

Box 1: The Length of Economic Expansions

Like virtually all industrialised countries, Australia has experienced three recessions and three expansions in the past quarter of a century. This box sets out the facts on the length of the economic expansions following the recessions of the mid 1970s, early 1980s and early 1990s.

Recessions and expansions cannot be dated by simply looking at figures for GDP. Any single variable is likely to contain too many random movements for it to be used as the sole arbiter of the timing of business cycles (some anomalous instances are illustrated below). Instead, a range of national accounts aggregates, labour market measures and indicators from the manufacturing sector are used to develop a more general picture of cyclical developments.

Dating recessions

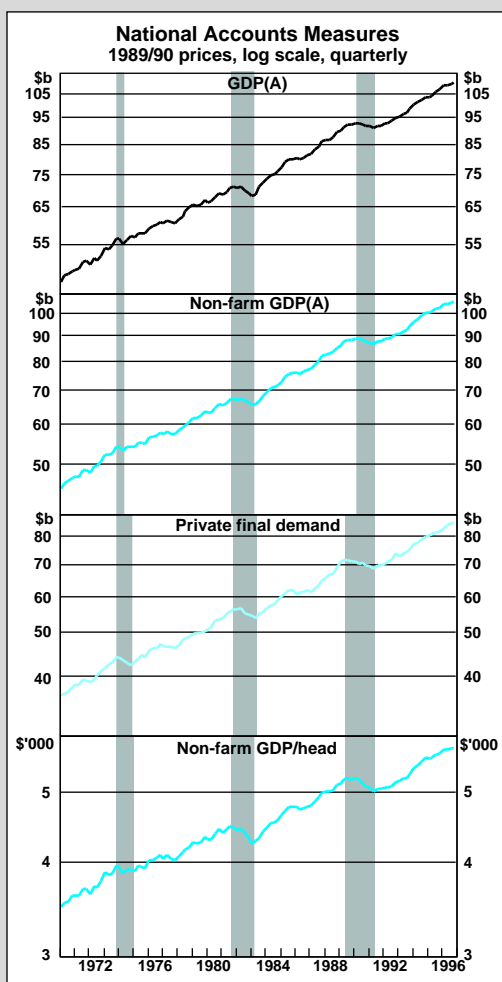
These cyclical indicators are summarised in Graphs 1, 2 and 3. In each case, the shaded areas show the recession, broadly defined as a period in which there is some fall in the level of the indicator of economic activity (or rise in the case of the unemployment rate). The exact position of the shaded area varies slightly according to which cyclical indicator is used, but the similarity of the pattern far outweighs the differences.

Graph 1 shows four measures of economic activity derived from the national accounts. Interestingly, it is these that give the least satisfactory dating of the business cycle. Although they point to the usual pattern of three recessions and three expansions, there are two anomalies.

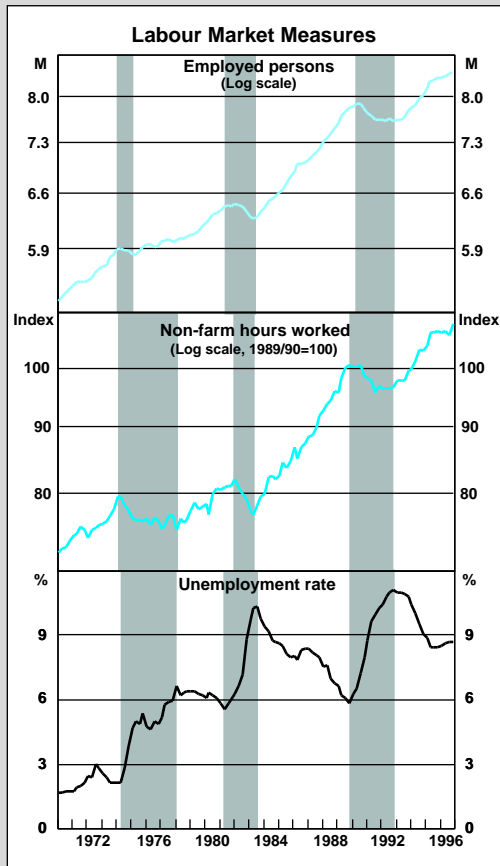
The first is that GDP and non-farm GDP both show only a short and modest fall in economic activity in the 1974 recession, unlike those shown by other national accounts measures and data on the labour market and the manufacturing sector.

