

Portfolio Choice over the Life Cycle with Regime Shifts in Stock and Labor Market

Jingjing Chai Raimond Maurer Ralph Rogalla

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Abstract

In this paper, we incorporate cyclical effects on capital and labor markets into a life cycle model and investigate into optimal labor supply and retirement decisions, as well as consumption and asset allocation patterns for an investor, who has access to stocks, bonds, and life annuities. Using realistically calibrated parameters, we analyze the impact of ignoring versus considering existing business cycles in the individual life-planning. In addition we study the impact for the consumer to have access to the longevity risk insurance markets by the possibility to buy deferred payout annuities during the working life. Deferred payout annuities are insurance contracts providing similar to social security or defined benefit pension plans lifelong income to the annuitant after a certain number of years has passed subject to the individual's survival. We find that considering business cycles generates substantial lifetime welfare gains of around 50% through adapting individual labor supply and investment patterns to time-varying investment and work opportunities.

Jingjing Chai

Goethe University Frankfurt
Department of Finance
Grüneburgplatz 1 (Uni-PF H 23)
60323 Frankfurt am Main, Germany
E-mail: chai@finance.uni-frankfurt.de

Raimond Maurer

Goethe University Frankfurt
Department of Finance
Grüneburgplatz 1 (Uni-PF H 23)
60323 Frankfurt am Main, Germany
E-mail: maurer@finance.uni-frankfurt.de

Ralph Rogalla

Goethe University Frankfurt
Department of Finance
Grüneburgplatz 1 (Uni-PF H 23)
60323 Frankfurt am Main, Germany
E-mail: rogalla@finance.uni-frankfurt.de