

Anwen Yin

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IOWA STATE UNIVERSITY

Contact Information

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Education

Iowa State University

Ph.D. in Economics, August 2009 – June 2015 (expected)
Thesis: *Forecasting and model averaging with structural breaks*
Advisers: *Helle Bunzel and Gray Calhoun*

M.A. in Economics, University of Windsor, Windsor, Ontario, Canada, 2009

Teaching and Research Fields

Primary Fields: Econometrics, Forecasting, Financial Economics, Time Series Statistics

Secondary Fields: Macroeconomics, International Economics

Teaching Experience

Instructor at Iowa State University:

- Microeconomic Theory, Summer 2013, Overall Rating: **4.3** / 5.0
- Principles of Macroeconomics, Summer 2012, Overall Rating: **5.0** / 5.0
- Principles of Macroeconomics, Summer 2011, Overall Rating: **4.7** / 5.0

Instructor at Drake University:

- Principles of Microeconomics, Fall 2012

Recitation Instructor at Iowa State University:

- Quantitative Methods in Economic Analysis
- Introductory Econometrics
- Introduction to R and MATLAB Programming

Teaching Assistant at Iowa State University:

- Industrial Organization
- Quantitative Methods in Economic Analysis
- Principles of Microeconomics
- Principles of Macroeconomics
- Microeconomic Theory
- Introductory Econometrics

Teaching Assistant at University of Windsor:

- International Trade
- International Economics
- Principles of Microeconomics
- Principles of Macroeconomics

Research Experience

Research Assistant for Prof. John Schroeter *Iowa State University, Fall 2011 – Summer 2012*

- Estimate industry market power using the NBER Manufacturing Industry Productivity database.
- Simulate imperfect competition pricing schedule using the random coefficients logit model.

Professional Experience

Equities Investment Research Associate *The Principal Financial Group, Summer 2014*

- Test and evaluate various equities investment strategies for the quantitative team.
- Manage corporate proprietary database for research.

Undergraduate Academic Adviser *Iowa State University, Fall 2012 – Spring 2014*

- Supervise about 70 economics and agricultural business major students.
- Participate in faculty meeting discussing issues related to undergraduate education.

Awards and Honors

- University Teaching Excellence Award *Iowa State University, 2010*
- Robert Thomas Teaching Excellence Award *Iowa State University, 2010*
- Graduate Scholarships *Iowa State University, 2009 – 2014*
- International Graduate Student Scholarships *University of Windsor, 2008*

Professional Activities

Journal Referee: *Economic Bulletin*

Professional Membership: *American Economic Association, Southern Economic Association*

Conference Presentations

- Annual Missouri Economics Conference, March 2014
- 24th Annual Meeting of the Midwest Econometric Group, September 2014
- 31st Annual Meeting of the Canadian Econometric Study Group, October 2014
- Missouri Valley Economic Association Annual Meeting, October 2014
- Southern Economic Association Annual Meeting, November 2014

Conference Participation

- AEA Continuing Education Program in Time-Series Econometrics, January 2013

Working Papers

“Out-of-Sample Forecast Model Averaging with Parameter Instability” (Job Market Paper)

Forecasting economic variables of interest when structural breaks are possible is highly relevant to many macroeconomic and financial applications. This task becomes even more challenging when the underlying time series data exhibits features such as conditional volatility, as it is difficult to separate the impact caused by parameter instability and volatility. As an alternative to model selection by hypothesis testing, model averaging or forecast combination provides possible predictive gains by better managing the model selection risk. This paper extends Hansen's (2009, *Econometric Theory*) model averaging theory under uncertainty regarding structural breaks to the out-of-sample forecast setting. We propose new predictive model weights based on the leave-one-out cross-validation criterion (CV), as CV is robust to heteroscedasticity which is relevant to many economic applications. We present the theoretical form that the CV penalty term takes in the setting where both parameter instability and conditional heteroscedasticity are present, then derive the sample optimal predictive model weights based on the cross-validation criterion. To support our theoretical results, we provide Monte Carlo evidence showing that CV weights outperform competing methods (i.e. Mallows' weights, equal weights, and Schwarz-Bayesian weights) in several simulation designs. Last, we apply the CV weights to forecasting the U.S. and Taiwan quarterly GDP growth rates out-of-sample, and demonstrate their better empirical performance compared with other methods.

Work in Progress

“Forecast Equity Premium with Structural Breaks”

This paper applies the optimal and robust weighting theory proposed by Pesaran et al. (2013, *J Econometrics*) to forecasting U.S. market equity premium in the presence of structural breaks. These weights are optimal in the sense of minimizing the expected mean-squared forecast error, or robust to the break dates and sizes estimation error. Based on break detection and out-of-sample forecast evaluation results, we conclude that parameter instability cannot fully explain the weak predictive ability of most factors considered in Goyal and Welch's paper (2008, *RFS*).

“Forecast Combination and Stock Returns Predictability”

References

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