

Appendix A: Model

The effect of increases in the Superannuation Guarantee minimum contribution rate on wage growth are estimated by versions of the following baseline specification:

$$\% \Delta WAGE_t = \beta_0 + \beta_1 \Delta SG_t + \beta_2 UnemGap_{t-4} + \beta_3 \Delta UR_{t-4} + \beta_4 InfExp_{t-4} + \beta_5 GDPdef_{t-4} + \varepsilon_t$$

Where:

- $\% \Delta WAGE_t$ = denotes the nominal wage growth at time t from the corresponding quarter, calculated as either the AAWI (approved), AENA (wages and salaries), AENA (social contributions) or AWOTE;
- $\beta_1 \Delta SG_t$ denotes the percentage point change in Superannuation Guarantee minimum contribution rate at time t from the corresponding quarter;
- $\beta_2 UnemGap_{t-4}$ denotes the 'unemployment gap' (difference between the unemployment rate and the estimated NAIRU) at time t , and enters the model with a four quarter lag;
- $\beta_3 \Delta UR_{t-4}$ is the percentage point change in the unemployment rate at time t from the corresponding quarter, and enters the model with a four quarter lag;
- $\beta_4 InfExp_{t-4}$ denotes the trend inflation expectations at time t , and enters the model with a four quarter lag;
- $\beta_5 GDPdef_{t-4}$ denotes the two year-ended percentage change in the non-farm GDP deflator, and enters the model with a four quarter lag; and
- ε_{it} is the error term.

The baseline specification is a variation of the wage Philips Curve model used in Bishop and Cassidy (2017).¹ Inflation expectations are captured using a measure of consumer price index (CPI) inflation expectations implied by a 10-year indexed bonds. The GDP deflator is included to capture changes to growth in firms' output prices. The change in the unemployment rate is included to capture wage growth pressure from sudden changes to the unemployment rate.

The model itself cannot fully explain the changes in wage growth over the period. There are many possible explanations for this. For example, it may be that there is more labour market slack than the unemployment rate would suggest, or that the relationship between labour market slack and wage growth has changed.

¹ Bishop, J., & Cassidy, N. (2017). Insights into low wage growth in Australia. *RBA Bulletin*, March, 13-20. Accessed online: <https://www.rba.gov.au/publications/bulletin/2017/mar/pdf/bu-0317-2-insights-into-low-wage-growth-in-australia.pdf>.