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SUBMISSION FORM

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Title of Paper / Presentation / Session to appear in program:

Optimal Decisions for Consumption, Investment and Housing in the Australian Retirement Decumulation Phase

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3.	Luo, Xiaolin	4.	

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ABSTRACT

Optimal Decisions for Consumption, Investment and Housing in the Australian Retirement Decumulation Phase
(Johan Andreasson, Pavel Shevchenko and Xiaolin Luo)

Key words: (Optimal control, retirement, pension, dynamic programming, superannuation)

Purpose of your paper: We develop a sequential utility model to capture Australian retirement characteristics in order to improve understanding of their behavior and to derive optimal decisions.

Abstract: The Australian means tested Age Pension introduces new complexities in modeling retirement behavior. In this paper we develop a model for the retirement behavior in the decumulation phase of Australian retirees with sequential family status subject to consumption, housing, investment and bequest. We account for stochastic mortality and risky asset, and introduce a health proxy to capture the decreasing level of consumption for older retirees. We can then find optimal housing at retirement, optimal consumption, and optimal risky asset allocation for each period. The model is solved numerically as a stochastic control problem, and is calibrated using the maximum likelihood method on empirical data of consumption and housing from ABS HIS and HES 2009-2010 Survey. We find that the model fits the characteristics of the data well to explain the behavior of Australian retirees.