

# Does Human Capital Risk Affect Individuals' Portfolio Choices?

February 2016

Jun Kyung Auh, McDonough School of Business, Georgetown University

Hyunseob Kim, Samuel Curtis Johnson Gradual School of Management, Cornell University

In the proposed project, we seek to understand the empirical link between the riskiness of individuals' human capital and that of their portfolio of tradable assets. Despite a clear theoretical relation between these two types of risk that individuals face (e.g., Viceira, 2001), there is a lack of empirical work testing their interaction. This may be due to the challenge that "human capital" (and its risk in particular) is not easily observable. To circumvent this challenge, we use local labor market integration as a source of exogenous variation in human capital risk. When a local labor market is integrated with other labor markets, individuals with given human capital (or skill sets) would experience reduction in their perceived human capital risk because the potential employers requiring similar skill sets would work as a partial insurance against unemployment. To capture such variation, we exploit plausibly exogenous variation in travel time to work (i.e., commuting time), which essentially expands or reduces the size of the relevant local labor market (Moretti, 2013), due to construction (or destruction) of transportation infrastructures. Using this empirical setting, we seek to test the following key prediction: Expanding local labor market reduces human capital risk related to individuals' jobs (e.g., being unemployed or moving to a job that pays lower wages), which in turn would allow them to take more risk in non-human (i.e., tradable) assets, such as savings and investment portfolios.

We will employ a unique identification strategy combined with a dataset of individual portfolio choices. First, we measure changes in commuting time between two "cities" in the U.S. (in practice, cities, towns, or counties) using time-series variation in ground transportation infrastructures. In particular, the variation may come from construction or closure of roads (e.g., inter-state highways/beltways, state/county highways), bridges, and tunnels. Electronic versions of historical maps with a built-in GPS engine allow us to measure the time-series variation of travel times, reflecting changes in infrastructure.<sup>1</sup> The identification challenge is that any latent variables (such as local economic conditions) may drive both infrastructure changes and individual's risk taking behavior. We, therefore, define the "treated" cities as those experiencing a substantial reduction (or perhaps increase) in travel time to other cities in the area, due to infrastructure changes that are unrelated to the treated cities (e.g., future economic prospects of the cities). For example, if there is a new highway construction that connects two "major" cities, we define our treated cities as those on the new road (excluding the major cities by which the construction was originally motivated) and controlled cities as those also geographically located between the two now-better-connected major cities but are not affected by the construction (in terms of travel time).

Second, we derive a proprietary dataset of individuals' financial asset allocations from their 401(k) portfolios. Specifically, we are in the process of negotiating with one of the largest 401(k) assets sponsors in

---

<sup>1</sup> We construct the panel data on U.S. maps from Microsoft's Map Point® from 2000 to 2013 which are available in approximately every other year.

the U.S. regarding our access to the data. Upon successful negotiation, the data provide us rich individual-level information such as identifier(s), monthly or quarterly account balance, composition of investment asset, gender, overall reported wealth, education, and the location of home and employment. By using information on the treated and control cities from the first step, we will be able to construct the panel data on individuals' retirement assets choices in conjunction with the dynamics of their human capital risk.

The results of this project will have at least three implications for the literature in labor and financial economics, as well as for policy discussions. First, the results will highlight a key benefit of local "agglomeration" in terms of improved capacity for individuals' risk-taking. While there is existing evidence that large local labor markets (and local economies in general) could lead to increases in productivity (Greenstone, Hornbeck, and Moretti, 2010), wages (Glaeser and Maré, 2001) and innovative output (Moretti, 2011), there is little evidence for increased risk taking by individuals in those markets.<sup>2</sup> Second, the results will add to the asset pricing literature on portfolio choices and return predictability by providing micro evidence that investors consider human capital risk in their aggregated wealth (Lettau and Ludvigson, 2001) and in particular, labor income dynamics for their portfolio holdings (Ameriks and Zeldes, 2004; Benzoni, Collin-Dufresne, and Goldstein, 2007). Third, the results will shed light on the role of transportation infrastructure for workers' commuting patterns, which in turn affect their asset allocations.<sup>3</sup>

