Review of "Forecasting the age structure of the scientific workforce in Australia"

In this paper, the authors studied the forecasting of the workforce of different scientific disciplines. The forecasting approach was built upon early studies by the authors with a reminder term to account for migration and career changes. Although the empirical study in Sections 3 and 4 may be interesting to applied scientists, the statistical contributions of the paper are unclear. More detailed comments are given below.

Other comments:

1. On page 2, it seems restrictive to have only two reasons, retirement and death, for people to leave the workforce.

2. On page 4, assuming $q_{i,x,t} = q_{x,t}$ and $r_{i,x,t} = r_{x,t}$ needs justification rather than for modeling convenience.

3. The main model setup is stated on pages 6 and 7. It is not clear which parts of the model are new in the literature.

4. In equation (3), why don't the authors consider a multivariate time series model for $\beta_{k,t}$, $k = 1, ..., K$?

5. There is no mention of the statistical inference of the unknown parameters. For example, how were the unknown parameters in the model on pages 6 and 7 estimated?

6. There is no simulation experiment to investigate the performance of the inference procedure.

7. In Section 4, the forecasting was done using simulation methods. There is no validation of the forecasting accuracy. It is important to demonstrate how good the forecasts are compared with existing models.

In short, the contributions of the current version of the paper do not seem to be adequate for publication in the journal. Much more work is required to illustrate the value of the proposed changes in the workforce modeling.