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**Iowa State University**  
Department of Economics  
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## **Curriculum Vitae**

**PYO, DONG-JIN**

### **Personal Data**

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*Citizenship:* South Korea

### **Major Fields of Interests**

Financial Economics, Macroeconomics and Monetary Economics, Labor Economics

### **Education**

<i>Degree</i>	<i>Field</i>	<i>Institution</i>	<i>Year</i>
Ph.D.	Economics	Iowa State University (expected)	May 2015
M.A.	Economics	Korea University	2010
B.A.	Economics	Korea University	2006

### **Publications**

‘The Study on the Model for Economic Impacts and the Status of Offshore Financial Centers’  
(joint with Sung-Jin Kang), *Journal of Offshore Financial Services* 2, 2009, 51-73: in Korean.

## Working Papers

- ‘A Multi-Factor Model of Heterogeneous Traders in a Dynamic Stock Market’, Working Paper No. 14005, Department of Economics, Iowa State University, under review by *Journal of Economic Dynamics & Control*.

*Abstract:* This study develops a computational stock market model in which each trader's buying and selling decisions are endogenously determined by multiple factors: namely, firm profitability, past stock price movement, and imitation of other traders. Each trader can switch from being a buyer to a seller, and vice versa, depending on market conditions. Simulation findings demonstrate that the model can generate excess volatility, a fat-tail property, and the ARCH effect in stock returns. The results also suggest the importance of trader memory length for determining the stability of stock prices in response to dividend shocks.

## Works in Progress

- ‘Animal Spirits, Innovation, and Firm Fundamental’ (joint with Leigh Tesfatsion)

*Abstract:* This study is a computational manifestation of Keynes’s *animal-spirit* metaphor in the determination of fundamentals of a firm’s equity. We develop both theoretical and computational model aiming to investigate a possible role of animal-spirits on economic outcomes in the context of interplay between financial market and firm’s investment. In a static model with endogenous determination of project fundamentals, we show that idiosyncratic non-fundamental shocks could be welfare improving under some parametric conditions. In a dynamic model with *constructively* rational agents, we demonstrate the possibility of one-time animal-spirits shock being self-fulfilling if traders have a strong tendency to conform other traders’ investment behavior.

- ‘When Risk Regulation Meets Heterogeneous Learning Gains’

*Abstract:* This study starts from a simple question on how heterogeneous and time-varying learning gain in risk management practice by financial institutions affects asset market dynamics. Contrasting with the previous studies based on rational expectation equilibrium, I introduce the model with backward-looking agents who consistently try to infer from the path of history for the better forecasting for asset returns. This study provides the computational demonstration of the role of heterogeneous learning gains in the determination of financial market stability under risk regulations.

- ‘Does Shadow Education Cast a Shadow on the Economy?’

*Abstract:* This study develops a simple computational model which aims to explain emergent phenomena associated with shadow education. Featured with human capital externality and residential location choice, this study provides a framework in which household's decision on shadow education under uncertainty, migration patterns, economic growth, and income distribution dynamics could be properly analyzed.

- ‘Does Non-Fundamental Expectation Matter for Fundamentals? Firm-Level Evidence’

## Teaching Experiences

<i>May 2014 - Jul 2014</i>	Stand-alone Instructor, Iowa State University ECON 102 (Principles of Macroeconomics)
<i>Aug 2014 - Current</i>	Instructor, Iowa State University ECON 301 (Intermediate Microeconomics) Lab Session 1
<i>Aug 2014 - Current</i>	Stand-alone Instructor, Iowa State University ECON 101 (Principles of Microeconomics) Lab Session 5
<i>Aug 2010 -Apr 2014</i>	Graduate Teaching Assistant, Iowa State University ECON 313 (Economics of Sports) ECON 458 (Economic Systems for Electric Power Planning) ECON 313 (Economics of Sports) ECON 102 (Principles of Macroeconomics)

## Research Experience

<i>Sep 2011 - Apr 2012</i>	Research Assistant for Prof. Leigh Tesfatsion, Iowa State University
<i>Mar 2008 - Feb 2010</i>	Research Assistant for Prof. Sung-Jin Kang, Korea University

## Professional Experience

<i>Jul 2013 - Aug 2013</i>	GIS (Geographic Information System) Technician, Iowa Department of Transportation, Ames, Iowa
<i>Aug 2006 - Feb 2008</i>	Associate, Gangnam Corporate Finance Division, Woori Bank, Seoul
<i>Jan 2005- Mar 2005</i>	Internship, Product Development Team, Samsung Life Insurance Company, Seoul

## Conference Presentations

WEAI (Western Economic Association International) Annual Meeting, Denver, Colorado, U.S., June 27- July 1, 2014.

SABE (Society for Advancement of Behavioral Economics) 2014 Annual Conference, Lake Tahoe, Nevada, U.S., July 21, 2014.

INFORMS (Institute for Operations Research and the Management Sciences) Annual Meeting, San Francisco, California, U.S., November 9-12, 2014.

## Honors and Awards

<i>Apr 2013</i>	Travel Scholarship (\$3000), Institute for New Economic Thinking
<i>Aug 2012- Current</i>	Graduate Assistantship, Iowa State University
<i>Sep 2008- Feb 2010</i>	BK21 (Brain Korea 21) Scholarship, Korea University
<i>Mar 2008-Feb 2010</i>	Research Assistantship, Korea University
<i>Nov 2007</i>	Distinguished Staff Award, Woori Bank
<i>Mar 2004</i>	Army Commendation Medal, 8 <sup>th</sup> U.S. Army, United States Forces Korea
<i>Sep 2003</i>	Army Achievement Medal, 8 <sup>th</sup> U.S. Army, United States Forces Korea

## Miscellaneous

Invited as *Young Scholar* to Institute for New Economic Thinking (INET) Annual Plenary Conference, Hong Kong, April 2-6, 2013

Iowa State University Oral English Certification Test (OECT): Fully certified (Level 1)

Information Technology Workshop Coordinator, Department of Economics, Iowa State University

## Computer Skills

Java, Matlab, Stata, R

## Languages

English (fluent), Korean (native)

## References

Professor Leigh Tesfatsion (Major advisor)	(515) 294-0138 <a href="mailto:tesfatsi@iastate.edu">tesfatsi@iastate.edu</a>	Department of Economics Iowa State University 375 Heady Hall Ames. IA 50011. USA
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