Box 2.5: Sensitivity of the economic forecasts to the NAIRU

The NAIRU represents the level of the unemployment rate associated with stable growth in wages and prices. The difference between the NAIRU and the unemployment rate is one measure of how much spare capacity there is in the labour market and economy. The NAIRU assumption underpinning the economic forecasts in this Budget is 4¼ per cent.

Treasury has previously assumed the NAIRU to be 4¾ per cent, based on historical economic data and econometric analysis.[1] However, the unemployment rate has fallen faster and lower than previously expected, without generating substantial wage increases.

The underlying level of spare capacity and underemployment present in the economy may not have been captured in the previous NAIRU assumption. Additionally, structural changes may have altered the wage and price setting dynamics in a way which was not fully reflected in earlier estimates.

Australia's experience of low unemployment and wage growth is not unique. Many major economies including the United States, Japan and the United Kingdom experienced decade low unemployment rates prior to COVID-19 with little wage pressure.

One way to understand the influence of the NAIRU on the forecasts is through a concept known as the Phillips curve. It explains the trade-off between the unemployment rate and stable wages or inflation. An unemployment rate below the NAIRU is associated with higher wage and price growth, while an unemployment rate above the NAIRU is associated with lower wage and price growth.

This box presents scenarios to illustrate the impact the NAIRU assumption has on the forecasts. One scenario has a higher NAIRU of 4¾ per cent and the other a lower NAIRU of 3¾ per cent (Chart 2.21). The scenarios hold the unemployment rate at the Budget forecast to illustrate the impact on wages and prices. As illustrative scenarios, these results assume there is no change in monetary policy that would offset some of these price changes.

With the lower NAIRU assumption of 3¾ per cent, there is more spare capacity in the labour market compared to the Budget forecast. This reduces annual wages growth to be ½ of a percentage point lower in 2022-23 and ¾ of a percentage point lower in 2023-24.

1 Ruberl H, Ball M, Lucas L and Williamson T (2021), 'Estimating the NAIRU in Australia', Treasury Working Paper 2021-01, 29 April 2021.

Box 2.5: Sensitivity of the economic forecasts to the NAIRU (continued)

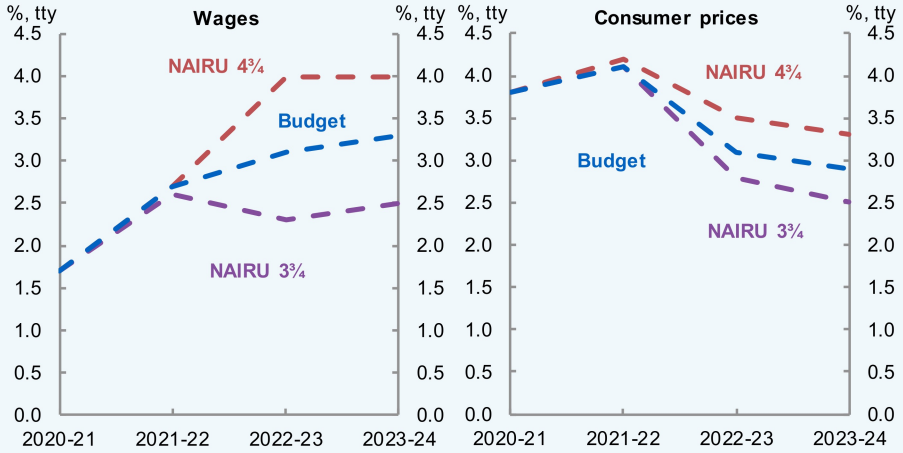
Over time lower wages growth leads to lower consumer price inflation, as firm costs are passed on to consumer prices. CPI growth in the scenario is ¼ of a percentage point lower in 2022-23 and ½ of a percentage point lower in 2023-24. In the June quarter of 2024, through the year growth in both wages and CPI is 2½ per cent.

A higher NAIRU of 4¾ per cent results in an opposite impact, with through the year wages growth of 4 per cent in the June quarters of 2023 and 2024, and through the year CPI growth of 3¼ per cent in the June quarter 2024.

There is limited recent experience in Australia with an unemployment rate below 5 per cent, adding to uncertainty around how wages respond in such an environment. Regardless of the NAIRU assumption, it will take time for tightening labour market conditions to become a key driver of inflation.

The large degree of uncertainty around technical estimates of the NAIRU suggests a degree of caution is required in framing fiscal and monetary policy. Overestimating the NAIRU could see policy tighten prematurely and prevent Australia from attaining the goal of full employment. Treasury will continue to review and assess the NAIRU assumption as more information comes to light.

Chart 2.21: Implications of the NAIRU assumption



Source: ABS Wage Price Index, Australia and Treasury.

Source: ABS Consumer Price Index, Australia and Treasury.