

Farm performance

Broadacre and dairy farms – 2006-07 to 2008-09

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- Broadacre farm financial performance is projected to improve in 2008-09, building on the improvement recorded in 2007-08. Average farm cash income is projected to increase from \$62 500 in 2007-08 to \$80 000 in 2008-09.
- However, improvement in income for broadacre farms will be mainly confined to Western Australia, northern New South Wales and Queensland.
- Average farm cash income for dairy farms is projected to decline sharply in 2008-09 on lower milk prices and continued dry conditions in many dairy regions.
- Overall farm debt levels are high, but broadacre and dairy farms had strong farm equity at 30 June 2008. Debt servicing will be assisted by lower interest rates in 2008-09 and by the improved incomes for broadacre farms.

The financial performance of Australian broadacre and dairy farms strengthened in 2007-08, from a record low in 2006-07, which was a year of widespread, severe drought. Farm cash income for broadacre farms increased from an average of \$29 800 per farm in 2006-07 to average \$62 400 in 2007-08. Farm cash incomes for dairy farms in 2007-08 was the highest recorded in more than 20 years.

In 2008-09, the overall financial performance of Australian broadacre farms is projected to further improve on the back of increases in grain production, strong livestock prices and reductions in fodder prices and interest rates. For broadacre farms, farm cash income is projected to rise to average \$80 000 per farm in 2008-09. But the financial performance of dairy farms is projected to decline sharply in 2008-09 in response to reductions in prices for manufactured dairy products in 2009.

However, improvement in farm financial performance in 2008-09 is expected to mainly be confined to Western Australia, northern New South Wales and Queensland. In southern regions farm financial performance remains constrained by continued dry seasonal conditions and shortages of irrigation water.

Financial performance of Australian farms

Broadacre and dairy farms account for almost 70 per cent of commercial-scale Australian farm businesses. They are also responsible for the management of more than 90 per cent of the total area of agricultural land in Australia and account for the majority of Australia's family owned and operated farms. They are located in all regions and form a vital part of rural communities and economies across the country.

Each year ABARE interviews producers from the broadacre and dairy sectors of Australian agriculture as part of its annual survey program. Broadacre industries covered in this survey include the wheat and other crops, mixed livestock-crops, sheep, beef and sheep-beef

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industries (box 1). The information collected provides a basis for analysing the current financial position of farmers in these industries and expected changes in the short term. Data from ABARE's Australian Agricultural and Grazing Industries Survey (AAGIS) and Australian Dairy Industry Survey (ADIS) are examined to gain insights into the performance of Australian broadacre and dairy farms over the period from 2006-07, including projected farm financial performance in 2008-09.

box 1 **The broadacre sector of Australian agriculture is defined to include five industry types:**

Wheat and other crops industry

The wheat and other crops industry represents the more specialised producers of cereal grains, coarse grains, pulses and oilseeds.

Mixed livestock–crops industry

The mixed livestock–crops industry covers farms engaged in the production of sheep and/or beef cattle in conjunction with substantial activity in broadacre crops such as wheat, coarse grains, oilseeds and pulses.

Sheep industry

The sheep industry represents the more specialised producers of sheep and wool. The number of properties classified to the industry, along with the sheep industry's contribution to wool production, has declined substantially since the early 1990s as producers diversified enterprises. Currently, sheep industry farms account for only 30 per cent of Australia's wool production. The majority of both wool and sheep meat production occurs on mixed enterprise farms, particularly on mixed livestock–crops industry farms.

Beef industry

The beef industry covers properties mainly engaged in running beef cattle and currently accounts for around 65 per cent of Australia's beef production. The beef industry contains a large number of small farms.

Sheep–beef industry

The sheep–beef industry covers properties engaged in running sheep and beef cattle. As with the sheep and beef industries, this industry also contains a large number of small farms.

Farm production

2007-08

Improved seasonal conditions during the first half of 2007 led to increases in the area of winter crops sown. However, with the exception of Queensland, parts of northern New South Wales and southern Western Australia, seasonal conditions deteriorated during the critical September-October period and many regions experienced a second year of crop failure. Higher rainfall in northern cropping areas resulted in record grain sorghum production in both Queensland and New South Wales.

Improved seasonal conditions in northern Australia led to a reduction in cattle turn-off in Queensland as beef cattle herds were rebuilt. However, in central Australia where seasonal conditions were dry, cattle turn-off increased. In southern states, where cattle numbers had been reduced through several dry years, cattle turn-off increased slightly and producers were unable to begin herd rebuilding. In addition, sheep numbers and wool production declined further because of low lambing rates and continued high turn-off rates of sheep and lambs for slaughter.

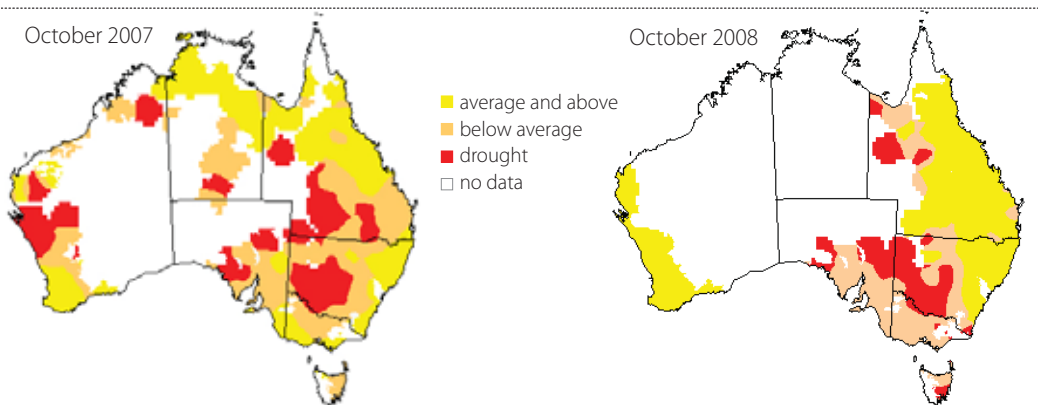
Production on irrigated broadacre and dairy farms in many regulated river valleys, particularly in the southern and eastern Murray-Darling Basin, was low with many licence holders receiving record low water allocations.

2008-09

Historically high grain, oilseed and grain legume prices in early 2008 led to an 8 per cent increase in winter crop plantings on broadacre farms for the season and raised hopes of a substantial increase in cropping farm incomes. Unfortunately, below average winter and spring rainfall in 2008 resulted in low yields in southern Australia. In Queensland, northern New South Wales and the northern grains belt of Western Australia, in-season rainfall and stored soil moisture resulted in a substantial increase in winter crop production. However, rain through the harvest period in most states resulted in a downgrading of grain quality, increasing the supply of feed grade grains and resulting in lower prices for many growers.

Overall, winter crop production increased by around 60 per cent on broadacre farms in 2008-09 compared with 2007-08. Of the major winter crops, wheat production increased by around 70 per cent on the 2007-08 harvest, barley production increased by around 7 per cent and canola production increased by slightly more than 50 per cent.

map 1 Seasonal conditions, broadacre and dairy farms



Seasonal conditions as reported by farmers in ABARE farm surveys

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Prospects for 2008-09 summer crops are currently favourable, with good soil moisture conditions following spring and late summer rains in the major summer cropping regions of northern New South Wales and Queensland. However, the area planted to grain sorghum on broadacre farms is lower than in 2007-08 as growers respond to reduced feed grain prices and land available for cropping because of the large area planted to winter crops in 2008-09.

After a dry 2008 in which cattle turn-off increased sharply, seasonal conditions are expected to improve markedly in 2009 across most of pastoral northern and central Australia following widespread summer rains. Improved grazing conditions are expected to lead to an increase in herd building in formerly dry areas. However, overall turn-off of cattle in northern Australia and in northern New South Wales is projected to increase slightly in 2008-09, particularly from northern and eastern Queensland, following improved seasonal conditions and herd buildup in 2007-08.

In southern Australia, dry seasonal conditions throughout 2008-09 are projected to constrain beef cattle turn-off to be similar to 2007-08. Overall, average beef cattle numbers are projected to be slightly lower on broadacre farms in southern Australia, particularly in Victoria.

Lamb markings are expected to increase slightly on broadacre farms during 2008-09, but with continued high lamb and sheep turnoff rates for slaughter, sheep numbers and wool production on broadacre farms are projected to fall in 2008-09.

The availability of irrigation water remains a critical issue for irrigated broadacre and dairy farms in 2008-09. Many irrigated farms continue to operate with allocations of water significantly lower than licensed entitlements. Some improvement in water storage levels in 2008-09 has resulted in an increase in the area planted to cotton and rice, but the area planted is still historically low.

Improved seasonal conditions and high milk prices in 2008 encouraged a small increase in dairy cow numbers on dairy farms in 2008-09, leading to increased milk production in all states. However, continued dry conditions, low irrigation water allocations and increased competition for purchased fodder and feed grains has forced many dairy farms in northern Victoria and the southern New South Wales Riverina region to further reduce the size of their dairy herds.

