

# ZHITING WU

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## EDUCATION

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<b>The University of St Andrews, Scotland</b> D.Phil Candidate in Economics and Finance	August 2017 - Present
<b>The University of Manchester, England</b> Ph.D. Student in Finance	September 2016 - August 2017
<b>The University of Leicester, England</b> M.Sc. in Financial Economics	September 2014 - January 2016
<b>Guangxi University, China</b> B.Sc. in Management	September 2010 - June 2014

## RESEARCH INTERESTS

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Asset Pricing, Macroeconomics, Macro Finance.

## WORKING PAPER

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### **Firm Heterogeneity in Production-Based Asset Pricing: the Role of Habit Sensitivity and Lumpy Investment (Job Market Paper)**

**Abstract:** I study the interaction between lumpy investment and asset prices in both time-series and cross-section. To this end, I work with a variant of habit sensitivity function introduced in Campbell Cochrane (1999). The model produces 100% equity volatility of data by generating volatile marginal utility under the assumption of non-convex adjustment costs. Second, the model reproduces nearly 100% equity premiums of data because it assigns large weights on precautionary savings and constrained firms, respectively. Furthermore, the model can rationalise considerable size premiums as small firms absorb more productivity risks. Finally, the model matches key macroeconomic moments and the cross-sectional investment rate.

### **A Long-Run Productivity Risks Driving q-Factor Model**

**Abstract:** I incorporate the productivity growth with regime-switching in the conditional mean and volatility into an investment-based q-factor asset pricing model. The long-run productivity risks factors largely summarize the cross-sectional stock return, where the time-varying volatility plays an important role. A parsimonious q-factor model driven by productivity risks explains about 90% variation of return of 25 Size/BM portfolios and 75% variation of return of 160 portfolios, which is comparable to the Fama-French multifactor models, the Carhart (1997) four-factor model, and the Hou, Mo, Xue & Zhang (2020) augmented q-factor model. Therefore, productivity growth can be the potential force driving investment-based models.

### **The Sensitivity of Risk Premiums to the Elasticity of Inter-temporal Substitution**

**Abstract:** I offer two extensions on Pagel (2016)'s reference-dependent preference and study their aggregate implications in a consumption-based asset pricing model. I first extend time-separable utility to recursive utility, which allows the model to reproduce crucial asset pricing moments with a simple IID process for consumption growth. Second, I estimate and introduce a first-order autoregression consumption shock, and I find that it improves model performance by smoothing interest rates. My additional finding is that the elasticity of intertemporal substitution is more sensitive to asset prices given the recursive preference.

## CONFERENCE

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**2020:** The 2020 Computational Economics and Finance Annual Meeting (Paper Accepted); The 2020 Midwest Economic Theory Conference (Paper Accepted); The 2020 Royal Economic Society Junior Symposium (Paper Accepted); The 2020 Graduate Student Chinese Economics Conference; The 2020 Annual Conference on Asia-Pacific Financial Markets (Scheduled); The 2020 European Winter Meeting of Econometric Society (Scheduled).

**2019:** The Scottish Graduate Programme in Economics Residential Conference; The 6th Young Finance Scholar Conference; The 50th Bank of England Money, Macro, and Finance Annual Meeting.

**2018:** The UK-China Doctoral Academic Forum Conference.

## DISCUSSION

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**2020:** The Bank of England Money, Macro, and Finance PhD Conference: The Signalling Channel of Negative Interest Rates, by Oliver de Groot and Alex Hass.

## COMPUTATIONAL SKILLS

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<b>Programming</b>	C++, Dynare, Fortran, Matlab, R Studio
<b>Statistical Packages</b>	Eviews, Gretl, Stata
<b>Document Edition</b>	Latex, Lyx, MS Office
<b>Databases</b>	Bloomberg, CRSP, Wharton

## AWARDS

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China Scholarship Council PhD Scholarship	September 2016 - Present
Distinction with Master of Science in Financial Economics	January 2016
Outstanding Graduates in Department (rank 2nd of 61)	June 2014
3rd Place Chinese Debate Competition in Guangxi University	December 2011
Professional Scholarship in Department	June 2011
2nd Place Wusi Speech Contest in Business School, Guangxi University	May 2011

## CERTIFICATES

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Certificate of Accounting Professional, Certificate of Securities Professional

## LANGUAGES

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Mandarin (Native Speaker); Cantonese (Native Speaker); English (Fluent)

## REFERENCE

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Prof. Oliver de Groot, Chair in Macroeconomics, The University of Liverpool, oliverdegroot@gmail.com  
Prof. Roderick McCrorie, Director of Research, The University of St Andrews, jrm210@st-andrews.ac.uk  
Dr. Ioannis Psaradellis, Lecturer, The University of St Andrews, ioannis.psaradellis@st-andrews.ac.uk