

## CEPAR Summer Scholarship Project Nomination Form 2018/19

### Project title

Life-cycle modelling for optimal retirement spending in countries with less developed social security systems

### Supervisor

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### Project summary

This project will construct life-cycle models to study optimal consumption strategies with retirement savings in the presence of social security and private longevity and health insurance products. The study will focus on developing countries facing rapid population ageing such as China. The outcome of the project will inform the product design of private insurance products suitable for retirement. The project will provide an exciting opportunity for a student interested in policy analysis or insurance product design. The student will gain a better understanding of the economics of retirement planning and will develop their coding skills.

### Role of the scholarship holder(s) in the project

- Review of relevant life-cycle models for retirement planning
- Data collection and empirical analysis
- Programming of life-cycle models

### Required knowledge, skills and/or training

- Basic knowledge of the roles of social security, life insurance and health insurance for retirement financial planning
- Experience in programming, e.g., STATA/R/MATLAB or others

### Preference

- Solid quantitative background (e.g., Economics or Actuarial Studies majors)
- Experience in analysing household survey data
- Experience with dynamic programming or other mathematical optimization methods
- Coding experience with Python/Julia
- Experience with Linux

### Work period

<p>Total work weeks:</p> <p><input type="checkbox"/> 4 weeks</p> <p><input type="checkbox"/> 5 weeks</p> <p><input type="checkbox"/> 6 weeks</p> <p><input type="checkbox"/> 7 weeks</p> <p><input checked="" type="checkbox"/> 8 weeks</p>	<p>Please tick one box</p> <p><input checked="" type="checkbox"/> Exact dates will be decided in consultation with the successful applicant</p> <p>OR</p> <p><input type="checkbox"/> The project must be conducted during the following period: --/--/-- to --/--/--</p>
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