

Non-technical summary for 'Is the Phillips Curve Still a Curve? Evidence from the Regions'

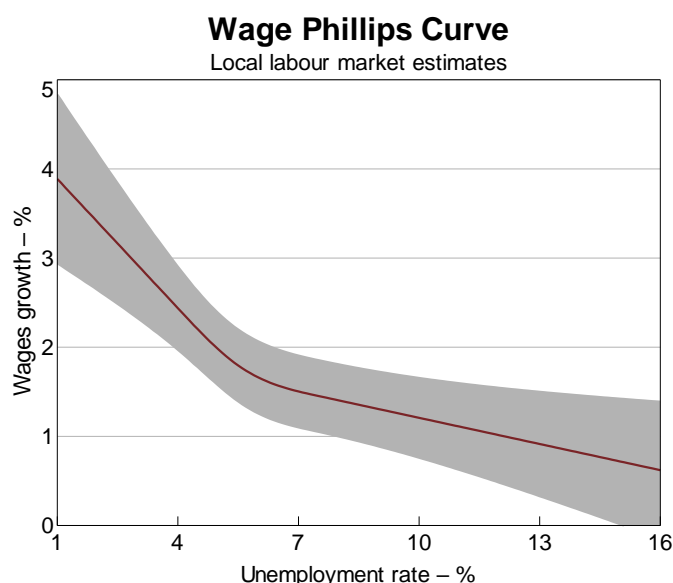
By James Bishop and Emma Greenland

The Phillips curve is one of the most important macroeconomic relationships the Reserve Bank of Australia (RBA) considers when making its monetary policy decisions. This relationship suggests that, all else being equal, wages growth and inflation will tend to rise as the unemployment rate falls. Most models in the academic literature assume that this relationship is linear (that is, a straight line). But for two decades the models used by the RBA for forecasting wages growth and inflation have assumed that the Phillips curve really *is* a curve. Specifically, the RBA's models assume that the Phillips curve relationship becomes stronger at lower levels of unemployment, consistent with research by Guy Debelle and James Vickery (1997) in the late 1990s.

We ask: is the Australian Phillips curve for wages still a curve? And how strong is this relationship?

A key issue we face in examining how wages respond to very low rates of unemployment is that the national unemployment rate has not often fallen to very low levels over recent decades. To overcome this issue, we examine the relationship between wages growth and unemployment in 291 local labour markets across Australia over the past 20 years. In contrast to the national data, using local labour markets provides us with many more observations on what happens to wages growth when the unemployment rate falls to very low levels. For example, the national unemployment rate has not once fallen below 4 per cent in the past four decades, but around one-fifth of our sample of local labour markets have seen unemployment rates below 4 per cent.

We find that the Australian wage Phillips curve is indeed still a curve, rather than a straight line (see the figure). When the unemployment rate is above 7½ per cent, the Phillips curve is relatively flat and wages growth is largely unresponsive to changes in unemployment. Wages growth then becomes increasingly responsive to changes in the unemployment rate as it falls to lower and lower levels. Our baseline estimates suggest that if the unemployment rate is below 4 per cent, a 1 percentage point reduction will lead to an increase in wages growth that is around three times larger than if the starting unemployment rate was above 5½ per cent.



Notes: The vertical position of the curve is set in an arbitrary way and is for illustrative purposes only. For example, the figure should not be read as indicating that wages growth will be 2.2 per cent at an unemployment rate of 4.5 per cent. Rather, the focus should be on how the slope and curvature changes as the unemployment rate changes. Shaded area represents 95 per cent confidence intervals.

Sources: ABS; Authors' calculations; National Skills Commission

Using local labour market data to estimate Phillips curves does present some challenges, most notably the issue of translating the estimates we obtain into national ones. For this reason, our estimates have some important caveats. There are also some difficulties in obtaining good quality data at the local labour market level; there is no high-quality price data for local labour markets, so we restrict our analysis to the wages Phillips curve. Finally, our findings should not be viewed in isolation – wages, prices and unemployment are all interrelated concepts and are affected by policy decisions, making it difficult to draw definitive conclusions about when or how the RBA’s policy objectives can be achieved.

Despite these challenges, our findings have important implications for monetary policy. As the labour market recovers from the effects of COVID-19, a key policy question facing the RBA Board is: when will unemployment be sufficiently low to generate a sustained increase in wages growth? Understanding the shape of the relationship between unemployment and wages at very low rates of unemployment is essential in helping to answer this question, particularly given the RBA’s central forecast for the unemployment rate to fall to a four-decade low over the next few years.

Reference

Debelle G and J Vickery (1997), ‘Is the Phillips Curve a Curve? Some Evidence and Implications for Australia’, [RBA Research Discussion Paper No 9706](#).