# **EDUCATION**

Ph.D. Economics, Northern Illinois University, IL, USA 2018-2023 (expected) | GPA: 3.9/4.0 M.A. Statistics, Northern Illinois University, IL, USA M.A. Economics, Northern Illinois University, IL, USA M.S. Financial Economics, Sharif University of Technology, Tehran, Iran B.S. Economics, Urmia University, Urmia, Iran 2006-2010 GPA: 3.4/4.0

# **PUBLICATIONS**

#### **Published Papers**

- Mahmoudi, M. (2023), "COVID lessons: was there any way to reduce the negative effect of COVID-19 on the United States economy?", Journal of Economic Studies, Vol. 50 No. 5, pp. 896-920. https://doi.org/10.1108/JES-01-2022-0052
- Mahmoudi, M. and Ghaneei, H. (2022), "Detection of structural regimes and analyzing the impact of crude oil market on Canadian stock market: Markov regime-switching approach", Studies in Economics and Finance, Vol. 39 No. 4, pp. 722-734. https://doi.org/10.1108/SEF-09-2021-0352
- Mahmoudi, M. (2021). Identifying the Main Factors of Iran's Economic Growth Using Growth Accounting Framework. European Journal of Business and Management Research, 6(5),239 - 245.https://doi.org/10.24018/ejbmr.2021.6.5.1099

#### **Research in Progress**

- