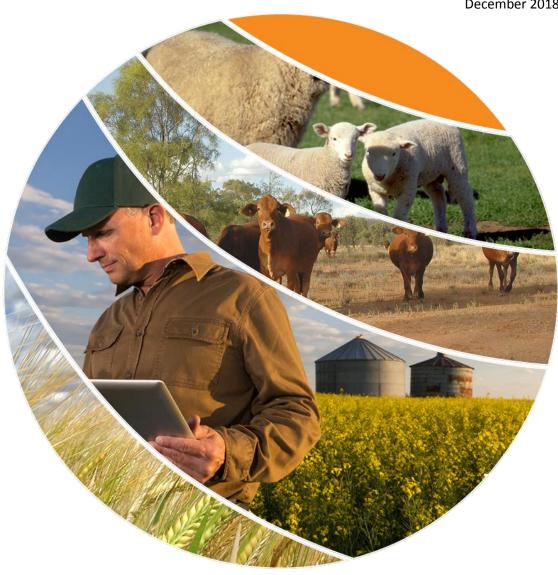


Drought impacts on broadacre and dairy farms in South-Eastern Australia

Peter Martin and Vernon Topp

Research by the Australian Bureau of Agricultural and Resource Economics and Sciences

Research Report 18.16
December 2018



Ownership of intellectual property rights

Unless otherwise noted, copyright (and any other intellectual property rights, if any) in this publication is owned by the Commonwealth of Australia (referred to as the Commonwealth).

Creative Commons licence

All material in this publication is licensed under a Creative Commons Attribution 4.0 International Licence, save for content supplied by third parties, logos and the Commonwealth Coat of Arms.



Creative Commons Attribution 4.0 International Licence is a standard form licence agreement that allows you to copy, distribute, transmit and adapt this publication provided you attribute the work. See the <u>summary of the licence terms</u> or the <u>full licence terms</u>.

This publication (and any material sourced from it) should be attributed as Martin, P & Topp, V, 2018, *Drought impacts on broadacre and dairy farms in South-Eastern Australia*, ABARES research report 18.16, Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra, December. https://doi.org/10.25814/5c1827b8962ba

ISBN 978-1-74323-416-7

ISSN: 1447-8358

Internet

This publication is available at

http://agriculture.gov.au/abares/research-topics/surveys/drought-impacts-broadacre-and-dairy-farms

Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES)

Postal address GPO Box 858 Canberra ACT 2601

Switchboard +61,2,6272,2010

Email info.abares@agriculture.gov.au

Web <u>agriculture.gov.au/abares</u>

Inquiries about the licence and any use of this document should be emailed to copyright@agriculture.gov.au.

The Australian Government acting through the Department of Agriculture and Water Resources, represented by the Australian Bureau of Agricultural and Resource Economics and Sciences, has exercised due care and skill in preparing and compiling the information and data in this publication. Notwithstanding, the Department of Agriculture and Water Resources, ABARES, its employees and advisers disclaim all liability, including for negligence and for any loss, damage, injury, expense or cost incurred by any person as a result of accessing, using or relying on information or data in this publication to the maximum extent permitted by law.

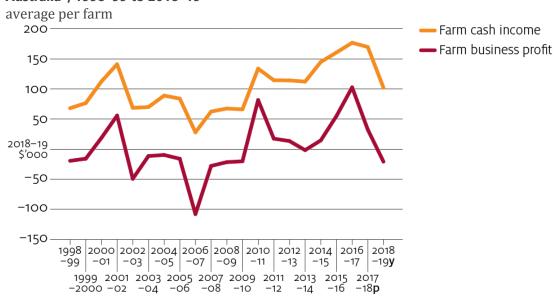
Drought impacts on broadacre and dairy farms in South-Eastern Australia

A recent ABARES <u>report</u> noted that the impacts of the 2018 drought on farm incomes may not be as severe as experienced in previous droughts, but that aggregate and average trends would likely mask significant variation in performance across different industries and regions.

