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**Title:**  
**Modeling and forecasting Australian Fertility**

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**Abstract:**  
Most users of demographic data in government, international agencies and industry require population forecasts to which fertility projection is a vital component. In this paper an approach combining parametric and time-series models is applied to forecasting Australian fertility. First, the paper fits the *Gamma* function, the *double-exponential* distribution, and the *normal*, *lognormal* and *inverse normal* distributions to the time-series age-specific fertility rates and determines the particular distribution that best describe the historical data. The parameters of the preferred distribution are then projected into the future using a multivariate ARIMA model. Subsequently, these forecasted values are used to construct the age-specific fertility rate forecasts. The paper presents forecasts of total and age-specific fertility up to the year 2020.