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# HAMED GHODDUSI

Department of Finance

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**Current Position:** Assistant Professor of Finance, 2020-, Orfalea College of Business, California Polytechnic State University

**Research Interests** Resource and Energy Economics, Urban and Real Estate, Financial Markets and Institutions, Risk Management

## Employment History

- Assistant Professor of Finance, School of Business, Stevens Institute of Technology, 2013-2020
- Postdoctoral Associate, 2011-2013, Massachusetts Institute of Technology (MIT)

## Education

- Ph.D. in Finance, 2007-2011, Vienna Graduate School of Finance (VGSF)
- Visiting Ph.D. Student, 2009-2010, UT Austin, School of Business
- Graduate Diploma in Economics, 2005-2007, Institute for Advanced Studies (IHS)
- M.B.A./Management Science, 2000- 2003, Sharif University of Technology
- B.Eng. in Industrial Engineering, 1995- 2000, Sharif University of Technology

## Peer-Reviewed Journal Publications

1. Ghoddusi, H., Wirl, F., Forthcoming, “A Risk-Hedging View to Refinery Downstream Investment”, *The Energy Journal*
2. Ghoddusi, H., Afkhami, M., 2019, “Valuation of Mortgage Interest Deductibility: An Option Pricing Approach”, *Journal of Economics Dynamics and Control*, Volume 103, 102-122
3. Ghoddusi, H., Creamer, G., Rafizadeh, N., 2019, “Machine Learning in Energy Economics and Finance: A Review”, *Energy Economics*, Volume 81, 709-272

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4. Shantia, A., Aflaki, S., Ghoddusi, H., 2019, "Input Price Risk: Technological Improvement or Financial Hedging?", *Production and Operations Management*, Volume 28, 2044-2067
  5. Ghoddusi, H., Rafizadeh, N., Morovati, M., 2019, "Foreign Exchange Shocks and Gasoline Consumption", 2019, *Energy Economics*
  6. Ghoddusi, H., Rafizadeh, N., Rahmati, MH., 2018, "Price Elasticity of Gasoline Smuggling", *Energy Economics*, Volume 71, 171-185
  7. Ghoddusi H., Nili., M, and Rastad., M, 2017, "On Quota Violations of OPEC Members", *Energy Economics*, Volume 68, 410-422
  8. Ghoddusi H., Roy M., 2017, "Supply Elasticity Matters for the Rebound Effect and Its Policy Implications", *Energy Economics*, Volume 67, 111-120
  9. Afkhami, M., Cormack, L., Ghoddusi H., 2017, "The Most Predictive Energy Search Terms", *Energy Economics*, Volume 67, 17-27
  10. Ghoddusi, H., Emamzadeh Fard, S., 2017, "Optimal Hedging in the US Natural Gas Market: The Effect of Maturity and Cointegration", *Energy Economics*, Volume 63, 92-105.
  11. Ghoddusi, H., 2017, "Blending Under Uncertainty: Real Options Analysis of Ethanol Plants and Biofuels Mandates", *Energy Economics*, Volume 61, 110-120.
  12. Ghoddusi, H. and Fahim, A., 2016, "Volatility Can be Detrimental to Option Values", *Economics Letters*, Volume 149, 5-9.
  13. Ghoddusi, H., 2016, "Integration of Physical and Futures Prices in the US Natural Gas Market.", *Energy Economics*, Volume 56, 229-238.
  14. Ekholm, T., Ghoddusi, H., Krey, V., & Riahi, K., 2013, "The Effect of Financial Constraints on Energy-Climate Scenarios", *Energy Policy*, 59, 562-572.
  15. Ghoddusi, H., 2010, "Dynamic Investment in Extraction Capacity of Exhaustible Resources", *Scottish Journal of Political Economy* , 57 (3), 359-373.