Farm receipts

2008-09

The increase in crop production of broadacre farms is projected to have raised average crop receipts by around 16 per cent per farm, despite falls in grain and oilseed prices because of higher domestic and international production (figure a).

Lower net turn-off of both sheep and lambs on broadacre farms is projected to be more than offset by higher livestock prices resulting from the tight domestic supply of sheep and lambs. Average per farm sheep and lamb receipts are projected to increase by around 10 per cent.

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box 3 Farm survey methodology

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.

Data provided in this paper have been collected via on-farm interviews and incorporate detailed farm financial accounting information.

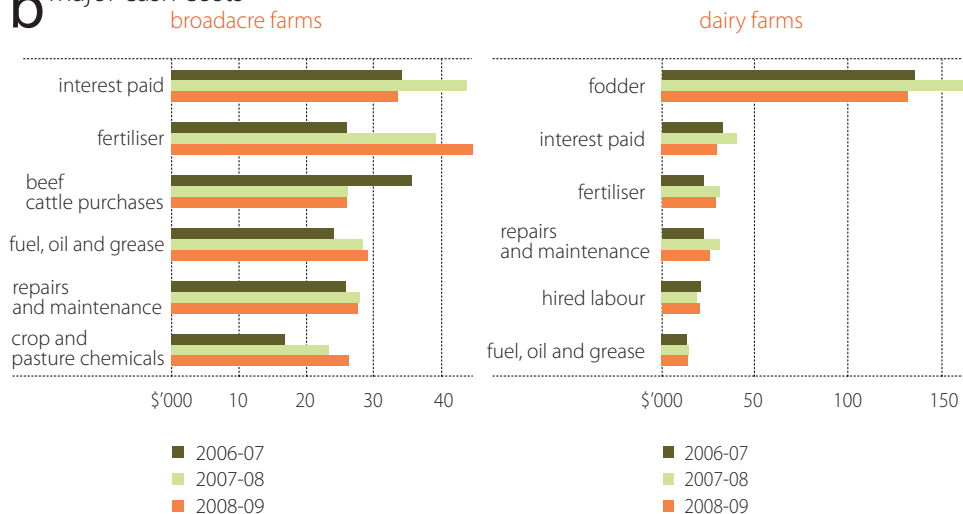
The estimates presented have been calculated by appropriately weighting the data collected from each sample farm. Sample weights are calculated so that sample estimates of numbers of farms, areas of crops and numbers of livestock in various geographic regions and industries correspond as closely as possible to the most recently available ABS data as collected in its Agricultural Censuses and updated annually with data collected in Agricultural Commodity Surveys.

The 2008-09 projections are based on data collected via on-farm interviews and telephone interviews in the period 1 October to 9 December 2008. The estimates include crop and livestock production, receipts and expenditure up to the date of interview together with expected production, receipts and expenditure for the remainder of the 2008-09 financial year. Modifications have been made to expected receipts and expenditure for the remainder of 2008-09 where significant price change has occurred post interview.

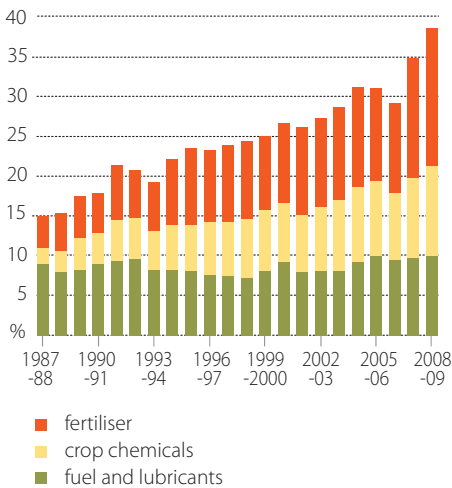
182 per cent increase in the ABARE index of prices paid for fertiliser in 2007-08 (figure b). With the average area planted to crops increasing by around 7 per cent, this indicates substantial changes were made to fertiliser use in 2007-08.

Spray chemicals and fertilisers accounted for about 25 per cent of average grains industry cash costs (grains industry includes wheat and other crops and mixed livestock-crops industries). In 1997-98, this was 17 per cent and just 6 per cent 20 years ago in 1987-88 (figure c). Significant

b Major cash costs



C Proportion of total cash costs for grains farms



changes in farm technology over the past three decades has contributed to the increased usage of chemicals and fertilisers, while reducing inputs of capital and labour on cropping farms (Nossal et al. 2009).

2008-09

Fodder prices are estimated to have fallen significantly, with lower hay prices and lower feed grain prices. Interest rates have also been reduced and fuel and fertiliser prices are forecast to fall slightly in the second half of the year.

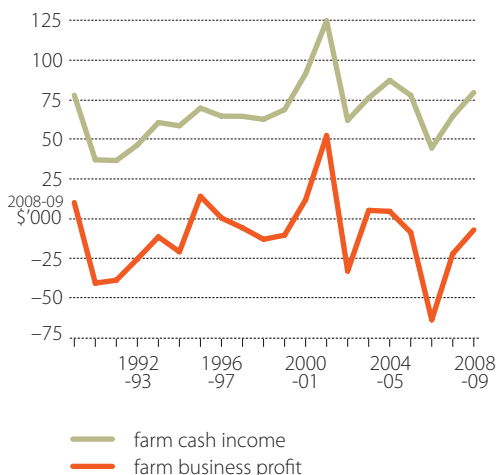
Total cash costs for broadacre farms are projected to rise by 4 per cent in 2008-09, with the final outcome to be determined mainly by the size of winter crop plantings in autumn and early winter and by expenditure of farms on beef cattle purchase, particularly in northern Australia.

For dairy farms total cash costs are projected to fall by around 10 per cent because of lower fodder prices, lower interest rates and an overall reduction in expenditure by dairy farms after higher expenditure in 2007-08 on the back of high milk prices and consequent high farm cash incomes.

Farm incomes and profits

Farm financial performance is projected to strengthen in 2008-09, adding to the improvement in farm financial performance recorded in 2007-08.

d Financial performance all broadacre industries average per farm



Increased grain production, combined with favourable prices for livestock and reductions in fodder prices and interest rates, are projected to result in farm cash incomes on broadacre farms rising in 2008-09, to average around \$80 000 per farm (figure d, table 1).

For the dairy industry, farm financial performance is projected to fall sharply in 2008-09 because of lower milk prices, particularly for manufactured dairy products. This is despite lower fodder prices and interest rates and a small increase in milk production.

Farm cash income is a measure of the cash funds available for farm investment and consumption after paying all costs incurred in

Farm performance

1 Financial performance all broadacre industries average per farm

		2006-07	2007-08 ^p	2008-09 ^s
Total cash receipts	\$	359 270	415 100 (4)	450 000
Total cash costs	\$	329 460	352 800 (4)	370 000
Farm cash income	\$	29 800	62 400 (13)	80 000
Farms with negative farm cash income	%	45	38 (5)	36
Farm business profit	\$	-70 240	-21 300 (38)	7 000
Farms with negative farm business profit	%	81	70 (2)	69
Profit at full equity				
– excl. capital appreciation	\$	-28 510	32 300 (25)	36 000
– incl. capital appreciation	\$	244 970	110 300 (14)	na
Farm capital at 30 June ^a	\$	3 756 820	4 207 300 (3)	na
Net capital additions	\$	25 470	46 100 (27)	na
Farm debt at 30 June ^b	\$	463 870	547 200 (5)	na
Equity at 30 June ^{bc}	\$	3 181 660	3 531 600 (3)	na
Equity ratio ^{bd}	%	87	87 (1)	na
Harvest loans at 30 June ^e	\$	4 280	6 100 (23)	na
Farm liquid assets at 30 June ^b	\$	na	154 800 (12)	na
Farm management deposits (FMDs) at 30 June ^b	\$	23 890	25 700 (9)	na
Share of farms with FMDs at 30 June ^b	%	17	19 (8)	na
Rate of return ^g				
– excl. capital appreciation	%	-0.8	0.8 (25)	0.9
– incl. capital appreciation	%	7.0	2.7 (14)	na
Off-farm income of owner manager and spouse ^b	\$	37 440	37 500	na

^a Excludes leased plant and equipment. ^b Average per responding farm. ^c Farm capital minus farm debt. ^d Equity expressed as a percentage of farm capital. ^e Harvest loans are not included in farm debt. ^f Dairy Structural Adjustment Program and Supplementary Dairy Assistance Scheme. ^g Rate of return to farm capital at 1 July. ^p Preliminary estimates. ^s Provisional estimates. **na** Not Available.
Note: Figures in parentheses are standard errors expressed as a percentage of the estimate provided.

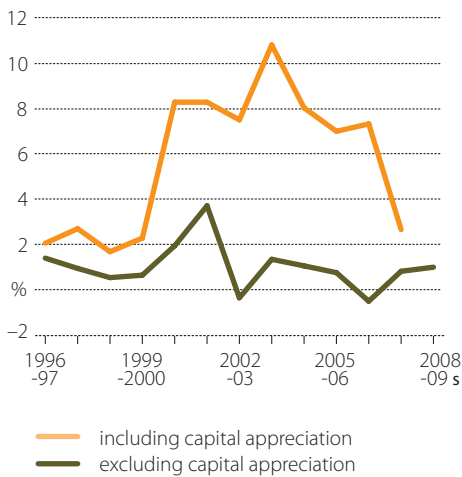
production, including interest payments, but excluding capital payments and payments to family workers. It is a measure of short-term farm performance because it does not take into account depreciation or changes in farm inventories. A measure of longer term profitability which takes into account capital depreciation and changes in inventories of livestock, fodder, grain and wool is farm business profit.

Average farm business profit in the broadacre industries is projected to recover more strongly in 2008-09 than the increase in farm cash income. This largely reflects a small buildup in the value of trading stocks as a result of producers increasing cattle numbers in northern Australia and replenishing on-farm inventories of fodder and grain. However, little change is expected in the proportion of broadacre farms projected to realise a farm business loss in 2008-09. On average, farm businesses are projected to realise a profit of \$7000, compared with a loss of \$21 300 in 2007-08.

Rates of return

Rates of return to total farm capital including capital appreciation have been relatively high since 2000-01 but dipped sharply in 2007-08 (figure e). Strong demand for rural land during this period resulted in a sharp increase in land values in many agricultural regions, raising the total capital value of farms. These rising values have resulted in high rates of return,

e Return on capital, broadacre industries



including capital appreciation. However, in 2007-08 increases in land values were much smaller, particularly in northern Australia where the growth in land prices has been strong in recent years. The lesser growth in land values in 2008-09 resulted in a much lower average rate of return to total farm capital including capital appreciation.

Rates of return excluding capital appreciation have been adversely affected in many regions by a number of poor profit years resulting from adverse seasonal conditions. Rises in total farm capital values as a consequence of increases in land values in recent years have also reduced rates of return excluding capital appreciation. Only a relatively small improvement in rates of return excluding capital appreciation is expected in 2008-09 (figure e).

In 2008-09, highest average rates of return excluding capital appreciation are expected to be recorded in Western Australia and the Northern Territory, and for cropping farms, large beef industry farms and dairy farms (tables 2 and 4).

Performance, by state

Farm financial performance projected for 2008-09 and how this performance ranks in historical terms varies markedly across states and regions (map 2).

New South Wales

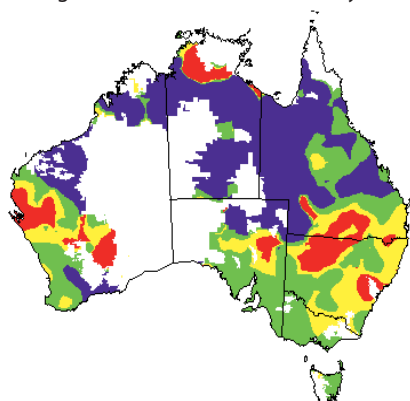
Broadacre farms in the grain growing areas of north-western and central New South Wales are projected to have higher farm cash incomes in 2008-09, despite crop losses and grain quality downgrading caused by rainfall and flooding during the harvest period. In contrast, farm cash incomes are projected to be relatively low across much of southern New South Wales, where dry seasonal conditions have continued, particularly in the irrigated areas of the southern Murray-Darling Basin.

Higher livestock prices and reductions in cash costs are projected to slightly increase average farm cash incomes for livestock farms despite lower wool prices. Improvement will mainly occur in the north and east, where turn-off of cattle and sheep is also expected to increase slightly.

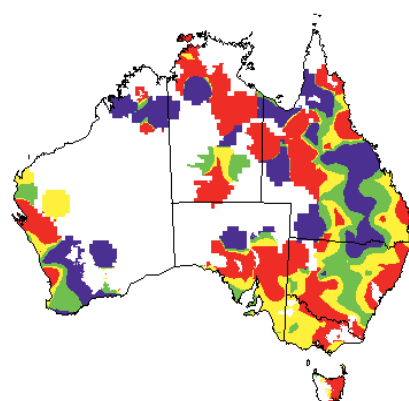
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map 2 Farm cash income, broadacre and dairy farms

Average farm cash income over 10 years to 2007-08



Farm cash income, 2008-09



■ more than \$200 000
 ■ \$100 000 – \$200 000
 ■ \$50 000 – \$100 000
 ■ less than \$50 000
 □ no data

2 Financial performance, by state

broadacre industries average per farm

	farm cash income			farm business profit ^a			
	2006-07	2007-08 ^p	2008-09 ^s	2006-07	2007-08 ^p	2008-09 ^s	
	\$	\$	\$	\$	\$	\$	
New South Wales	5 020	14 300 (84)	72 000	-103 830	-68 200 (18)	-4 000	
Victoria	27 830	71 600 (16)	50 000	-70 190	-3 700 (343)	-29 000	
Queensland	52 230	68 200 (21)	96 000	-16 830	6 800 (238)	13 000	
Western Australia	66 360	127 500 (26)	149 000	-67 140	25 100 (133)	21 000	
South Australia	35 730	88 100 (13)	60 000	-78 560	-17 200 (74)	-45 000	
Tasmania	-7 200	36 100 (37)	16 000	-68 490	-47 100 (29)	-67 000	
Northern Territory	10 090	695 600 (26)	33 000	567 500	161 500 (130)	407 000	
Australia	29 800	62 400 (11)	80 000	-70 240	-21 300 (34)	7 000	

	rate of return – excluding capital appreciation ^b			rate of return – including capital appreciation ^b	
	2006-07	2007-08 ^p	2008-09 ^s	2006-07	2007-08 ^p
	%	%	%	%	%
New South Wales	-1.8	-0.3 (103)	1.1	4.1	0.7 (100)
Victoria	-1.7	1.0 (41)	0.0	5.4	4.9 (15)
Queensland	0.6	1.2 (24)	1.2	13.1	2.0 (37)
Western Australia	0.4	2.2 (31)	1.7	8.5	5.1 (22)
South Australia	-1.6	0.6 (60)	-0.3	2.1	1.8 (32)
Tasmania	-1.5	-0.7 (72)	-1.5	5.6	2.5 (68)
Northern Territory	5.4	1.6 (70)	2.7	20.9	11.7 (23)
Australia	-0.8	0.8 (22)	0.9	7.0	2.7 (13)

^a Defined as farm cash income plus buildup in trading stocks, less depreciation and the imputed value of operator partner and family labour. ^b Defined as profit at full equity, excluding or including capital appreciation, as a percentage of total opening capital. Profit at full equity is defined as farm business profit plus rent, interest and lease payments less depreciation on leased items.

^p Preliminary. ^s Provisional estimate.

Note: Figures in parentheses are standard errors expressed as a percentage of the estimate provided.

On average, farm cash income of broadacre farms in New South Wales is projected to increase from \$14 300 in 2007-08 to \$72 000 per farm in 2008-09 (tables 2 and 3).

Victoria

Victorian cropping farm cash incomes are projected to decline in 2008-09 because of dry seasonal conditions. Receipts from wool are projected to fall, but higher sheep, lamb and beef cattle prices are expected to result in maintaining receipts from livestock sales, despite a small reduction in lamb turn-off. Farm cash incomes are projected to remain relatively low in the irrigated areas of the Murray-Darling Basin. Farm cash income for broadacre farms in Victoria is projected to average \$50 000 in 2008-09, falling from \$71 600 in 2007-08 (tables 2 and 3).

