Project Code: CEPAR2

Conditional life expectancy comparisons using a semi-parametric trending panel model approach

Supervisor

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Project summary

Life expectancy is an important and widely used measure of the mortality experience of a population. However, as a single index, it does not reflect certain underlying features in mortality surfaces such as cohort effects. Therefore, we want to introduce the concept of conditional life expectancy as a new mortality index so that the experience within different age groups can be explicitly studied and compared. In this project, we will apply a semi-parametric varying coefficient panel model to analyse the relationship between life expectancy and several socio-economic factors. The model will be estimated with state-level data for Australia.

Role of the scholarship holder(s) in the project

The scholarship holder will carry out a literature review on mortality modelling and life expectancy calculation. He/she will also assist in the model design process after collecting data from the Australian Bureau of Statistics. A report needs to be prepared by the scholarship holder at the end of the project.

Required knowledge, skills and/or training

Potential applicants need to have basic programming and computing background and be willing to learn statistical computing software such as R or MATLAB if required.
Preference
Preferences will be given to students who have completed ACTL3141 and have a good understanding of survival models and different estimation techniques. Preferences will also be given to students who are interested in proceeding to Honours study.

Work period
The work period may be broken into two parts as students will not be expected to work during the UNSW shutdown over Christmas/New Year.

| Total work weeks: 8 weeks | Preferably from early December (excluding Christmas period) to early February |

How to Apply
Apply on the Scholarships website here, using the scholarship code UGVC1053.

You will need:
- An electronic copy of your CV
- An electronic copy of your academic transcript
- The project codes and titles of up to three projects you’d be interested in getting involved in

The deadline for submissions is 4th October 2017.