Interim results ¹ from ABARES annual surveys of broadacre and dairy farms confirm that average farm financial performance in South-Eastern Australia will worsen significantly in 2018-19 relative to the previous year, but not to the levels experienced during the 2002-03 and 2006-07 droughts (figure 1). The impacts of the drought on farm financial performance will be variable however, largely in line with regional differences in the severity of rainfall deficiencies.

Across South-Eastern Australia as a whole, average farm cash income on broadacre farms will decline by nearly \$70,000 per farm in 2018-19 (from \$169,700 to \$102,000), while average farm business profit (farm cash income adjusted for changes in livestock and grain inventories, as well as capital depreciation and the imputed value of family labour) will be the lowest it has been in a decade (figure 1 and table 1).

Figure 1 Real farm cash income and farm business profit, broadacre industries in South-Eastern Australia*, 1998–99 to 2018–19



p Preliminary estimate. **y** Provisional estimate. * South-Eastern Australia is defined as Queensland below 24 degrees latitude, and all of New South Wales, Victoria, and South Australia. Farm cash income is defined as total cash receipts minus total cash costs. It is a short term measure of the cash surplus available to farmers to meet immediate needs. Farm business profit is defined as farm cash income plus the change in trading stocks, less depreciation and the imputed value of the owner–manager, partner(s) and family labour. Source: ABARES Australian Agricultural and Grazing Industries Survey.

At the state level, average farm cash incomes in 2018-19 are forecast to fall particularly sharply in New South Wales and South Australia, albeit from comparatively high levels in the preceding year (figure 2 and table 1). Within New South Wales, the largest declines are expected in the

¹ Comprehensive results from ABARES most recent farm surveys will be available at the Outlook 2019 conference in March

northern and western parts of the state, where the impact of rainfall deficiencies on farm financial performance have been particularly apparent in 2018-19. The expected decline in average farm cash income in Southern Queensland in 2018-19 is not as large, but it comes on the back of a large decline the previous year.

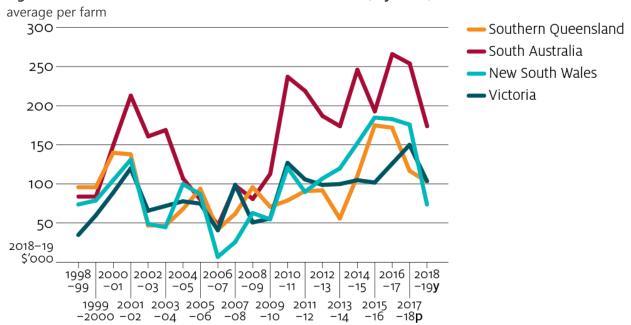


Figure 2 Real farm cash income in South-Eastern Australia, by State, 1998-99 to 2018-19

p Preliminary estimate. **y** Provisional estimate. * South-Eastern Australia is defined as Queensland below 24 degrees latitude, and all of New South Wales, Victoria, and South Australia. Farm cash income is defined as total cash receipts minus total cash costs.

Source: ABARES Australian Agricultural and Grazing Industries Survey

Changes in farm inventories

The survey results also show that broadacre farms in South-Eastern Australia are expecting to record only modest reductions in cattle and sheep inventories (numbers on hand) during 2018-19, despite the challenges of drought. This compares with much larger reductions in livestock inventories in 2017-18, particularly in regions where rainfall deficiencies were already quite severe. In 2018-19, favourable prices for beef, sheep meats and wool are encouraging livestock farmers to hold on to remaining cattle and sheep where possible, although high prices for fodder and feed grains are adding to the cost of this strategy.

Broadacre farms in South-Eastern Australia also ran down their grain inventories during the 2017-18 financial year, leaving smaller volumes on hand at the beginning of the 2018-19 season. While grain inventories are forecast to decline further, the absolute size of the reductions are expected to be smaller than those recorded in the previous year.