The second anomaly is that all four national accounts indicators show a 'mini recession' during calendar 1977 which is less apparent in the labour market and manufacturing indicators. Other OECD economies continued to grow through this period although there was a levelling out in industrial production. This period might be better regarded as representing a pause in the late 1970s recovery, rather than the

Graph 1



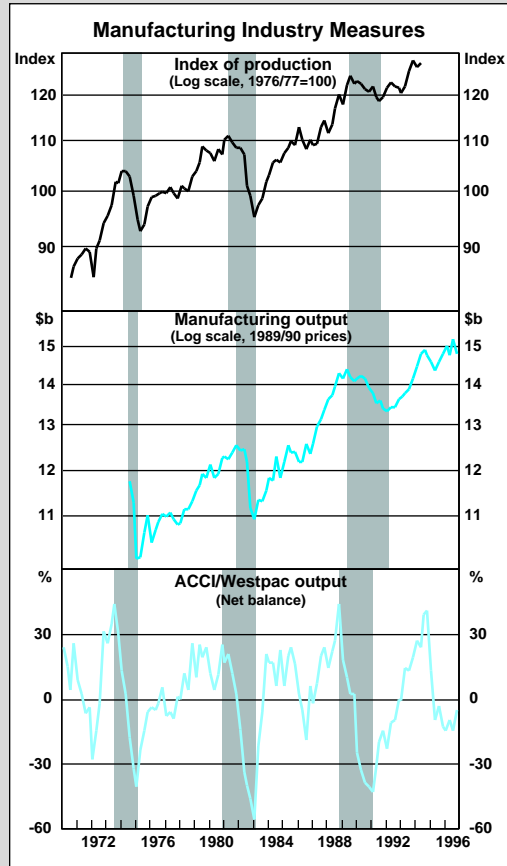
Graph 2



starting point of another cycle;¹ the 1980s expansion was also characterised by a mid-cycle slowing.

Graph 2 shows that labour market measures clearly identify three recessions. Each is quite pronounced, and the only unusual aspect is that the 1970s recession shows up as being quite prolonged when measured by the rise in the unemployment rate, which rose almost continuously from June 1974 to March 1978. The large rise in real wages at this time explains why the

Graph 3



unemployment rate indicates a deeper and longer recession than the other indicators of the cycle.

Graph 3 shows three measures from the manufacturing sector. Two measures of manufacturing output have been used because neither completely covers the estimation period.² Again, each recession and expansion is very pronounced. This is not surprising, given that the manufacturing sector usually shows much greater cyclical movements than the economy as a whole.

1. E.A. Boehm, however, defines the period from August 1976 to October 1977 as a recession. See 'The Usefulness and Applications of Economic Indicator Analysis', Institute of Applied Economic and Social Research Working Paper No. 9/1989.
2. The index of production is the ANZ Bank Index of Factory Production, which was also maintained at one stage by the Westpac-Melbourne Institute for Business Cycle Analysis. It was discontinued in June 1994. Manufacturing output is the official series produced by the ABS in the national accounts. This is a superior series, but only starts in September 1974.

Length of expansions

Having dated the recessions, the expansions can then be identified as the period between each recession. Table 1 shows the length and strength of each expansion, based on eight of the ten indicators. (Two cyclical indicators – unemployment and ACCI/Westpac Survey – have not been used because it is not possible to calculate growth rates from them.)

On the basis of the above measures, both of the previous expansions lasted 6–7 years. Some data on the current expansion to date are included for indicative purposes, but its

length cannot be determined until it finishes.

The average growth rate of each variable for each expansion is shown in parentheses. On the basis of each of the eight variables, the 1980s expansion has been the strongest, the current expansion is the next strongest and the 1970s expansion is the weakest. Part of the strength of the 1980s is due to faster population growth at that time. The differences in growth rates for non-farm GDP per head across the three expansions are smaller than for most of the other variables. ↗

Table 1: Length of Expansion and Average Rate of Growth of Selected Variables
(Annual rate)

	From 1970s recession	From 1980s recession	From 1990s recession to date
GDP	7 ¹ / ₄ years (3.3%)	7 years (4.6%)	5 ¹ / ₂ years (3.6%)
Non-farm GDP	7 ¹ / ₄ years (3.3%)	7 years (4.5%)	5 ¹ / ₂ years (3.6%)
Private final demand	7 years (4.1%)	6 years (4.9%)	5 ¹ / ₂ years (4.3%)
Non-farm GDP/head	6 ¹ / ₂ years (2.2%)	6 ¹ / ₄ years (3.2%)	5 ¹ / ₂ years (2.5%)
Employed persons	6 ¹ / ₄ years (1.6%)	7 years (3.3%)	4 ¹ / ₄ years (2.4%)
Hours worked	4 years (2.3%)	6 ¹ / ₂ years (4.1%)	4 ¹ / ₄ years (2.7%)
Index of production	6 years (3.0%)	6 ¹ / ₂ years (4.2%)	—
Manufacturing output	6 ³ / ₄ years (3.1%)	6 ¹ / ₄ years (4.5%)	4 ³ / ₄ years (2.2%)
Average of above	6.4 years	6.6 years	—