## References

- Ameriks, John, and Stephen P. Zeldes, 2004, How Do Household Portfolio Shares Vary with Age? Working paper, Columbia University.
- Baum-Snow, Nathaniel, 2007, Did Highways Cause Suburbanization? *Quarterly Journal of Economics* 112, 775-805.
- Benzoni, Luca, Pierre Collin-Dufresne, and Robert S. Goldstein, 2007, Portfolio Choice over the Life-Cycle when the Stock and Labor Markets Are Cointegrated, *Journal of Finance* 62, 2123-2168.
- Glaeser, Edward L. and David C. Maré, 2001, Cities and Skills, *Journal of Labor Economics* 19, 316-342.
- Greenstone, Michael, Richard Hornbeck, and Enrico Moretti, 2010, Identifying Agglomeration Spillovers: Evidence from Winners and Losers of Large Plant Openings, *Journal of Political Economy* 118, 536-598.
- Kim, Hyunseob, 2015, How Does Labor Market Size Affect Firm Capital Structure? Evidence from Large Plant Openings, Working paper, Cornell University.
- Lettau, Martin and Sydney Ludvigson, 2001, Consumption, Aggregate Wealth, and Expected Stock Returns, *Journal of Finance* 56, 815-849.
- Michaels, Guy, 2008, The Effect of Trade on the Demand for Skill: Evidence from the Interstate Highway System, *Review of Economics and Statistics* 90, 683-701.
- Moretti, Enrico, 2011, Local Labor Markets, *Handbook of Labor Economics*, O. Ashenfelter and D. Card Eds., Elsevier, North Holland.
- Moretti, Enrico, 2013, *The New Geography of Jobs*, Mariner Books.
- Viceira, Luis M., 2001, Optimal Portfolio Choice for Long-Horizon Investors with Nontradable Labor Income, *Journal of Finance* 56, 433-470.

---

<sup>2</sup> Kim (2015) shows that an expansion of local labor market leads firms to take more (financial) risk by increasing debt usage in their capital structure.

<sup>3</sup> See Baum-Snow (2007) and Michaels (2008) for studies examining the effects of transportation infrastructure on suburbanization of cities and local economic activities.

## **Appendix - Itemized budget (\$12,800 in total)**

- Electronic map software (2000, 2002, 2004, 2006, 2008, 2010, and 2013 editions): \$2,800 (i.e., \$400 per edition on average)
- Research assistants:
  - Student(s): \$2,000 (for basic data work)
  - Professional software developer: \$5,000 (for building up customized map applications)
- In-person meeting(s) with the 401(k) provider (who is based in the Philadelphia area): \$3,000 (i.e., \$1,500 for each author)

# Jun Kyung Auh

McDonough School of Business  
Georgetown University  
37th and O Streets, NW  
Washington, DC 20057

Phone: +1-202-687-2783  
Fax: +1-202-687-4031  
Email: [jka43@georgetown.edu](mailto:jka43@georgetown.edu)  
Web: [faculty.georgetown.edu/jka43](http://faculty.georgetown.edu/jka43)

---

## Current Appointment

**McDonough School of Business, Georgetown University**, Washington, DC 2014-Present  
Assistant Professor of Finance, Finance Division

## Education

Ph.D. in Finance and Economics, GSB, Columbia University, New York, NY 2014  
M.Phil. in Finance and Economics, GSB, Columbia University, New York, NY 2011  
M.A. in Mathematics, Columbia University, New York, NY 2009  
B.B.A. Korea University, Seoul, Korea 2005

## Research Interests

Corporate Credit and Corporate Bond  
Debt Contracts  
Bankruptcy Risk  
Credit Ratings / Credit Rating Agencies  
Financial Intermediation

## Previous Positions

**Merrill Lynch**, Singapore Summer 2010  
External Consultant, Commodity Derivatives Trading, GCIP  
**Deutsche Bank AG**, New York / London 2007-2009  
Vice President, Exotic Option Trading, Global Market  
**Deutsche Bank AG**, London / Hong Kong 2005-2007  
Analyst/ Associate, Quantitative Product Engineering, Global Market

## Teaching Experiences

(Undergraduate) Advanced Financial Management Fall 2014 & 2015  
(PhD) Finance Theory I, Teaching Assistant to Professor Larry Glosten Spring 2014  
(MBA) Macroeconomics, Teaching Assistant to Professor John Donaldson Summer 2013  
(MBA) Debt Market, Teaching Assistant to Professor Charles Jones Spring 2013  
(EMBA/MBA) Debt Market, Teaching Assistant to Professor Suresh Sundaresan Spring & Fall 2012  
(MBA) Macroeconomics, Teaching Assistant to Professor John Donaldson Fall 2011