3 Financial performance, by state

all broadacre industries average per farm

	New South Wales			Victoria		
	2006-07	2007-08 ^p	2008-09 ^s	2006-07	2007-08 ^p	2008-09 ^s
Total cash receipts	\$ 352 020	353 700 (6)	415 000	222 280	312 100 (5)	279 000
Total cash costs	\$ 347 000	339 400 (6)	343 000	194 450	240 500 (7)	228 000
Farm cash income	\$ 5 020	14 300 (84)	72 000	27 830	71 600 (16)	50 000
Farms with negative farm cash income	% 53	44 (9)	35	39	30 (15)	39
Farm business profit	\$ -103 830	-68 200 (18)	-4 000	-70 190	-3 700 (343)	-29 000
Farms with negative farm business profit	% 88	79 (3)	66	87	66 (5)	79
Profit at full equity						
– excl. capital appreciation	\$ -62 420	-10 700 (102)	41 000	-45 460	30 400 (42)	-1 000
– incl. capital appreciation	\$ 139 330	26 700 (99)	na	141 250	154 700 (14)	na
Farm capital at 30 June ^a	\$ 3 559 290	3 926 300 (4)	na	2 710 480	3 256 700 (5)	na
Net capital additions	\$ 30 060	45 600 (54)	na	-52 710	11 700 (142)	na
Farm debt at 30 June ^b	\$ 496 090	597 000 (9)	na	242 910	311 800 (9)	na
Equity at 30 June ^{bc}	\$ 3 153 570	3 183 500 (4)	na	2 352 210	2 932 100 (5)	na
Equity ratio ^{bd}	% 86	84 (1)	na	91	90 (1)	na
Harvest loans at 30 June ^e	\$ 480	300 (102)	na	360	0 ()	na
Farm liquid assets at 30 June ^b	\$ na	98 700 (12)	na	na	212 600 (33)	na
Farm management deposits (FMDs) at 30 June ^b	\$ 17 890	14 900 (25)	na	22 200	27 100 (17)	na
Share of farms with FMDs at 30 June ^b	% 14	13 (17)	na	20	21 (13)	na
Rate of return ^g						
– excl. capital appreciation	% -1.8	-0.3 (103)	1.1	-1.7	1.0 (41)	0.0
– incl. capital appreciation	% 4.1	0.7 (100)	na	5.4	4.9 (15)	na
Off-farm income of owner manager and spouse ^b	\$ 42 100	41 200	na	41 050	43 400	na

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Queensland

Queensland cropping farm cash incomes increased in 2007-08 because of higher wheat production and, particularly, increased production of grain sorghum and summer crops. In 2008-09, cropping incomes are projected to be maintained, mainly through increased winter crop production. Receipts from summer crops are projected to be lower, because of expected lower prices for feed grains, including grain sorghum and reduced grain sorghum production because of lower plantings. Beef cattle receipts are projected to increase in 2008-09, with a small increase in projected beef cattle turn-off after two years of growth in beef cattle numbers combined with higher cattle prices. Farm cash incomes for broadacre farms in Queensland are projected to rise to average \$96 000 per farm in 2008-09 (table 3).

3 Financial performance, by state

all broadacre industries average per farm *continued*

	Queensland						Western Australia		
	2006-07	2007-08 ^p		2008-09 ^s	2006-07	2007-08 ^p		2008-09 ^s	
Total cash receipts	\$ 446 400	448 200	(8)	522 000	556 870	714 600	(6)	806 000	
Total cash costs	\$ 394 170	379 900	(8)	426 000	490 510	587 000	(5)	657 000	
Farm cash income	\$ 52 230	68 200	(21)	96 000	66 360	127 500	(26)	149 000	
Farms with negative farm cash income	% 38	46	(12)	37	44	39	(12)	26	
Farm business profit	\$ -16 830	6 800	(238)	13 000	-67 140	25 100	(133)	21 000	
Farms with negative farm business profit	% 72	72	(4)	70	72	57	(7)	52	
Profit at full equity									
- excl. capital appreciation	\$ 26 170	69 200	(24)	82 000	16 820	110 000	(32)	88 000	
- incl. capital appreciation	\$ 552 400	109 900	(38)	na	398 420	256 400	(22)	na	
Farm capital at 30 June ^a	\$ 4 763 850	5 572 800	(5)	na	5 149 050	5 300 900	(5)	na	
Net capital additions	\$ 22 270	2 700	(1241)	na	102 850	153 500	(24)	na	
Farm debt at 30 June ^b	\$ 506 650	681 000	(9)	na	852 010	838 200	(8)	na	
Equity at 30 June ^{bc}	\$ 3 882 050	4 739 900	(6)	na	4 124 020	4 366 100	(6)	na	
Equity ratio ^{bd}	% 89	87	(1)	na	83	84	(1)	na	
Harvest loans at 30 June ^e	\$ 0	0	0	na	29 930	41 400	(25)	na	
Farm liquid assets at 30 June ^b	\$ na	141 600	(22)	na	na	162 600	(19)	na	
Farm management deposits (FMDs) at 30 June ^b	\$ 24 680	27 900	(16)	na	37 880	28 600	(21)	na	
Share of farms with FMDs at 30 June ^b	% 18	19	(17)	na	19	24	(17)	na	
Rate of return ^g									
- excl. capital appreciation	% 0.6	1.2	(24)	1.2	0.4	2.2	(31)	1.7	
- incl. capital appreciation	% 13.1	2.0	(37)	na	8.5	5.1	(22)	na	
Off-farm income of owner manager and spouse ^b	\$ 35 320	34 900		na	27 320	30 000		na	

Western Australia

Western Australian broadacre farm cash income is projected to remain relatively high in 2008-09. Increases to winter crop production, particularly in the northern and central wheat belt, are projected to offset falls in some grain prices and a substantial increases in farm cash costs. Despite a small increase in lambs expected to be marked in 2008-09, sheep numbers are projected to continue to reduce as farmers further expand grain growing.

South Australia

South Australian broadacre farm cash income is projected to fall to average \$60 000 per farm as a result of both lower crop production and lower prices in 2008-09. Some of the fall in crop receipts is expected to be offset by increases in livestock receipts because of increased turn-off of sheep, lambs and beef cattle because of dry conditions in 2008-09.

3 Financial performance, by state

all broadacre industries average per farm

	South Australia				Tasmania			
	2006-07	2007-08 ^p	2008-09 ^s		2006-07	2007-08 ^p	2008-09 ^s	
Total cash receipts	\$ 294 220	386 100 (7)	368 000		243 690	273 000 (12)	202 000	
Total cash costs	\$ 258 490	297 900 (9)	308 000		250 890	236 900 (13)	186 000	
Farm cash income	\$ 35 730	88 100 (13)	60 000		- 7 200	36 100 (37)	16 000	
Farms with negative farm cash income	% 45	26 (17)	37		51	39 (28)	65	
Farm business profit	\$ -78 560	-17 200 (74)	-45 000		-68 490	-47 100 (29)	-67 000	
Farms with negative farm business profit	% 79	64 (7)	76		81	83 (4)	86	
Profit at full equity								
- excl. capital appreciation	\$ -47 880	19 700 (59)	-12 000		-43 120	-20 000 (70)	-48 000	
- incl. capital appreciation	\$ 63 050	60 400 (34)	na		165 090	74 900 (69)	na	
Farm capital at 1 July ^a	\$ 3 116 500	3 374 400 (8)	na		3 288 320	3 064 800 (8)	na	
Net capital additions	\$ 62 630	68 100 (41)	na		145 270	21 900 (99)	na	
Farm debt at 30 June ^b	\$ 334 640	361 300 (13)	na		385 180	284 400 (18)	na	
Equity at 30 June ^{bc}	\$ 2 726 860	2 894 500 (8)	na		2 701 370	2 750 200 (10)	na	
Equity ratio ^{bd}	% 89	89 (1)	na		88	91 (2)	na	
Harvest loans at 30 June ^e	\$ 2 200	6 000 (41)	na		0	0 (0)	na	
Farm liquid assets at 30 June ^b	\$ na	219 000 (18)	na		na	139 500 (56)	na	
Farm management deposits (FMDs) at 30 June ^b	\$ 28 020	47 400 (23)	na		26 230	20 500 (36)	na	
Share of farms with FMDs at 30 June ^b	% 19	26 (18)	na		22	14 (24)	na	
Rate of return ^g								
- excl. capital appreciation	% -1.6	0.6 (60)	-0.3		-1.5	-0.7 (72)	-1.5	
- incl. capital appreciation	% 2.1	1.8 (32)	na		5.6	2.5 (68)	na	
Off-farm income of owner manager and spouse ^b	\$ 27 100	29 900	na		28 940	24 600	na	

Farm performance

Tasmania

Tasmanian broadacre farm cash income is projected to decline in 2008-09. This is largely because of continued dry seasonal conditions in the midlands and central highlands. Sheep farm production is projected to be lower in 2008-09 with many farms running smaller flocks because of falling sheep numbers. The decline in flock size is expected to result in lower receipts for sheep and for wool in 2008-09. Beef cattle receipts are also expected to be lower with farms turning off fewer cattle although farms are expected to further reduce cattle numbers because of the dry conditions. The reduction in livestock numbers is projected to result in a substantial fall in the value of on-farm inventories and substantial farm business losses, for the third successive year.

