

# Hormoz Ramian

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## RESEARCH INTERESTS

Macroeconomics, Finance, Monetary Economics, Banking and Financial Regulation

## EDUCATION

### Finance, Ph.D. Candidate

Imperial College London (2016–2020, Expected)  
Job Market Paper: *Optimal Financial Regulation*

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**Finance, M.Res.** (Distinction, Dean's List), Imperial College London

**Financial Economics, M.Sc.**, University of Manchester

**Economics, B.Sc.**, National University, Iran

## AWARDS AND SCHOLARSHIPS

|  |              |
|--|--------------|
| Presidential Scholarship, Imperial College London                              | 2016–20      |
| Winner, Imperial College London Best Graduate Teaching (University-wide Award) | 2018         |
| Imperial College London, Best Graduate Teaching Nominations                    | 2017, 18, 19 |
| Graduate Teaching Scholarship, Imperial College Business School                | 2015–16      |
| Dean's List Award, Imperial College, Business School                           | 2016         |
| ORS Scholarship, University of Manchester                                      | 2012         |

### RESEARCH EXPERIENCE

#### **Optimal Financial Regulation** (Job Market Paper)

*Abstract:* I show that when the banking sector's assets comprise large excess reserves and loans, jointly determined capital regulation and interest-on-excess-reserves (IOER) policies provide welfare gains. In general equilibrium, falling IOER is associated with a proportional fall in deposit rate only when IOER is above the zero bound. This leads to a faster fall in the bank's interest expenses than its interest incomes. Given any lending level, lower net interest expenses enhance bank solvency. Nonetheless, the risk-weighted capital regulation remains unchanged and hence becomes socially costly. I show that jointly determined policies achieve welfare gains by loosening the capital requirement and lowering IOER to expand the credit flow, while bank failure likelihood remains constant. Conversely, lowering IOER below the zero bound is associated with a nonresponsive deposit rate that leads to growing net interest expenses and worsening bank solvency. In that case, I show that a stricter capital constraint together with a lower IOER provide social value.

#### **Financial Regulation and Wealth Distribution** (Research in Progress)

*Abstract:* Financial regulation provides welfare gains to the society, at the expense of an exacerbated wealth distribution. I show that when capital markets are segmented, financial regulation leads to a transfer of wealth from depositors to equity investors. An integrated monetary and financial regulatory policies achieve welfare gains due to a credit flow expansion to the real sector, while default likelihood within the banking sector remains fixed. Nonetheless, this constrained equilibrium allocation is associated with a lower deposit rate while dividends increase, leading to a wealth transfer across market segments. I provide sufficient conditions under which optimal financial regulation leads to welfare gains without exacerbating wealth heterogeneity.

#### **Pay Banks to Lend: Targeted Long-Term Refinancing Operations and the Fiscal**

##### **Stimulus** (Research in Progress)

*Abstract:* The aftermath of the financial crisis inherited heightened economic uncertainty and low productivity. These features prompted the banking sectors across the developed economies to rely heavily on excess reserves offered by the central banks despite the negative nominal interest-on-excess-reserve (IOER) policy. Nonetheless, the negative relationship between the overall interest expenses of the banking sector with the IOER around the zero lower bound further exacerbates the over-reliance on excess reserves particularly when rates are negative. This paper shows that the new Targeted Long-Term Refinancing Operations (TLTRO) policy adopted by the central banks leads to expansionary effects when the refinancing lending rates fall below the IOER. I first provide a social welfare maximizing approach to determine the optimal borrowing limit. Second, I show that the policymaker's decision to finance the deficit due to remunerations depends on the trade-offs between the social gains associated with the expansion of lending to the real sector against the social costs of monetary tools (creating money to finance the gap) or fiscal tools (taxation).

### RESEARCH SUPERVISION

#### **Student Investment Fund**

2018, 19, 20

I supervised graduate students in finance working as members of Student Investment Fund Research Center at Imperial College London. I have been responsible to promote learning outcomes of students with interests in academic findings backed by data and statistical models learned from their studies.

### TEACHING EXPERIENCE

*Teaching Assistant, Imperial College London (\*Evaluations out of 5.0)*

|   |               |
|---|---------------|
| <b>Econometrics 1</b> (PhD, 4.80, 4.98, <i>University-wide Teaching Award</i> ) | 2017, 18, 19  |
| <b>Macro-Finance</b> (MSc Finance, 4.00, 4.33)                                  | 2018, 19      |
| <b>Macroeconomics</b> (MSc Finance 4.38)  | 2018, 19      |
| <b>Empirical Finance</b> (MSc Financial Engineering, 4.64)                      | 2019          |
| <b>Financial Statistics</b> (MSc Financial Engineering, 4.63, 4.72)             | 2017, 18      |
| <b>Machine Learning &amp; Applied Statistics</b> (Summer School, 4.54)          | 2019          |
| <b>Introduction to Finance</b> (MBA, Executive MBA)                             | 2017, 18 , 19 |

### WORKSHOPS

I developed the following workshops by designing simple economic trade-offs into practical exercises. Students are assigned in groups learn how to incorporate simulated market information into trading strategies and execute them on a platform simulator in a competitive environment.

#### [Trading Simulation](#)

This workshop intends to familiarize students with the optimal execution of bid-ask quotes by incorporating market information and placing quotes on a simulated trading platform. Key learning outcomes are to understand the trade-off between absorbing market demand as a result of a narrow bid-ask quote against obtaining a lower profit margin per transaction in a competitive environment.

#### **Bid-Ask Spread and Private Information**

The purpose of this workshop is to demonstrate how to infer information embedded in market quotes and incorporate them to increase profit margins per transaction. Conversely, participants learn how to strategize against information give-away embedded in their own posted quotes by understanding the negative relationship between profit margins against quote informativeness in a multi-period simulation.

### SOFTWARE AND COMPUTING

Python, R, Matlab, Mathematica, Stata, SAS, Linux, Julia