#### **Working Papers and Papers Under Review**

1. Ghoddusi, H., Titman, S., Tompaidis, S., 2019, "Hedging Price Risks for Commodity Processors", Revise and Resubmit, *Journal of Financial and Quantitative Analysis*
2. Ghoddusi, H., Siyahhan, B., 2019, "Optimal Investment on Human Capital under Migration Uncertainty", Second Round, *Review of International Economics*

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3. Ghoddusi, H., Rodvilov A., Roy, M., “Income Elasticity of Demand versus Consumption: Implications for Energy Policy Analysis”, Second Rounds, *Energy Economics*
  4. Afkhami, M., Ghoddusi, H., Rafizadeh, N., “Google Search Explains Your Gasoline Consumption!”, Second Rounds, *Energy Economics*
  5. Ghoddusi, H., Afkhami, M., Pavesi, F., Bassetti, T., 2018, “Virtual Water Trade: The Role of Capital Scarcity”, Under Review
  6. Ghoddusi, H., Dangl, T., 2019, “The Hedging Value of Low-Quality Capital in Competitive Industries”
  7. Ghoddusi, H., Siyahhan, B., and Rodvilov A., 2019, “Investment on Two-Sided Markets under Technological Uncertainty”
  8. Ghoddusi, H., Afkhami, M., 2018, “Pricing Renewable Identification Numbers (RINS) Under Uncertainty”

### **Works in Progress**

1. Ghoddusi, H., ”Real Estate Sector and Long-Run Risk: The Role of Supply Elasticity”
2. Ghoddusi, H., ”Market for Transferable Development Rights under Uncertainty”
3. Ghoddusi, H., Dashmiz, S., “Volatility: Good, Bad, Ugly”
4. Ghoddusi, H., Aflaki, S., Shantia, A., “Technology Improvement on a Supply Chain”
5. Ghoddusi, H., Hogpsiel V., Hegnes, L., “Renewable Energy Investment with Endogenous Policy Risks”

### **Book Chapters**

1. Ghoddusi, H., 2019, “Risk Management in Commodity Processing Firms”, Foundations and Trends in Technology, Information and Operations Management: Vol. 12: No. 2-3, pp 219-239
2. Rahmandad, H, Jalali, M, Ghoddusi, H, “Using the Simulated Method of Moments (SMM) to Estimate Dynamic Models”, Analytical Methods for Dynamic Systems Modelers, MIT Press, 2015
3. Ghoddusi, Hamed, 2011, “Kandelous Agro-Industry Group, Case Study of a Pro-Poor Business Model”, UNDP Growing Inclusive Markets (GIM)

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## Teaching Experience

- Corporate Finance (Undergraduate)
  - Fall 2013, Fall 2014, Fall 2015, Fall 2016, Fall 2017 (8 sections in total)
  - Average instructor evaluation: 3.75 / 4.00
- Econometrics for MFin Program (Graduate)
  - Fall 2017, Fall 2018, Fall 2019
  - Average instructor evaluation: 3.75 / 4.00
- Financial Econometrics (Graduate)
  - Spring 2018, Spring 2019
  - Average instructor evaluation: 3.76 / 4.00
- Microeconomic Theory (Ph.D.)
  - Fall 2016, Fall 2018, Fall 2019
  - Average instructor evaluation: 4.00 / 4.00
- Quantitative Finance Senior Design (Undergraduate)
  - Spring/Fall 2014, 2015, 2016, 2017, 2018, 2019
  - Average instructor evaluation: 3.60 / 4.00

## Selected Conference and Seminar Presentations

- 2020: Carleton University, Cal Poly, 12th Digital Economy Conference (cancelled), 6th Supply Chain Finance Workshop (cancelled), International Industrial Organization Conference (cancelled),
- 2019: Oklahoma University Energy and Commodities Finance Research Conference, International Real Options Conference, Commodity and Energy Markets Association Annual Meeting, ESSEC Business School, Ecole Mines and Telecom, International Symposium on Environment and Energy Finance, Supply Chain Finance Workshop, Sixth Conference on Iran's Economy, Florida State University, Economic Research Forum (ERF)
- 2018: Norwegian University of Science and Technology (NTNU), Rutgers Business School (Newark), Rutgers New Brunswick (Resource Economics), Annual Real Options Conference,