3 Financial performance, by state

all broadacre industries average per farm *continued*

	Northern Territory			Australia		
	2006-07	2007-08 ^p	2008-09 ^s	2006-07	2007-08 ^p	2008-09 ^s
Total cash receipts	\$ 1 401 940	2 601 100	(17) 1 850 000	359 270	415 100	(3) 450 000
Total cash costs	\$ 1 391 860	1 905 500	(17) 1 817 000	329 460	352 800	(3) 370 000
Farm cash income	\$ 10 090	695 600	(26) 33 000	29 800	62 400	(11) 80 000
Farms with negative farm cash income	% 44	56	(10) 57	45	38	(5) 36
Farm business profit	\$ 567 500	161 500	(130) 407 000	-70 240	-21 300	(34) -7 000
Farms with negative farm business profit	% 23	53	(17) 68	81	70	(2) 69
Profit at full equity						
- excl. capital appreciation	\$ 653 200	288 400	(72) 515 000	-28 510	32 300	(22) 36 000
- incl. capital appreciation	\$ 2 521 280	2 136 500	(28) na	244 970	110 300	(13) na
Farm capital at 30 June ^a	\$ 14 635 770	19 753 500	(11) na	3 756 820	4 207 300	(2) na
Net capital additions	\$ 159 650	135 400	(43) na	25 470	46 100	(27) na
Farm debt at 30 June ^b	\$ 1 039 220	1 454 300	(24) na	463 870	547 200	(4) na
Equity at 30 June ^{bc}	\$ 9 476 570	12 372 100	(10) na	3 181 660	3 531 600	(2) na
Equity ratio ^{bd}	% 90	90	(3) na	87	87	(1) na
Harvest loans at 30 June ^e	\$ 0	0	(0) na	4 280	6 100	(23) na
Farm liquid assets at 30 June ^b	\$ na	159 400	(26) na	na	154 800	(12) na
Farm management deposits (FMDs) at 30 June ^b	\$ 13 350	65 800	(59) na	23 890	25 700	(9) na
Share of farms with FMDs at 30 June ^b	% 3	14	(42) na	17	19	(7) na
Rate of return ^g						
- excl. capital appreciation	% 5.4	1.6	(70) 2.7	-0.8	0.8	(22) 0.9
- incl. capital appreciation	% 20.9	11.7	(23) na	7.0	2.7	(13) na
Off-farm income of owner manager and spouse ^b	\$ 46 360	17 619	na	46 360	37 500	na

^a Excludes leased plant and equipment. ^b Average per responding farm. ^c Farm capital minus farm debt. ^d Equity expressed as a percentage of farm capital. ^e Harvest loans are not included in farm debt. ^f Dairy Structural Adjustment Program and Supplementary Dairy Assistance Scheme. ^g Rate of return to farm capital at 1 July. ^p Preliminary estimates. ^s Provisional estimates. ^{na} Not Available.

Note: Figures in parentheses are standard errors expressed as a percentage of the estimate provided.

Northern Territory

In 2007-08 and the first half of 2008-09, dry seasonal conditions throughout much of the southern and eastern Northern Territory led to increased cattle turn-off, high farm cash incomes and a reduction in herd sizes. With good rainfall through summer expected to improve grazing conditions across most of the Northern Territory, many cattle stations are projected to begin rebuilding herd numbers, reducing cattle turn-off and lowering farm cash income. In northern areas, turn-off of cattle for live export is projected to increase in 2008-09.

4 Financial performance of broadacre farms, by industry

average per farm

	farm cash income			farm business profit ^a		
	2006-07	2007-08 ^p	2008-09 ^s	2006-07	2007-08 ^p	2008-09 ^s
	\$	\$	\$	\$	\$	\$
Wheat and other crops	52 470	147 500	149 000	-100 820	33 400	15 000
Mixed livestock crops	15 590	66 800	123 000	-109 560	-25 000	12 000
Beef industry	41 350	25 100	32 000	-16 640	-43 800	-27 000
– farms with less than 300 beef cattle	7 250	-9 700	-18 000	-53 660	-67 100	-69 000
– farms with more than 300 beef cattle	123 630	86 500	110 000	64 360	-2 800	43 000
Sheep	6 910	36 600	46 000	-76 370	-42 900	-27 000
Sheep beef	19 990	40 800	58 000	-76 370	-19 800	2 000
All broadacre industries	29 800	62 400	80 000	-70 240	-21 300	7 000
Dairy	43 110	127 700	85 000	-30 060	63 000	5 000

	rate of return –excluding capital appreciation ^b			rate of return–including capital appreciation ^b	
	2006-07	2007-08 ^p	2008-09 ^s	2006-07	2007-08 ^p
	%	%	%	%	%
Wheat and other crops	-0.9	2.6	1.9	4.6	5.4
Mixed livestock crops	-1.8	1.0	1.5	3.6	3.0
Beef industry	0.5	-0.1	0.1	11.9	1.1
– farms with less than 300 beef cattle	-2.1	-2.8	-3.2	5.4	-3.1
– farms with more than 300 beef cattle	1.8	0.9	1.4	14.9	2.8
Sheep	-1.6	-0.2	0.0	3.5	3.5
Sheep beef	-1.4	0.6	0.8	7.4	0.9
All broadacre industries	-0.8	0.8	0.9	7.0	2.7
Dairy	0.3	3.7	1.3	10.3	10.5

^a Defined as farm cash income plus buildup in trading stocks, less depreciation and the imputed value of operator partner and family labour. ^b Defined as profit at full equity, excluding or including capital appreciation, as a percentage of total opening capital. Profit at full equity is defined as farm business profit plus rent, interest and lease payments less depreciation on leased items.

^p Preliminary. ^s Provisional estimate.

Note: Figures in parentheses are standard errors expressed as a percentage of the estimate provided.

Farm performance

Performance, by industry

Wheat and other crops industry

Farm cash income for the wheat and other crops industry rebounded in 2007-08 from the drought reduced income of 2006-07 on the back of record grain prices and production increases in some regions. This was despite large increases in expenditure on the key crop inputs of fuel, chemicals and fertilisers (figure f).

In 2008-09, an increase in total farm cash costs is projected to result in average farm cash income for wheat and other crops industry farms remaining similar to that recorded in 2007-08, despite increased grain production in New South Wales, Queensland and Western Australia. Low grain yields in southern and eastern states combined with lower grain prices to subdue the overall increase in crop receipts (table 4). Total cash costs are projected to increase, mainly because of projected further increased fertiliser expenditure and despite reductions in interest rates. Domestic fertiliser prices are expected to remain high in 2008-09 and expenditure on fertiliser is projected to continue to account for the largest share of total cash costs. Higher expenditure is also projected for chemicals and crop marketing expenses because of the planting and harvesting of a larger crop 2008-09. Total cash costs are projected to increase by 7 per cent on average in 2008-09.

Wheat and other crops industry farms are projected to record the highest rates of return among the surveyed industries in 2008-09.

Mixed livestock-crops industry

Farm cash incomes for mixed livestock-crops industry farms rose in 2007-08 with increases in grain production and higher grain prices and despite some reduction in beef cattle receipts and increased total cash costs. In 2007-08, the largest costs for mixed livestock-crops industry farms were interest payments and fertiliser, both of which rose significantly because of higher interest rates and sharp increases in fertiliser prices during the year.

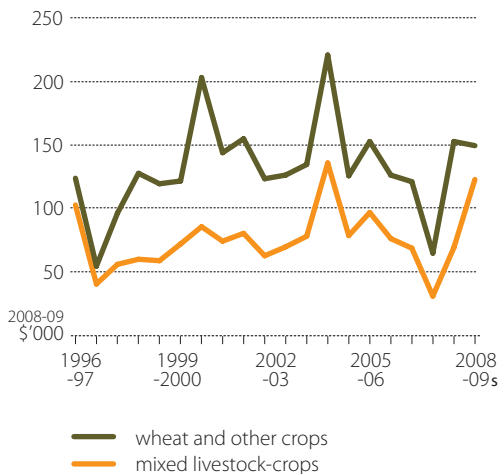
In 2008-09, expanded crop areas and improved yields, together with stronger sheep and lamb prices, are projected to increase average total cash receipts by around 13 per cent. Increases in expenditure on fertiliser are projected to be mostly offset by lower interest expenditure and livestock purchases. Total cash costs are projected to increase only marginally. Overall, farm cash income for mixed livestock-crops industry farms is projected to increase to average \$123 000 in 2008-09, compared with \$66 800 in 2007-08.

Sheep industry

In 2007-08, higher wool prices together with increased turn-off of sheep and lambs led to a recovery in sheep industry farm cash income from the drought affected 2006-07. This was despite total cash costs increasing by around 8 per cent on average, mainly because of increases in interest rates.

