

CENTRE FOR APPLIED FINANCE AND ECONOMICS

Higher Degree Economics Student Research in International Development, Health and Environment

The School of Commerce is proud to host a half-day research symposium to feature the innovative and high quality applied economics research that graduate students from the University of South Australia and University of Adelaide are doing. The focus is on PhD students working on international development, health and environmental economics topics. The presenters will present their work and allow enough time to receive valuable inputs from our academic and non-academic attendees.

Date: 19th of October 2017

Time: 10:30am – 1:30pm

Location: WL2-47 (Level 2, Room 47, Way Lee Building) City West [[campus map](#)]

Please find below the seminar presenters and the titles of their projects:

- **Admasu Asfaw Maruta: PhD Student, University of South Australia**
Title: *Sectorial Aid, Institutional Quality, and Growth*
- **Clifford Afoakwah: PhD Student, University of South Australia**
Title: *Opportunity Cost and Post-primary Schooling in Ghana: A Gender Perspective*
- **John Kandulu: PhD Student, University of Adelaide**
Title: *The inadvertent effect of microfinance on girls' household education investment*
- **Claire Settre: PhD Candidate, University of Adelaide, Global Food and Resource Studies**
Title: *Strategic opportunity for water management working in carbon and water markets*
- **Christine Mpundu-Kaambwa: PhD Student, University of South Australia**
Title: *Quality of life measures for adolescents: Does study population and proxy-assessment have an effect on the latent constructs?*

Below are the details of their presentations:

Admasu Asfaw Maruta: PhD Student, University of South Australia

Title: Sectorial Aid, Institutional Quality, and Growth

Abstract: In this paper, we examine sectorial aid effectiveness in promoting the growth of developing countries using aid targeted to education, health and agriculture sectors. We also examine regional differences in terms of using sectorial aid. Using panel data from 75 developing countries covering the period 1980-2013, we find that education aid has the highest positive and significant effect on growth relative to health and agriculture aid. Further, health aid has higher positive and significant effect on growth compared with agriculture aid. However, each type of sectorial aid augments growth if it is interacted with the measure of institutional quality. We also find that South American countries are more effective than African and Asian countries in using and thereby enhancing economic growth.

Clifford Afoakwa: PhD Student, University of South Australia

Title: Opportunity Cost and Post-primary Schooling in Ghana: A Gender Perspective

Abstract: This study examines the effect of opportunity cost of time and schooling expenditure on post-primary school enrollment. Using nationally representative household data from Ghana, we exploit district changes in food price inflation and wages to obtain exogenous variations in opportunity cost of schooling. Our findings suggest that parents with sizeable outside options for their children's schooling are less likely to enroll them. The effect is more evident for girls in secondary school. At the tertiary education level, however, this effect is significant only for boys. We then decompose the opportunity cost and show that schooling expenditure plays a crucial role in parent's decision to enroll girls into secondary school. The effect is insignificant for boys and the opportunity cost for the child's time in school is negligible for both genders. At the tertiary level, the opportunity cost of children's time is the only significant predictor of enrollment, especially for boys. Further investigation on parents' expected returns to education shows interesting differences. Earnings in the informal market is the main driver of secondary school enrollment, while expectations from the formal labour market predicts tertiary school enrollment.

John Kandulu: PhD Student, University of Adelaide

Title: The inadvertent effect of microfinance on girls' household education investment

Abstract: Human capital investment, specifically in education, is a key driver behind sustainable economic growth and development and poverty alleviation in developing countries. Nevertheless, there are contrasting results in empirical econometric studies on the effect of microfinance on education investment in poor households. In this paper, we use recent large-scale repeated cross-sectional household datasets from Bangladesh to study how receiving microfinance and increasing microfinance incomes to households – that is, the extensive and intensive margins of microfinance – may affect education investment in a) the number of children enrolled in school; b) total household school expenditure; c) boys' education dropout rate; and d) girls' education dropout rate. Our empirical analysis controls for a wide variety of individual, household, community, school and spatial characteristics. Results indicate that neither receiving microfinance income nor increasing the amount of income from microfinance influences boys' education in a statistically significant way. However, receiving microfinance may reduce girls' education dropout rates while increasing the amount of microfinance income received may increase girls' education dropout rates. Potential inferences from our results suggest that subsidising house labour, as an

accompaniment of existing and future initiatives to expand access to microfinance, could mitigate girls' education dropout rates prevalent in many developing countries and contribute towards achieving long term economic growth and development and poverty alleviation.

Claire Settre: PhD Candidate, University of Adelaide, Global Food and Resource Studies

Title: Strategic opportunity for water management working in carbon and water markets

Abstract: This talk presents a model of ecosystem health and carbon storage to assess possibilities to offset cost of environment water purchases by generating and selling carbon credits. Results identifying the optimal temporal opportunities to utilize a carbon-water trading strategy to finance environmental water purchases. Results show that under certain hydrological and market conditions it may be possible for floodplain inundation to stimulate biomass growth and carbon storage of sufficient value to offset the cost of annual environmental water purchases required to cause the flooding. We conclude that a carbon-water trading strategy may present one avenue to offset, or at least reduce, the cost of supplementary environmental water purchases to achieve positive ecological benefits from overbank flooding but that some institutional challenges to implementation remain.

Christine Mpundu-Kaambwa: PhD Student, University of South Australia

Title: Quality of life measures for adolescents: Does study population and proxy-assessment have an effect on the latent constructs?

Abstract: OBJECTIVES: An important psychometric property of instruments designed to measure health-related quality of life (HRQOL) is that they must accurately capture the latent HRQOL constructs for different subgroups within the instruments' target population. This study examined the latent structures of two generic-paediatric-HRQOL measures [the non-preference-based Pediatric Quality of Life Inventory (PedsQL) and the preference-based Child Health Utility 9D (CHU9D)] when used in subgroups that differed according to age and type of respondent (self versus proxy-report).

METHODS: Representative cross-sectional data were obtained from two 2014 cohorts of the Longitudinal Study of Australian Children (LSAC) [14-15yrs (n=3,247) and 10-11yrs (n=3,376)] and a separate 2013 independent study (community-cohort, 15-17yrs (n=755)). The CHU9D is self-reported across all cohorts, whereas the PedsQL is proxy-reported by parents in the LSAC cohorts and self-reported in the community-cohort. Latent HRQOL constructs measured by the instruments were identified using exploratory factor analysis (EFA) with varimax rotation. The optimal number of factors for the EFA was determined using parallel analysis based on simulated polychoric correlation matrices.

RESULTS: A five-factor structure was deemed optimal. In all three cohorts, the PedsQL dimensions loaded onto four distinct factors as the developer originally specified: 'physical functioning (8 items), emotional functioning (5 items), social functioning (5 items) and school functioning (5 items). In the LSAC cohorts, all CHU9D dimensions loaded onto a separate latent factor, interpreted as general HRQOL while 8 CHU9D dimensions in the community-cohort loaded onto emotional functioning and 1 onto school functioning.

CONCLUSIONS: Age differences did not seem to have an impact on the latent HRQOL constructs measured by the instruments but the use of proxy-respondents did. These results support the validity of using both instruments across a range of ages. That the CHU9D loaded onto a single

factor in LSAC cohorts reinforces the underlying premise of the CHU9D as a measure of health utility/overall HRQOL.

For any further information and enquiries please contact
CMR-Research@unisa.edu.au or
Jon Lontos on jon.lontos@unisa.edu.au or phone +61 8 830 20457