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Vienna University, Vienna University of Economics and Business, International Conference of Industrial Organization, Viennese Workshop on Optimal Control and Dynamic Games, World Congress on Environmental and Resource Economics

- 2017: International Institute for Applied Systems Analysis (IIASA), Vienna University (Business Department), Institute for Mines and Telecom Management (France), Vienna Institute for International Economics (WIIW), Baruch School of Business (Real Estate), Rutgers Newark (Economics), University Quebec at Montreal (Economics), California Poly Technique (Economics and Finance), Institute for Research in Planning and Management
- 2016: Rutgers Newark, Institute for Research in Planning and Management, Texas State, Vienna University of Economics and Business
- 2015: UC Davis, Rutgers New Brunswick, HEC Paris, France, International Institute for Applied Systems Analysis (IIASA)
- 2014: Vienna University of Agriculture Science
- 2012: University of Montreal, University of Calgary, Stevens Institute of Technology
- 2011: Humboldt University Berlin, Oxford Institute for Energy Studies, HEC Montreal, GERAD Montreal
- 2010: Colorado School of Mines, Ohio State University

#### **Ph.D. Thesis Supervision**

- Sahar Emamzadeh Fard, Thesis Title: “Essays on the Financial Economics of Commodity Markets”, Graduation date: May 2019, First Placement: JP Morgan
- Mohammad Afkhami, Thesis Title: “Essays on Optimal Dynamic Decisions”, Aug 2020

#### **Ph.D. Dissertation Committee Member**

1. Patrick Houlihan, 2016, Financial Engineering, Committee Member [Main Advisor: Prof German Creamer]
2. Chenjie Shao, 2019, Financial Engineering, Committee Member [Main Advisor: Prof Khaldoun Khashanah]
3. Jiacheng Fan, Financial Engineering, Aug 2020, Committee Member [Main Advisor: Prof Zhenyu Cui]

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## **Masters Thesis Advising**

1. Falgoun Paatil, Financial Engineering, Title: “Applied Energy Finance Models”, expected completion: Spring 2020
2. Jassimran Oberoi, Sustainability Management, Title: “Multicriteria Stakeholder Decision Analysis of Thermal, Electrical, and Battery Storage Systems”, 2019

**Undergraduate Thesis Advising** More than 15 Senior Design (SD) thesis on topics related to commodity markets, real estate, and energy finance.

**Reviewer for Scientific Journals:** Management Science, Production and Operations Management, Nature Energy, Review of Finance, Scandinavian Journal of Economics, Empirical Economics, Economics Letters, Energy, Energy Journal, Energy Economics, Energy Policy, ESAIM: Control, Optimization, and Calculus of Variations, Eastern Economic Journal, Structural Change and Economic Dynamics, Quarterly Review of Economics and Finance, Venture Capital: an International Journal of Entrepreneurial

## **Grants and Awards**

- Vice-provost for Academics Teaching Excellence commendation (2016, 2017, 2018, 2019)
- Ignition grant, Stevens Institute of Technology, 2017
- Howe School Alliance for Technology Management (HSATM) Grant, 2013
- MIT/BP Biofuels Grant, Co-Developer of the Grant Proposal, 2012
- Semi-Finalist, Best Paper Award in Investment Category, Financial Management Association (FMA), 2012
- Full Scholarship, Vienna Graduate School of Finance, 2007-2011

**Computer Skills** Matlab, Stata, R, Eviews, Finance Databases (Bloomberg, CRSP, Data Stream), LaTeX

**References** Available upon request.

**Last Update: Sep 2020**