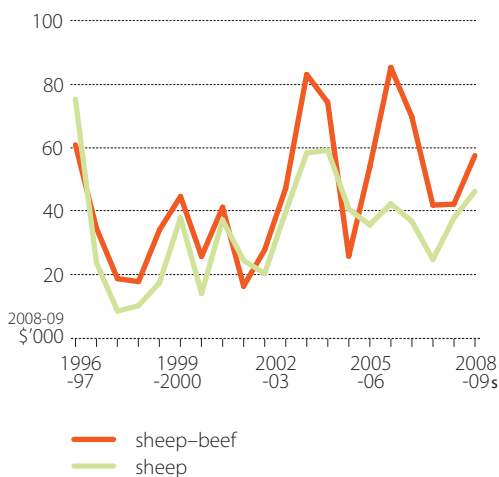
In 2008-09, sheep industry farms are projected to have similar levels of total cash receipts as in 2007-08. Reductions in wool receipts resulting from lower wool prices, reduced wool

f Farm cash income average per farm
grains industries



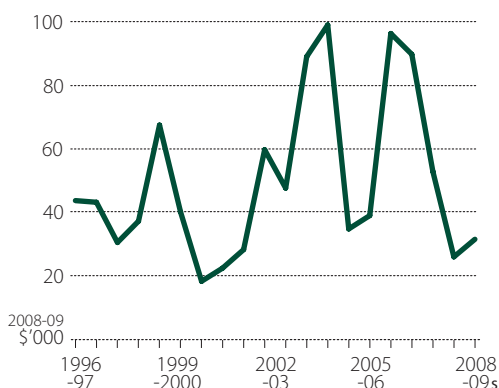
— wheat and other crops
— mixed livestock-crops

sheep industries



— sheep-beef
— sheep

beef industry



production and some stockpiling of wool on farm, are projected to be offset by increases in receipts from sheep, lambs and crops, on average. However, total cash costs are projected to fall by around 3 per cent, mainly because of lower interest costs and a reduction in fodder expenditure resulting in a farm cash income rising slightly to average \$46 200 per farm.

In addition, a small increase in the number of lambs marked resulted in a small increase in overall sheep numbers, a rise in livestock inventories and a reduction in farm business loss.

Sheep-beef industry

In recent years, the number of farms classified as sheep-beef industry farms has declined. Many of these farms, particularly in Queensland, have been increasing beef cattle numbers steadily and have not rebuilt sheep numbers following recent droughts and have effectively moved to the beef industry.

In 2007-08, improved seasonal conditions allowed sheep-beef industry farms to turn-off an increased number of sheep and beef cattle at higher average prices. In combination with increased wool production and higher wool prices, farm cash income increased despite a large increase in total cash costs. Cost increases mainly resulted from increased purchases of beef cattle and higher interest rates in 2007-08.

In 2008-09, with many Queensland and northern New South Wales farms increasing beef cattle production, and beef and sheep-meat prices rising, the effect of reduced wool production and prices on total cash receipts is projected to be largely offset. Total cash costs are projected to fall by around 4 per cent, mainly because of lower interest costs, a reduction in expenditure on the purchase of beef cattle and reduced fodder expenditure as pasture availability continues to improve. This is

Farm performance

projected to result in farm cash income rising slightly to average \$57 500 per farm in 2008-09, up from an average of \$40 800 a farm in 2007-08.

Increased beef and sheep numbers because of improved calving and lambing rates in 2008-09 are projected to increase the value of on-farm inventories and to contribute to a significant improvement in farm business profit from the previous two years losses.

Beef industry

In 2007-08, a reduction in the number of beef cattle sold, combined with lower prices per head for cattle sold, resulted in average total cash receipts falling by around 23 per cent. Average total cash costs were also reduced, by around 21 per cent, with expenditure on beef cattle purchases falling by 40 per cent. Purchases of beef cattle fell sharply in northern regions, but increased in Victoria. In addition, fodder and agistment expenditure was reduced because of improved pasture availability compared with the severely drought affected 2006-07. With a larger fall in total farm receipts compared to the reduction in total farm costs, average farm cash income for beef industry farms declined in 2007-08 (figure f).

Overall, there was little change in beef industry cattle numbers on broadacre farms in 2007-08. The herd rebuilding in parts of northern and eastern Australia were offset by a small reduction in cattle numbers in Victoria and Tasmania and continued dry conditions elsewhere in southern Australia which prevented herd rebuilding. As a consequence, farm business profit declined by a similar amount as farm cash income.

In 2008-09, sales of beef cattle are projected to increase by around 1 per cent, with increased turn-off mostly occurring in northern Australia and with forecast higher average prices per head expected. Total cash receipts for beef industry farms are projected to rise by around 5 per cent.

Total cash costs for beef industry farms are projected to increase in 2008-09. Beef cattle purchases are projected to increase by around 5 per cent and more than offset reductions in fodder expenditure and interest paid. Purchases of beef cattle are projected to increase mostly in northern Australia, including northern New South Wales, because of improved grazing conditions in 2009.

With a larger increase in beef industry farm receipts relative to the increase in farm cash costs, average farm cash income is projected to increase to around \$31 500 per farm in 2008-09, compared with \$25 080 per farm in 2007-08 (table 4).

Improvement in farm cash income is projected to mainly occur in northern Australia (Queensland, Northern Territory, and the Kimberley and Pilbara areas), with farm cash incomes in the south remaining similar to 2007-08. A projected increase in beef cattle numbers in the north in 2008-09 will increase the value of on-farm inventories and lead to an additional boost to farm business profit.

Dairy industry

Farm cash income for Australian dairy farms almost tripled in 2007-08 to average \$127 700 per farm, the highest average farm cash income recorded in the past 20 years (figure g). This was because of record farm-gate milk prices and occurred despite falls in average milk yield per cow as dry seasonal conditions restricted milk production. High total cash receipts were partly offset by increases in expenditure on major dairy farm inputs including hay, feed-grains, fertilisers, chemicals and fuel, resulting from higher input prices, together with higher interest rates and increased farm expenditure on repairs and maintenance. Average total cash costs rose by 20 per cent in 2007-08.

In 2008-09, average farm cash income for dairy industry farms is projected to fall to around \$85 000 a farm in response to lower manufacturing milk prices. Average farm-gate milk prices are forecast to fall sharply in regions where milk is used for manufactured dairy products

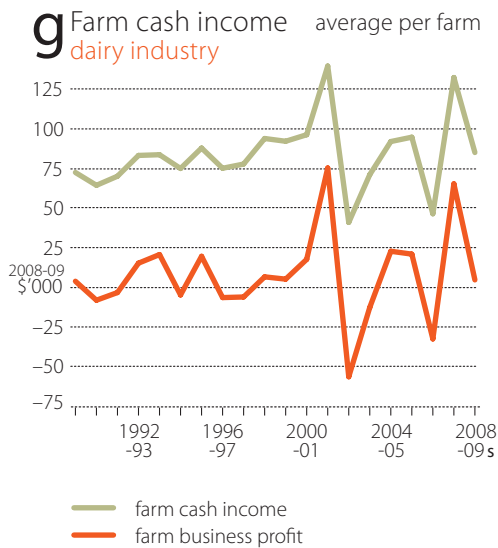
5 Financial performance, dairy industry

average per farm

		2006-07	2007-08 ^p	2008-09 ^s
Total cash receipts	\$	394 580	551 200 (4)	461 000
Total cash costs	\$	351 470	423 500 (5)	376 000
Farm cash income	\$	43 110	127 700 (8)	85 000
Farms with negative farm cash income	%	32	7 (41)	18
Farm business profit	\$	-30 060	63 000 (18)	5 000
Farms with negative farm business profit	%	73	38 (14)	62
Profit at full equity				
- excl. capital appreciation	\$	9 600	111 900 (11)	42 000
- incl. capital appreciation	\$	295 200	319 200 (10)	na
Farm capital at 30 June ^a	\$	3 206 040	3 281 800 (4)	na
Net capital additions	\$	39 920	53 500 (37)	na
Farm debt at 30 June ^b	\$	479 760	511 900 (7)	na
Equity at 30 June ^{bc}	\$	2 668 010	2 783 700 (5)	na
Equity ratio ^{bd}	%	85	85 (1)	na
Farm liquid assets at 30 June ^b	\$	na	103 500 (15)	na
Farm management deposits (FMDs) at 30 June ^b	\$	12 410	28 400 (33)	na
Per cent farms with FMDs at 30 June ^b	%	16	19 (27)	na
Annual payment from DSAP and SDAS ^f	\$	15 630	15 300 (45)	na
Rate of return ^g				
- excl. capital appreciation	%	0.3	3.7 (10)	1.3
- incl. capital appreciation	%	10.3	10.5 (10)	na
Off-farm income of owner manager and spouse ^b	\$	21 140	19 900 (14)	na

^a Excludes leased plant and equipment. ^b Average per responding farm. ^c Farm capital minus farm debt. ^d Equity expressed as a percentage of farm capital. ^e Harvest loans are not included in farm debt. ^f Dairy Structural Adjustment Program and Supplementary Dairy Assistance Scheme. ^g Rate of return to farm capital at 1 July. ^p Preliminary estimates. ^s Provisional estimates. **na** Not Available. *Note:* Figures in parentheses are standard errors expressed as a percentage of the estimate provided.

Farm performance



because of the decline in prices for dairy products on international markets. Despite increased milk production in all states, average total cash receipts are projected to fall by around 16 per cent in 2008-09.

Partly offsetting this reduction in milk receipts, average total cash costs are projected to fall by around 11 per cent because of lower hay and feed grain prices, together with lower interest rates. Despite increased availability of feed grains, particularly in eastern Australia and improved on-farm pasture growth in some regions, overall expenditure by dairy farms on fodder is projected to remain relatively high.

