standard error by the survey estimate and divide by 100. For example, if average total cash receipts are estimated to be \$100 000 with a relative standard error of 6 per cent, the standard error for this estimate is \$6000. This is one standard error. Two standard errors equal \$12 000.

For a 66 per cent confidence interval, there is roughly a two in three chance that the 'census value' (the value that would have been obtained if all farms in the target population had been surveyed) is within one standard error of the survey estimate. This range of one standard error is described as the 66 per cent confidence interval. In this example, there is an approximately two in three chance that the census value is between \$94 000 and \$106 000 (\$100 000 plus or minus \$6000).

For a 95 per cent confidence interval, there is roughly a 19 in 20 chance that the census value is within two standard errors of the survey estimate (the 95 per cent confidence interval). In this example, there is an approximately 19 in 20 chance that the census value lies between \$88 000 and \$112 000 (\$100 000 plus or minus \$12 000).

The size of the RSE is mainly influenced by the design of the survey, the sample size and the variability in the population. For example, the larger the sample size, the lower the RSE is likely to be.

Comparing estimates

When comparing estimates between two groups, it is important to recognise that the differences are subject to sampling error. As a rough rule of thumb, a conservative estimate (an overestimate) of the standard error of the difference can be constructed by adding the squares of the estimated standard errors of the component estimates and taking the square root of the result.

For example, suppose the estimates of farm cash income are \$59 334 for small scale slaughter lamb producers and \$51 664 for medium scale slaughter lamb producers, with the relative standard errors given as 38 and 42 per cent respectively. The difference between these two estimates is \$7670. The standard error of the difference can be estimated as:

$$\sqrt{(38 \times \$59\,334 / 100)^2 + (42 \times \$51\,664 / 100)^2} = \$31\,292$$

A 95 per cent confidence interval for the difference is:

$$\$7670 \pm 1.96 \times \$31\,292 = (-\$53\,662, \$69\,002)$$

Hence, if 100 different samples are taken, in 95 of them, the difference between these two estimates is between -\$53 662 and \$69 002. Also, since zero is in this confidence interval, it is possible to say that the difference between the estimates is not statistically significantly different from zero at the 95 per cent confidence level.

Definition of terms

Owner manager: The primary decision-maker for the business. This person is identified by discussion between interviewer and interviewee as (one of) the key decision-maker(s). This person is usually responsible for the day-to-day operation of the business and may own or have a share in the business.

Area of land at business premises: Includes all land operated by the business, whether owned or rented by the business.

Labour: Measured in work-weeks, as estimated by the owner manager. It includes all work on the business by the owner manager, partners, family, hired permanent and casual workers, but excludes work done by contractors.

Hired labour: Excludes the owner manager, partners and family labour, and work undertaken by contractors. Expenditure on contract services appears as a cash cost.

Capital: The value of capital employed by the business is the market value of all the assets used including leased items but excluding machinery and equipment either hired or used by contractors. Market valuations

were provided by the owner manager of surveyed businesses and included the market value of land and fixed improvements used by the business, excluding the value of the owner manager's house. The house value deducted from the total value of land and fixed improvements was the present day replacement cost, depreciated for age.

Debt: Estimated as business debt. It includes all debts attributable to the business excluding personal debt and underwritten loans. Information collected at the survey interview was supplemented by information in the business accounts.

Total cash receipts: Total of revenues received by the business during the financial year, including revenues from the sale of crops, livestock and livestock products. It includes revenue received from royalties, rebates, refunds, plant hire, contracts, insurance claims and compensation, and government assistance payments.

Total cash costs: Payments made by the business for materials and services and for permanent and casual hired labour (excluding partner and other family labour). It includes the value of any lease payments on capital, produce purchased for resale, rent, interest, cropping and livestock related purchases. Capital and household expenditures are excluded from total cash costs. Handling and marketing expenses include commissions, levies etc. for business produce sold. Administration costs include accountancy fees, banking and legal expenses, postage, stationery, subscriptions and telephone. Other cash costs include relatively small cost items like stores, advisory services and travelling expenses.

Depreciation: Estimated by applying the diminishing value depreciation method to the market value of capital items at 30 June 2010. Capital items are categorised into several groups and relevant depreciation rates are applied. The capital groups include vehicles; handling, harvesting and packing equipment; cultivation and sowing equipment; computers, electronic and communications equipment; other plant and equipment; and buildings on the business premises.

Imputed labour cost: Payments for owner manager and family labour may bear little relationship to the actual work input. An estimate of the labour input of the owner manager, partners and their families is calculated in work-weeks and a value is imputed at the relevant Federal Pastoral Industry Award rates.

Farm business profit: Cash operating surplus plus buildup in trading stocks, less depreciation, less the imputed value of the owner manager, partner(s) and family labour.

Profit at full equity: Return to capital and management plus interest, rent and finance lease payments. It is the return produced by all the resources used in the business.

Rate of return: The return to all capital used. It is computed by expressing farm business profit as a percentage of the total opening capital of the business.

Equity ratio: Calculated as a percentage of owned capital at 30 June.

Off-farm income: Income not derived from the surveyed farm business. It includes all off-farm income from wages and salaries, other businesses, other investments and Australian Government social support payments. It is estimated for the owner manager and spouse only.

Lamb turn-off rate: Proportion of lambs marked that were sold during the financial year

Sheep turn-off rate: Proportion of adult sheep on hand at 1 July that were sold during the financial year.



Meat & Livestock Australia Limited

Level 1, 165 Walker Street, North Sydney NSW 2060

Postal address Locked bag 991, North Sydney NSW 2059

Phone 02 9463 9333 **Fax** 02 9263 9393

Free phone 1800 023 100 (Australia only)

Farm survey data for the beef, lamb and sheep industries

www.abare.gov.au/ame/mla/mla.asp

www.abare.gov.au/interactive/agsurf

www.abare.gov.au



abare.gov.au

Australian Bureau of Agricultural and Resource Economics

Postal address GPO Box 1563 Canberra ACT 2601

Location 7b London Circuit Canberra ACT 2601

Switchboard +61 2 6272 2000