

## MACROECONOMICS AT WORK EXERCISE

### PRODUCTIVITY

**REFERENCE:** Gary Banks, ‘The drivers of Australia’s productivity surge’, [extract from speech in March 2002 by the Chairman of the Productivity Commission], <http://www.pc.gov.au/research/speeches/cs20020307/cs20020307.pdf>, pp. 1–5.

**CHAPTER RELEVANT TO THIS EXERCISE:** Chapter 9.

### OVERVIEW

In this speech, the Chairman of the Australian Productivity Commission analyses the marked increase in productivity in Australia in the 1990s. This productivity increase compared very favourably with previous years and with that of other comparable countries.

At the outset, it is noted that increases in productivity are a fundamental basis of increases in Gross Domestic Product and, hence, living standards. The speech also contains a brief analysis of the issues associated with measuring productivity.

Productivity is, in essence, a ratio of *output* (the amount of production and income generated in an economy) to *input* used in producing that output. The major categories of inputs, or resources, are *labour* and *capital*. The more effectively these two factors of production can be utilised in conjunction with a country’s natural resources (that is, the higher the level of *multifactor productivity*), the higher the level of Gross Domestic Product per person (GDP per capita). The GDP per capita is the conventional measure of living standards.

Figure 1 in the speech summarises the trend in multifactor productivity (MFP) in Australia in recent decades. It notes in particular the ‘surge’ in productivity growth since the early 1990s in contrast to the preceding period. This from the late 1970s had markedly lower increases in MFP.

Figure 2 shows data (as computed by the Australian Bureau of Statistics) for the growth of both labour productivity *and* multifactor productivity over a number of ‘productivity cycles’. Productivity growth has fluctuated and ‘productivity cycles’ are defined by the period between ‘peaks’ in productivity growth and are, therefore, of varying length. This chart shows the increase in labour productivity broken down into the increase that can be attributed to the increased use of capital per unit of labour (or capital deepening) and the increase that can be attributed to the way that all factors are used in combination (or multifactor productivity).

The growth in MFP has been almost entirely due to the efficiency with which all the resources, or factors of production, that are available for use in Australia, have been utilised in combination. Increases in the growth of productivity in the 1990s compared

to the 1980s have also been greater in Australia than in virtually every other high-income country, a point illustrated in figure 3.

## QUESTIONS

1. Explain the concepts of *labour productivity* and *multifactor productivity* and compare the two.
2. Summarise the trends in Australia's multifactor productivity growth over the second half of the twentieth century.
3. What is the major conclusion of the chart shown as figure 2?
4. Can you suggest what factors may be behind the productivity performance of the final 'productivity cycle' (1993–94 to 1999–2000), for which data are given?
5. Describe Australian productivity performance in the 1990s relative to that of other developed countries.