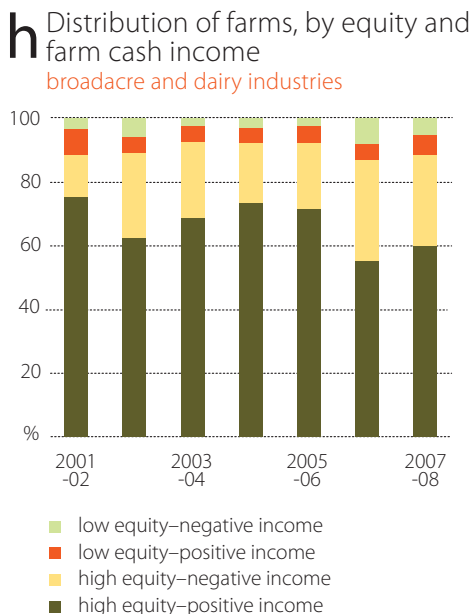
Water inflows and storage levels are remaining historically low in northern Victoria and southern

New South Wales irrigation regions and irrigated dairy farms in these regions continue to receive low irrigation water allocations in 2008-09. This has left many farms critically dependent on purchased feed grains and hay exacerbating the effect of reductions in farm receipts in these regions in 2008-09.

Farm equity

Farm business equity remained strong for broadacre and dairy farms in 2007-08 and debt servicing capacity improved. The proportion of broadacre and dairy farms estimated to have a farm business equity ratio of greater than

70 per cent increased only marginally from 87 per cent in 2006-07 to 88 per cent in 2007-08. The proportion of these farms recording negative farm cash incomes declined from 32 per cent in 2006-07 to 29 per cent in 2007-08 (figure h). The proportion of farms estimated to have a farm business equity ratio of less than 70 per cent declined from 13 per cent in 2006-07 to 12 per cent in 2007-08 and the proportion of these farms recording negative farm cash incomes declined from 8 per cent to 5 per cent.

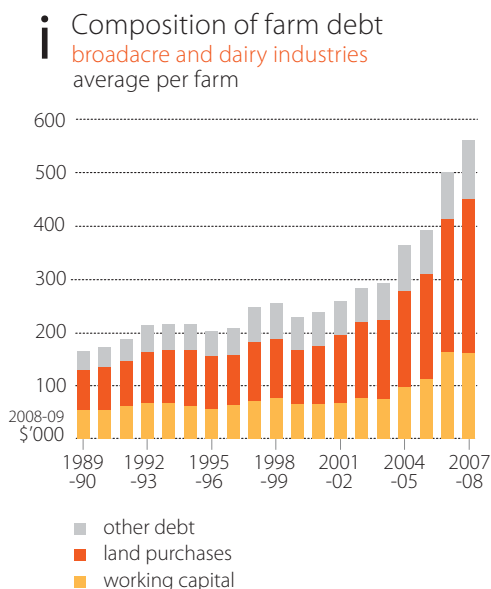


Despite the projected improvement in broadacre farm income in 2008-09, in part a consequence of lower interest costs, the proportion of broadacre farms recording negative farm cash income and therefore potentially needing to borrow working capital is projected to fall only slightly from 38 per cent of farms in 2007-08 to

36 per cent in 2008-09. For the dairy industry, the proportion of farms recording negative farm cash income is projected to rise from 7 per cent in 2007-08 to 18 per cent in 2008-09.

Use of debt

Average farm business debt is estimated to have increased by 18 per cent for broadacre farms in 2007-08 and by 7 per cent for dairy farms, compared with the rise of 10 per cent for broadacre farms and 16 per cent for dairy farms in 2006-07. Farm businesses interviewed by ABARE in November 2008 indicated they expected to make smaller increases in farm debt in 2008-09, on average. Broadacre and dairy farms reported they expected to increase debt by around 2 per cent in 2008-09.



Increases in debt to fund land purchase, account for the largest share of the large increase in average farm business debt which occurred in recent years (figure i). Increases in land purchase debt have been confined to a relatively small proportion of farms with around 7 per cent increasing borrowing to purchase land in each the three years ending 2007-08.

There have also been substantial increase in debt to fund working capital in recent years and this increase has occurred across a high proportion of farms. Around 27 per cent of farms increased borrowings to fund working capital in each of the three years ending 2007-08. In the period of adverse seasonal conditions from 2002-03, farms have relied on a range of sources of finance to deal with reduced farm incomes and marked fluctuation in income including: the use of Farm Management

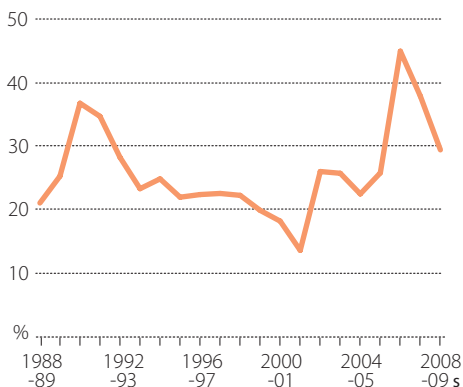
Deposits; drawing down other farm liquid assets; increasing off-farm work for wages; and increased reliance of government drought assistance payments to both the farm business and farm households. Borrowing to cover working capital requirements has been one of the most common responses (if not the most common response) to low cash flow caused by adverse seasonal conditions in recent years (Levantis and Martin, 2007 and ABS, 2009). Increases in farm debt also corresponds with increased use of interest only loans and increases in the total amount of interest subsidies paid to farm businesses in many parts of eastern and northern Australia as part of government exceptional circumstances assistance.

Debt servicing

The proportion of farm cash income needed to meet interest payments on farm debt (debt servicing ratio) increased sharply from 2001-02 to 2007-08 (figure j). Interest rates rose through this period and farm cash incomes were highly variable. Partially offsetting the

Farm performance

j Debt servicing ratio broadacre and dairy farms



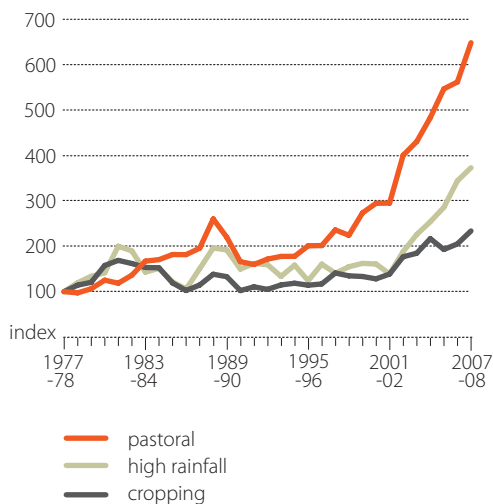
increase in interest rates was the increase in interest subsidies paid to farm businesses via exceptional circumstances assistance. However, notwithstanding these factors, most of the increase in the debt servicing ratio has been because of the large increases in farm debt.

With improved farm cash incomes for broadacre and dairy farms in 2007-08 the debt servicing ratio fell. In 2008-09, further improvement in the debt servicing ratio is expected with higher broadacre farm cash incomes and reduced interest rates.

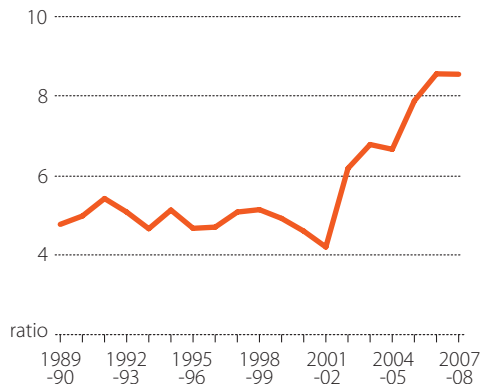
Land values

Improvement in the proportion of farms estimated to have strong business equity ratios in 2007-08 was driven by increases in land values in many regions which were sufficient to more than offset the effect of increases in farm debt on farm equity. Increases in land values reported for broadacre farms occurred in all agricultural zones in 2007-08 (figure k). In the period since 2004-05, increases in reported land values have been relatively smaller in the cropping zone, where the majority of broadacre production occurs, reflecting the greater effect of adverse seasonal conditions and the lesser influence in this zone of non-agricultural factors. These include competition for land from population growth, urban and peri-urban developments and economic growth driven by mining developments which support increases in land values in other zones.

k Land prices for broadacre farms



l Ratio of land prices to receipts per hectare broadacre and dairy farms

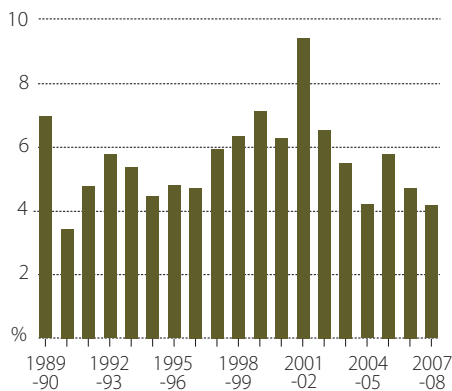


In recent years, average land prices for broadacre farms have become historically high relative to the cash receipts per hectare generated by farming activity during this period. The ratio of land price per hectare to total cash receipts per hectare has increased from around 5 prior to 2001-02 to more than 8 on average in 2007-08 on broadacre farms (figure l). This has been a period of adverse seasonal conditions, but this is a large increase and the increase in this ratio is relatively similar across all agricultural zones and industries.

