

## MACROECONOMICS AT WORK EXERCISE

### THE MULTIPLIER EFFECT

**REFERENCE:** Cathy Bolt, ‘High and dry in the drought’, *Australian Financial Review*, 29 August 2002, p. 68–9.

**CHAPTER RELEVANT TO THIS EXERCISE:** Chapter 12.

### OVERVIEW

This article analyses the economic consequences of the drought currently affecting much of Australia. It notes in particular, the multiplier or ‘flow on’ effects of its immediate impact.

The magnitude of the drought is indicated, for example, by the fall in the estimated wheat harvest. The drop is now estimated to be between 15.5 and 18 million tonnes — down from the pre-season estimate of 23 million tonnes. In this and other industries (such as rice and cotton), lower plantings will also have an effect on the size of the harvest in the following year.

The immediate effect of the drought is on the incomes of farmers and enterprises engaged in agricultural production. Revenues will fall as a result of smaller, or zero, harvests, and production of products such as meat and wool will drop as animal numbers are cut back. Incomes will also be affected by increased costs associated with, for example, the need to hand-feed or agist stock. This effect will be exacerbated by the fact that the price of grain and stock feed will be higher as a consequence of the reduced supply.

The cutback in production will also have an immediate effect on the level of employment of both full-time and casual workers directly employed in agricultural production.

In addition, there are what the article describes as ‘flow-on effects’ or, less formally, as ‘victims beyond the farm gate’. These will affect two categories of firms: those that are *suppliers of inputs* to rural producers, and those (especially in rural towns) whose revenue depends on rural producers *spending their income* on both consumption and investment goods. Employees of these firms will also be affected.

The immediate effects, and the ‘complex series of interactions’ consequent upon the drought, will have both *microeconomic* effects on the relative prices of different commodities and *macroeconomic* effects that will ultimately (though perhaps in quite a short time frame) result in a lower aggregate level of income, or GDP.

## QUESTIONS

1. Relate the analysis in the article of the economic effects of drought to the analysis of the multiplier in chapter 12.
2. Using the wheat industry as an example, give some examples of the immediate or first round effects of the drought.
3. Identify some of the flow-on effects on the different elements of aggregate spending specifically as a result of the consequences for *suppliers of inputs* to agricultural producers.
4. Carry out the same exercise by looking at the 'downstream' consequences. That is, the effect of lower incomes and expenditure by those who derive their income from agricultural production.
5. What is meant by the Director of ABARE's statement that 'regional multiplier models often exaggerated the impact of drought'?
6. What arguments are there for governments providing financial assistance to agricultural producers directly affected by drought?