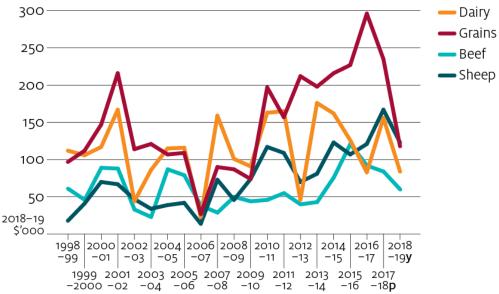
Given the changes in inventory behaviour, average farm business profit in 2018-19 is not expected to fall by as much as the decline in average farm cash income. Nevertheless, it is still forecast to be negative for the first time in five years, and the lowest in real terms in a decade. In Southern Queensland, average farm business profit will be negative for the second year in a row. (Detailed information about ABARES farm surveys, including variable definitions, can be found on our website.)

Industry-level impacts vary

Average farm cash incomes in 2018-19 are expected to fall across all industries in South-Eastern Australia, with the sharpest falls recorded among grain producers and dairy farms (figure 3 and table 1). Farm business profits will also be lower (on average) across all industries in 2018-19, although more so in the case of the dairy industry. Lower milk production, higher fodder costs, and reduced herd sizes mean that average farm business profit for this industry is forecast to fall by over \$150,000 per farm in 2018-19 compared with the previous year.

Although sheep specialists have not been spared the impacts of drought, favourable prices for wool and sheep-meat are expected to limit the worst of the effects. The average farm business profit for the sheep industry is expected to be positive in 2018-19, compared with negative results for the beef, grains, and dairy industries.

Figure 3 Real farm cash income in South-Eastern Australia, by industry, 1998–99 to 2018–19 average per farm



p Preliminary estimate. **y** Provisional estimate. * South-Eastern Australia is defined as Queensland below 24 degrees latitude, and all of New South Wales, Victoria, and South Australia. Farm cash income is defined as total cash receipts minus total cash costs.

Source: ABARES Australian Agricultural and Grazing Industries Survey

Summer cropping outcomes in 2019 are also important

It is important to note that the final picture for farm incomes in South-Eastern Australia in 2018–19 will depend in part on the success of summer crops in northern New South Wales and southern Queensland. Good outcomes for summer cropping are likely to improve cropping farm incomes in these regions. The improved availability of fodder and feed grains may also benefit livestock producers.

Comprehensive results from ABARES most recent farm surveys will be available at the Outlook 2019 conference in March. They will include estimates of farm financial performance in those parts of Australia that have been less affected by drought, including Western Australia, the Northern Territory and Tasmania.

Table 1: Financial performance of broadacre and dairy farms, South-Eastern Australia, 2016-17 to 2018-19

Financial performance of broadacre and dairy farms, South-Eastern Australia, 2016-17 to 2018-19 average per farm Farm business profit a Farms with negative farm cash income Farm cash income 2016-17 2017-18p 2018-19y 2016-17 2017-18p 2016-17 2017-18p 2018-19y 2018-19y \$ \$ \$ \$ \$ \$ % % % All broadacre industries by state **New South Wales** 183,430 175,900 74,000 108,560 5,000 (282) 34 -70,000 16 14 (7) (32) 125.950 104,000 80,010 Victoria 150,300 (8) 51,900 (22)6,000 16 16 (27) 23 Southern Queensland 171,910 116,600 (13) 103,000 71,630 -7,000 -18,000 12 31 35 (170)(14)South Australia 266,130 253,600 (12) 174,000 167,250 3 8 16 114,800 58,000 (21) (44)176,660 102,000 102,680 14 17 (14) 28 South-Eastern Australia 169,700 32,600 -21,000 (5) (24)**South-Eastern Australia by industry** 296,460 Grains **b** 234,900 (6) 118,000 201,250 46,200 (30)-34,000 11 14 (20) 29 167,500 (17) 48,600 22 Sheep 121,230 123,000 61,040 12,000 10 9 (46)(41)Beef 92,160 84,300 (13) 60,000 30,880 -3,900 -32,000 19 31 26 (287)(23) 84,000 33 34 Dairy 83.480 156,300 (13) -20.480 88,500 (17)-64,000 15 (35)

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

a Defined as farm cash income plus the change in trading stocks, less depreciation and the imputed value of operator partner and family labour.

b Grains and Grains-Livestock ANZSICs.

p Preliminary estimates. **y** Provisional estimates.