Farm investment

Despite improvement in farm cash income in 2007-08, the proportion of broadacre and dairy farms acquiring land continued the general downward trend of recent years (figure m). However, a substantial increase occurred in non-land farm capital in 2007-08. Non-land capital additions, including vehicles, plant, machinery and farm improvements, increased by more than two-thirds for both broadacre and dairy farms in 2007-08 (figure n). The increased investment in plant, machinery and farm improvements may have been

m Proportion of farms acquiring land
broadacre and dairy farms



substantially opportunistic with lower prices for imported farm machinery because of the strong Australian dollar, in combination with the improved cash flow, particularly in the dairy industry. High prices for fertiliser and low availability of irrigation water also provided incentives to change farm technologies related to the use of these inputs. The reduction in farms acquiring additional land and increased non-land investment may also indicate that farmers may be aiming to improve the productivity of their existing land base rather than purchasing additional relatively high priced land. Lower interest rates in 2008-09 will provide opportunities for those farms in a sound financial position to invest to improve farm productivity.

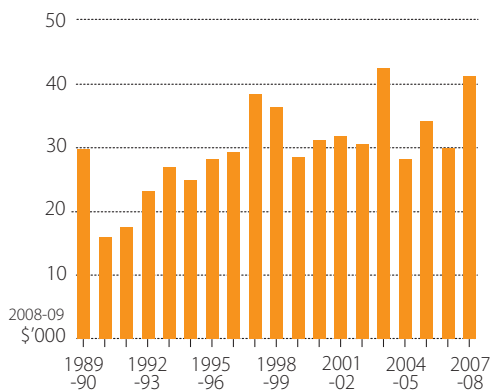
Better performing farms

Farm incomes and rates of return on investment in agricultural industries are usually low when reported across a whole industry or state. However, low average returns are partly a consequence of the generally high proportion of small farms in many industries, particularly the beef and sheep industries. The presence of these small farms masks the much higher incomes and returns from better performing and larger farms which generate the majority of each industry's output.

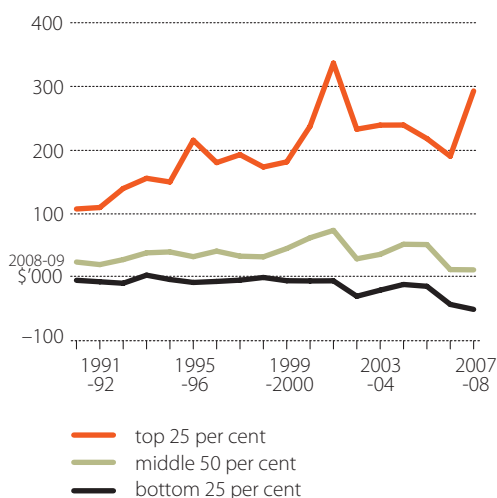
The top 25 per cent of farms, ranked by a moving average of rate of return to capital excluding capital appreciation, have consistently generated cash incomes of more than \$100 000 a year (in real terms) over the past two decades (figure o). Moreover, the trend in farm cash incomes for these farms is up. In contrast, the bottom 25 per cent of broadacre farms have struggled to

Farm performance

n Additions of non-land capital broadacre and dairy farms average per farm



O Financial performance broadacre farms average per farm



generate positive farm incomes and it appears the trend line for this group is at best flat.

The top 25 per cent of farms generated average rates of return excluding capital appreciation of 5 per cent over the five years ending 2007-08 and rates of return including capital appreciation of 12 per cent. These farms accounted for 54 per cent of the gross value of broadacre farm production over this period and 85 per cent of farm business profits. They have also accounted for 80 per cent of the increase in real value of production for the broadacre sector since 1990.

The top 25 per cent of farms also accounted for almost two-thirds of the net additions to farm capital in five years ending 2007-08. Estimates of productivity growth in the broadacre industries, have found that higher total factor productivity for larger farms capture most of the productivity growth in broadacre industries and the smallest one-third of farms capturing little productivity increase (Knopke et al. 1995 and ABARE, 2004). Rates of new investment on poorly performing and small farms are likely to be too small to generate significant productivity gains. An important means of capturing productivity increases is the adoption of more efficient methods of farming. These practices often require increasing the scale of farming enterprises to capture their advantages. This is difficult for small farms which have lesser capacity to generate a financial surplus and are often located in areas where high land values render land purchase a poor business option.

A range of other characteristics have been found to be associated with better performing farms. These characteristics are broadly indicative of a more intense focus on farm business improvement and include farms which are generally operated by owner-managers who are: more likely to be members of production and Landcare groups; seek information for decision-making more widely and from professional advisors; have less aversion to risk; use more risk management tools, including forward sales and futures; use methods of sale of farm products which ensure they receive clear market and price signals, enabling them to modify their production system; and, in some analyses but certainly not all, adopt better natural resource management practices (Martin et al. 2005).

Farm innovation

Productivity growth in agricultural industries relies on continued innovation and adoption of more efficient technologies. Data measuring the extent of farm innovation over the two years ending 2007-08 was collected as a supplementary survey to the 2007-08 Australian Agricultural and Grazing Industry Survey.

The survey collected data on new farm innovations. Innovation was defined in the survey to include only the implementation of new practices or technologies which were not previously used by the farm. To be considered an innovation, an implemented technology or practice had to be likely to be used on a continuing basis.

6 Farms making innovative changes, broadacre and dairy farms 2006-07 and 2007-08 percent of farms

innovative activity		bottom 25 percent a		top 25 percent a		all farms	
Marketing							
New approach to marketing farm's production	%	17	(17)	39	(5)	26	(5)
Management/Labour use							
New approach to labour use	%	17	(24)	26	(7)	21	(6)
New members to farm's management	%	5	(30)	14	(13)	9	(8)
Natural resource management practice							
Weed-related natural resource management	%	26	(16)	30	(8)	24	(6)
Pest-related natural resource management	%	16	(19)	18	(11)	17	(7)
Soil-related natural resource management	%	25	(16)	30	(7)	24	(6)
Cropping farms							
Product changes - new crop types/cultivars	%	42	(12)	48	(5)	41	(4)
Fertiliser practice	%	37	(15)	36	(7)	34	(6)
Soil management practice	%	34	(16)	33	(8)	31	(6)
Weed, pest and disease management practices	%	28	(15)	34	(8)	27	(6)
Equipments for cultivation, planting, fertilizing, spraying & harvesting	%	32	(16)	48	(6)	38	(4)
Livestock farms							
product changes - new livestock types/breeds	%	17	(16)	23	(9)	21	(7)
Livestock feeding practice	%	21	(20)	23	(8)	21	(6)
Fodder conservation and use practice	%	12	(27)	18	(11)	14	(7)
Livestock handling practice	%	14	(24)	16	(11)	14	(8)
Livestock health practices	%	15	(21)	20	(10)	16	(8)
Grazing management practices	%	19	(20)	22	(9)	20	(7)
Pasture types	%	21	(12)	23	(9)	22	(7)
Irrigation farms							
Irrigation and water management practices	%	20	(14)	35	(20)	29	(12)

a Farms ranked by rate of return excluding capital appreciation.

Note: Figures in parentheses are standard errors expressed as a percentage of the estimate provided.

Farm performance

More than one-third of broadacre and dairy farms made significant innovative change introducing new crop types or cultivars to their business (table 6). Similarly, more than one-third of farms purchased new crop production equipment and more than one-third changed fertilisers or nutrient management practices. These results are broadly consistent with the relatively high level of capital additions made by broadacre and dairy farms in 2007-08 and changes which may occur in response to the strong incentives to change fertiliser practices in the face of high fertiliser prices over this period. Introduction of new irrigation practices was also highly ranked, consistent with the severe shortage of irrigation water in many irrigation areas during this period.

The survey results indicate that farms in the top 25 per cent of farms, ranked by rate of return, were more likely to adopt innovative changes than the bottom 25 per cent of farms during 2007-08. Nearly half of the top performing farms introduced new crop types or cultivars in the past two years, and a similar proportion invested in new farm plant and equipment. A much higher proportion of top performing farms implemented new approaches to marketing their farm's production, changed labour use and introduced new members to the farms management team than the bottom 25 per cent of farms. There were also significant difference between the proportion of farms in the top and bottom 25 per cent of farms which introduced new equipments for cultivation, planting, fertilising, spraying and harvesting, and the proportion which introduced irrigation and water management practices in 2007-08.

Information from the survey of farm innovation is intended to be included in future ABARE analysis of total factor productivity for broadacre and dairy farms.

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