

# **YANG K. LU**

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## **EDUCATION**

Ph.D., Economics, Boston University, Boston MA, May 2009 (expected)  
Dissertation Title: *Macroeconomics, Econometrics and Game Theory of Regime Changes*  
Dissertation Committee: Robert G. King, Pierre Perron and Barton Lipman

M.A., Economics, Boston University, Boston, MA, 2006  
B.A., Economics (*with distinction*), Fudan University, Shanghai, China, 2004

## **FIELDS OF INTEREST**

Macroeconomic Theory, Time Series Econometrics, Empirical Macroeconomics and Finance

## **TEACHING EXPERIENCE**

Instructor, Economics Ph.D. Math Camp, Boston University, Summer 2007, 2008  
Teaching Assistant, Mathematical Economics (Ph.D. Level), Boston University, Fall 2005-2008  
Teaching Assistant, Introductory Microeconomics, Boston University, Spring 2005

## **WORK EXPERIENCE**

Research Assistant for Professor Stefan Collignon, The Minda de Gunzburg Center for European Studies, Harvard University, USA, 2006  
Research Assistant for Professor David G. Wall, Center of International Studies, University of Cambridge, UK, 2003

## **FELLOWSHIPS AND AWARDS**

Special Research Fellowship, Boston University, Spring 2007-2009  
Summer Research Grant, Boston University, 2006-2008  
Distinction in Ph.D. Qualifier Exam, Boston University, Spring 2005  
Dean's Fellowship, Boston University, 2004  
First-rate People's Scholarship, Fudan University, 2001-2004  
Excellent Graduate of Shanghai, 2004  
Excellent Leader of Student Union, Fudan University, 2001

## **REFeree EXPERIENCE**

*Journal of Monetary Economics*

## **LANGUAGES**

Fluent in English and Native in Chinese

**COMPUTER SKILLS:** MATLAB, GAUSS, Scientific WorkPlace, Microsoft Office

**PUBLICATIONS/SUBMITTED PAPERS**

- “Managing Expectations” *Journal of Money, Credit and Banking*, forthcoming December 2008 (with Robert G. King and Ernesto Pasten)  
“What Causes the Quick Development of Private Corporations in China: An Incentive Mechanism to Entrepreneur” (in Chinese) (2003) *Contemporary Finance & Economics*, Special Issue: 294-296.

**WORKING PAPERS**

- “Credibility Concerns in Optimal Policy Design” (Job Market Paper), October 2008.  
“Coordinating Expectations and the Information Role of Policy” (with Ernesto Pasten) revised September 2008.  
“Modeling and Forecasting Stock Return Volatility using a Random Level Shift Model” (with Pierre Perron) September 2008.

**WORK IN PROGRESS**

- “Source of Multiple Equilibria in Asset Markets”  
“Coherent Beliefs with Costless Imitative Signaling” (with Robert G. King and Ernesto Pasten)  
“Endogenous Sticky Information, Macroeconomic Volatility and Phillips Curve” (with Ernesto Pasten)  
“Estimating the Frequency of Permanent Shocks” (with Pierre Perron)

**CONFERENCES AND PRESENTATIONS**

- “Managing Expectations”:**  
2008 SED (Boston), 2008 NASAM (Pittsburgh), ECB (2008 by coauthor), 2007 LAMES (Bogota by coauthor), Conference in honor of Ernst Baltensperger (2007 Bern by coauthor)  
**“Coordinating Expectations and the Information Role of Policy”:**  
2008 FEMES (Singapore), 2008 ESEM (Milan by coauthor), ECB (2008 by coauthor), 2007 LACEA (Bogota by coauthor), BC-BU Green Line Macro Meeting (2007 by coauthor)  
**“Modeling and Forecasting Stock Return Volatility using a Random Level Shift Model”:**  
BU Econometrics Seminar (2008), 2008 CESG (Montreal by coauthor)  
**“Endogenous Sticky Information, Macroeconomic Volatility and Phillips Curve”:**  
BU Macro Workshop (2007)  
2<sup>nd</sup> Lindau Meeting with Nobel Laureates in Economic Science, Lindau Germany, 2006

**CITIZENSHIP/VISA: CHINA/F-1 VISA**

**REFERENCES**

**Professor Robert G. King**  
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Boston University  
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**Professor Pierre Perron**  
Department of Economics  
Boston University  
Phone: (617) 353-3026  
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**Professor Barton Lipman**  
Department of Economics  
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October 2008

## **Credibility Concerns in Optimal Policy Design** (Job Market Paper)

I study the optimal behavior of a policymaker in face of public skepticism about his willingness to fulfill an announced tax rate. In a finitely repeated game, the public's belief about the government being 'strong' (patient and always fulfills the announcement, while the 'weak' type may confiscate all the outputs) is Bayesian-updated each period after the tax action. A weak government optimally mimics a strong government's announcements, but not always his actions. As the announcement is incredible sometimes, fulfilling it is also informative. So its optimal design can be an accommodation to imperfect credibility or an active management of reputation, depending crucially on the patience of the weak type. With a highly patient weak type, Markov perfect equilibria involve initial periods of pooling with high taxation and no reputation gain. With an impatient weak type, the equilibria involve initial periods of low, perhaps zero, taxation accompanied by substantial reputation building.

## **Managing Expectations** (with Robert G. King and Ernesto Pasten)

The idea that monetary policy is principally about "managing expectations" has taken hold in central banks around the world. Discussions of expectations management by central bankers, academics and by financial market participants frequently also include the idea that central bank credibility is imperfect. We adapt a familiar macroeconomic model to discuss key concepts in the area of expectations management. Our work also exemplifies a model construction approach to analyzing the dynamics of announcements, actions and credibility which, we think, makes feasible a wide range of future investigations concerning the management of expectations.

## **Coordinating Expectations and the Information Role of Policy** (with Ernesto Pasten)

Economies with coordination failures (generating multiple equilibria), fundamental uncertainty and shocks endogenously fluctuate between "optimistic" and "pessimistic" equilibria with occasional transitions between these states. We explore a new role of policy that can affect both agents' expectations about what others do and their learning about the fundamentals. Hence, a government with no information advantage can still improve coordination, manipulating current and future equilibrium selection. An application to optimal taxation suggests that a stabilization policy should anticipate transitions instead of reacting after them, with small permanent tax cuts to extend "optimism" and severe transitory tax cuts to break "pessimism".

## **Modeling and Forecasting Stock Return Volatility using a Random Level Shift Model**

(with Pierre Perron)

We propose an estimation method for a random level shift model, where the series of interest is a short memory process contaminated by infrequent random level shifts occurring with probability  $\alpha$ . We estimate this random level shift model for volatility series of the S&P 500, AMEX, Dow Jones and NASDAQ stock market return indices. Our point estimates imply few level shifts for all series. But once these are taken into account, there is little evidence of serial correlation in the remaining noise and, hence, no evidence of long memory. Once the estimated shifts are introduced to a standard GARCH model, any evidence of GARCH effects disappears. We also produce rolling out-of-sample forecasts. In most cases, our simple random level shift model clearly outperforms a standard GARCH(1,1) model and, in many cases, it also provides better forecasts than a fractionally integrated GARCH model.