## Research Papers

### **"Procyclical Credit Rating Policy"**

*Winner*, Cubist Systematic Strategies Ph.D. Candidate Award for Outstanding Research at WFA 2014

*Finalist*, Olin Business School Best Finance Ph.D. Dissertation Award 2013

*Winner*, KAFA Best Doctoral Dissertation Award 2013

**Abstract:** This paper studies whether credit rating agencies applied consistent rating standards to U.S. corporate bonds over the expansion and recession periods between 2002 and 2011. Based on estimates of issuing firms' credit quality from a structural model, I find that rating standards are in fact procyclical: ratings are stricter during an economic downturn than an expansion. As a result, firms receive overly pessimistic ratings in a recession, relative to during an expansion. I further show that a procyclical rating policy amplifies the variation in corporate credit spreads, accounting for, on average, 11 percent of the increase in spreads during a recession. In the cross section, firms with a higher rollover rate of debt, fewer alternative channels to convey their credit quality to the market, and firms that are more sensitive business to economic cycles are more affected by the procyclical rating policy.

**Grant:** W. Edward Deming Doctoral Fellowship

**Presentation:** Financial Friction Colloquium at Columbia University (Department of Economics), Finance Lunch Seminar at Columbia GSB, Olin Business School Corporate Finance Conference (Ph.D. poster session), Georgetown University, University of Rochester, University of Washington, Boston University, University of Hong Kong, Nanyang Technological University, Federal Reserve Board, SKK GSB, Midwest Finance Association 2014, Deming Center Seminar at Columbia University 2014, SFS Finance Cavalcade 2014, Western Finance Association 2014

### **"Repo Runs and the Bankruptcy Code",**

with Suresh Sundaresan

**Abstract:** When the bankruptcy code protects the creditors' rights with no impairments to secured creditors, issuance of debt with exemption from automatic stay adds no value. When the Code admits violations of absolute priority rules or results in collateral impairments to secured creditors, the liability structure includes short-term debt, with safe harbor protection when the pledged collateral satisfies a minimum liquidity threshold. Safe harbor rights lead firms to issue more short-term debt, less long-term debt, and increases the long-term spreads. Using the 1984 reform of the Code, we offer empirical evidence consistent with the predictions of the model.

**Presentation:** Boston University, University of Washington, Harvard Law School, American University, SFS Finance Cavalcade 2015, Western Finance Association 2015, European Finance Association 2015

### **"The Role of Margin and Spread in Secured Lending: Evidence from the Bilateral Repo Market",**

with Mattia Landoni

*Winner*, McGraw-Hill Distinguished Paper Award

**Abstract:** We study bilateral repurchase agreements in a novel database with one borrower and many lenders. Margins and spreads increase together with lender risk as collateral quality declines. We observe different margins and spreads for contemporaneous contracts on identical collateral, with one point of spread substituting for nine points of margin. Lender characteristics drive substitution: we observe lower margins and higher spreads with (i) less creditworthy lenders, and (ii) lenders with more funding from money market funds. As borrower default risk increases, margins (but not spreads) rise faster when the collateral is more opaque, suggesting a special role for margin.

**Presentation:** Federal Reserve Board, University of Colorado Boulder, Lone Star Finance Conference, University of Washington Applied Econometrics Conference 2015, Singapore Management University, Hong Kong University, Peking University, ECB Money market workshop 2015

## Work in Progress

“Immediacy Trade-Off in Corporate Bond ETF”, with Charles Jones and Mattia Landoni  
“The Effect of Creditor Concentration”, with Jongsub Lee

## Presentations and Invited Conferences

University of Hong Kong, Singapore Management University, Peking University	Dec 2015
University of Colorado, Boulder CO	Oct 2015
European Finance Association Meeting, Vienna Austria	Aug 2015
Western Finance Association Meeting, Seattle WA	Jun 2015
Federal Reserve Board, Washington DC	May 2015
SFS Finance Cavalcade, Atlanta GA	May 2015
University of Washington Applied Economics Workshop	May 2015
American University Finance Seminar	Feb 2015
China International Conference in Finance, Chengdu China	Jul 2014
Western Finance Association Meeting, Monterey CA	Jun 2014
SFS Finance Cavalcade, Washington DC	May 2014
KAIST Finance Seminar, Seoul Korea	Mar 2014
Midwest Finance Association Meeting, Orlando	Mar 2014
University of Hong Kong, Nanyang Technological University, Federal Reserve Board, SKK GSB	Feb 2014
Georgetown University, University of Rochester, University of Washington, Boston University	Jan 2014
Olin Business School Corporate Finance Conference (Ph.D. poster session)	Nov 2013
Finance Lunch Seminar, Columbia Business School	Oct 2013
Financial Friction Colloquium, Department of Economics, Columbia University	Oct 2013
Econometric Society Australasian Meeting, Sydney	Jul 2013
LBS Trans-Atlantic Doctoral Conference, London	May 2013

## Fellowship, Awards and Grants

McGraw-Hill Distinguished Paper Award	2015
Cubist Systematic Strategies Ph.D. Candidate Award for Outstanding Research, <i>Winner</i>	2014
Olin Business School Best Finance Ph.D. Dissertation Award, <i>Finalist</i>	2013
KAFA Best Doctoral Dissertation Award, <i>Winner</i>	2013
W. Edwards Deming Doctoral Fellowship	2013
Chazen Institute of International Business Doctoral Research Grant	2013
LBS Trans-Atlantic Doctoral Conference Travel Grant	2013
KPMG Global Valuations Institute Research Grant	2011
Columbia Business School Doctoral Fellowship	2009-2014
The Bank of Korea Monetary Policy Competition, <i>First place winner</i>	2003

## Professional Services

Program Committee for Colorado Finance Summit 2015  
Program Committee for European Finance Association 2015  
Ad-hoc reviewer for Journal of Banking and Finance, Journal of Corporate Finance, Journal of Financial and Quantitative Analysis

## Committee and References

### **Professor Wei Jiang**

Finance and Economics, Columbia GSB

Phone: (212) 851-9002

E-mail: [wj2006@columbia.edu](mailto:wj2006@columbia.edu)

### **Professor Suresh Sundaresan**

Finance and Economics, Columbia GSB

Phone: (212) 854-4423

E-mail: [ms122@columbia.edu](mailto:ms122@columbia.edu)

### **Professor Patrick Bolton**

Finance and Economics, Columbia GSB

Department of Economics, Columbia University

Phone: (212) 854-9245

E-mail: [pb2208@columbia.edu](mailto:pb2208@columbia.edu)

### **Professor Martin Oehmke**

Finance and Economics, Columbia GSB

Phone: (212) 851-1804

E-mail: [moehmke@columbia.edu](mailto:moehmke@columbia.edu)

## Others

CPA Certificate (qualified in Delaware, not registered)

U.S. Permanent Resident

# HYUNSEOB KIM

## Curriculum Vitae

Samuel Curtis Johnson Graduate School of Management  
Cornell University  
366 Sage Hall  
114 East Avenue  
Ithaca, NY 14853

Phone: 607-255-8335

Fax: 607-254-4590

Email: [hk722@cornell.edu](mailto:hk722@cornell.edu)

Web: <http://blogs.cornell.edu/hyunseobkim>

### ACADEMIC APPOINTMENT

2012 - Samuel Curtis Johnson Graduate School of Management, Cornell University, Assistant Professor of Finance

### EDUCATION

2012 Fuqua School of Business, Duke University, Ph.D. in Business Administration (Finance)

Committee: John Graham (Chair), Peter Arcidiacono, Alon Brav, Manju Puri, S. Viswanathan

2008 Harvard University, A.M. in Statistics

2002 Seoul National University, B.B.A., summa cum laude

2000 Stern School of Business, New York University, Exchange Student

### RESEARCH INTERESTS

Empirical Corporate Finance, Labor Economics, Capital Reallocation and Investment, Corporate Governance

### PUBLISHED AND ACCEPTED PAPERS

[1] "Recent Advances in Research on Hedge Fund Activism: Value Creation and Identification" (with Alon Brav and Wei Jiang), Annual Review of Financial Economics 7, December 2015, 579-595.



- [2] "The Real Effects of Hedge Fund Activism: Productivity, Asset Allocation, and Labor Outcomes," (with Alon Brav and Wei Jiang) - Review of Financial Studies 28, October 2015, 2723-2769; also published as NBER working paper 17517.
- Lead article; Editor's choice
- [3] "The Effects of the Length of the Tax-Loss Carryback Period on Tax Receipts and Corporate Marginal Tax Rates," (with John Graham), National Tax Journal, 62, September 2009, 413-427; also published as NBER working paper 15177.
- [4] "Hedge Fund Activism: A Review," (with Alon Brav and Wei Jiang), Foundations and Trends in Finance, 4:3, 2009, 185-246.

## WORKING PAPERS

- [5] "The Asset Redeployability Channel: How Uncertainty Affects Corporate Investment," 2014 (with Howard Kung) - Revise and Resubmit, Review of Financial Studies.
- Awarded Best Paper in Corporate Finance Award, SFS Finance Cavalcade 2014
- [6] "How Does Labor Market Size Affect Firm Capital Structure? Evidence from Large Plant Openings," 2015 – submitted.
- Awarded SAC Capital PhD Candidate Award for Outstanding Research, WFA 2012
- [7] "Employee Costs of Corporate Bankruptcy," 2016 (with John Graham, Si Li, and Jiaping Qiu) – to be submitted, American Economic Review.
- Awarded FSA ULaval Best Paper Award on Corporate Finance, NFA 2013
  - Awarded Best Paper Award in Corporate Finance, FMA Asia 2013
- [8] "CEO Power, Bargaining with the CEO, and the Board of Directors," 2016 (with John Graham and Mark Leary).
- [9] "Why Did Rent Sharing Vanish in the United States?," 2015 (with Efraim Benmelech and Nittai Bergman).

[10] "Simulating Corporate Marginal Income Tax Rates and Implications for Corporate Debt Policy," 2012 (with John Graham).

## **WORKS-IN-PROGRESS**

[11] "Efficiency Wages: Local Unemployment and Labor Productivity," 2015 (with Efraim Benmelech and Nittai Bergman).

[12] "Financial Distress, Asset Redeployability and Reallocations: Evidence from Ship-level Data," 2015 (with Murillo Campello).

[13] "Flexible Work Hours, Worker Selection, and Labor Productivity: Evidence from Field Experiments in Ethiopia," 2015 (with Hyuncheol Bryant Kim).

[14] "Higher Moments of Financial Leverage," 2015 (with Howard Kung and Ercos Valdivieso).

[15] "Are Dual-class Firms Riskier?," 2015 (with Cindy Lu and Roni Michaely).

## **BOOK CHAPTERS**

[1] "Hedge Fund Activism," (with Alon Brav and Wei Jiang), Chapter 7 in Research Handbook on Hedge Funds, Private Equity and Alternative Investments, Edward Elgar Publishing Ltd., 2012.

## **INVITED SEMINARS AND CONFERENCE PRESENTATIONS**

2015/16 (Including scheduled): Cornell (Finance and Labor Economics); Maryland Junior Corporate Finance Conference; Census Bureau CES; Society of Labor Economists (SOLE) Annual Meetings; IDC

2014/15: Calgary Haskayne; CUNY Baruch; Rutgers Business School; FIRS Conference; Society of Labor Economists (SOLE) Annual Meetings; EFA; CSEF-EIEF-SITE Conference on Finance and Labor

2013/14: CICF; IDC Summer Finance Conference; EFA; SAIF; Seoul National University; Pennsylvania Wharton; AFA; Michigan Ross; UBC Sauder; Cornell Johnson; SFS Finance Cavalcade

2012/13: Census Bureau RDC Annual Conference; Washington University in St. Louis Annual Conference on Corporate Finance; Cornell Johnson (x2); SFS Finance Cavalcade; Stanford SITE (Macroeconomics of Uncertainty and Volatility)

2011/12: Duke Fuqua; Triangle Census RDC Conference; Cornell Johnson; London Business School; McGill DeSautels; Rice Jones; SMU Cox; Houston Bauer; UIUC College of Business; UNC-CH Kenan-Flagler; Duke Economics; SFS Finance Cavalcade; FIRS Conference; WFA (x2)

#### **INVITED CONFERENCE DISCUSSIONS AND SESSION CHAIR**

- Dore, T. and Zarutskie, R., "Leverage, Labor Market Size, and Employee Pay," SFS Cavalcade, 2016.
- Tate, G. and Yang, L., "The Human Factor in Acquisitions: Cross-industry Labor Mobility and Corporate Diversification," Washington University in St. Louis Annual Conference on Corporate Finance, 2015.
- Ouimet, P. and Simintzi, E., "Wages and Firm Performance: Evidence from the 2008 Financial Crisis," SFS Cavalcade, 2015.
- Serfling, M., "Labor Adjustment Costs and Capital Structure Decisions," AFA, 2014.
- Kumar, P. and Hadiye, A., "The Product Market Effects of Hedge Fund Activism," Washington University in St. Louis Annual Conference on Corporate Finance, 2013.
- Kotter, J., "Technological Change, Job Tasks, and CEO Pay," FMA, 2013 (+ session chair for doctoral consortium).
- Knüpfer, S., Rantapuska, E., and Sarvimäki, M., "Labor Market Experiences and Portfolio Choice: Evidence from the Finnish Great Depression," CICF, 2013.
- Li, Z. and Wang, L., "Executive Compensation Incentives Contingent on Long-term Accounting Performance," CICF, 2013.
- Brown, J. and Matsa, D., "Boarding a Sinking Ship? An Investigation of Job Applications to Distressed Firms," WFA, 2013.

- Giroud, X. and Mueller, H., "Capital and Labor Reallocation Inside Firms," UNC Roundtable for Junior Faculty in Finance, 2012.

### **CONFERENCE PROGRAM COMMITTEES**

- 2016 Financial Intermediation Research Society Conference
- 2016 Midwest Finance Association Annual Meetings
- 2015 - 2016 European Finance Association Annual Meetings
- 2013 - 2016 Western Finance Association Annual Meetings
- 2013 - 2016 Annual Rothschild Caesarea Center Conference, IDC
- 2013 - 2015 Annual Conference on Corporate Finance, Washington University in St. Louis

### **REFERRING SERVICE**

Journal of Corporate Finance; Journal of Finance; Journal of Financial Economics; Journal of Financial Intermediation; Management Science; Review of Finance; Review of Financial Studies

### **TEACHING EXPERIENCE**

- 2015 - Cornell Johnson, Valuations (Cornell Tech MBA @ NYC)
- 2014 - Cornell Johnson, Evaluating Capital Investment Projects (MBA)
- 2013 - Cornell Johnson, Valuation Principles (MBA)
- 2010 - 2011 Duke Fuqua, Guest lecturer, Empirical Corporate Finance (PhD)

### **SCHOOL SERVICE**

- 2015 – 2016 Small Grant Reviewer, Institute of Social Science
- 2015 Finance Faculty Search Committee, Johnson School of Management
- 2015 Guest Speaker (Valuation), Cornell Johnson Investment Management Club
- 2014 Organizer, Corporate Finance Conference, Johnson School of Management
- 2012 - 2014 Co-organizer, Finance Workshop, Johnson School of Management
- 2012 - 2015 Finance Judge at Integrative Case Competition, Johnson School of Management

## **HONORS AND AWARDS**

- 2015 Smith Family Business Research Pioneer Fund, Johnson School of Management (\$10,000, with Hyuncheol Bryant Kim)
- 2014 Best Paper in Corporate Finance Award, SFS Finance Cavalcade
- 2013 FSA ULaval Best Paper Award on Corporate Finance, NFA
- 2013 Best Paper Award in Corporate Finance, FMA Asia
- 2013 Small Grant Award, Cornell University Institute of Social Science (\$6,000)
- 2012 SAC Capital PhD Candidate Award for Outstanding Research, WFA
- 2010 AFA Student Travel Award
- 2007 - 2012 Duke Graduate School Scholarship
- 2005 - 2011 Kwanjeong Fellowship for Graduate Studies
- 2000 - 2001 University Presidential Scholarship, Seoul National University (Top 2% in Class)

## **STUDENTS SUPERVISED (PLACEMENT)**

- Gaurav Kankanhalli, Finance PhD, committee member (ongoing)
- Dawoon Kim, Finance PhD, committee member (ongoing)
- Youngwha Seok, Applied Economics PhD, committee member (ongoing)
- Hyungjin Choi, Economics BA 2016, Honors Thesis Adviser 2016 (expected)
- Youngjun Song, Economics BA 2014, Letter writer (Duke Finance PhD program)

## **RESEARCH AND PROFESSIONAL EXPERIENCE**

- 2006-2007 Research Assistant, Professor Malcolm Baker, Harvard Business School
- 2005 Equity Analyst, Cosmo Asset Management Co., Seoul, South Korea
- 2002 - 2005 Computer Programmer, Cosmo FN, Seoul, South Korea

## **OTHER AFFILIATION**

- 2015 - Labor and Finance Group (founding member)

## **MISCELLANEOUS**

Citizenship South Korea (U.S. Permanent Resident)

February 2016, Ithaca, NY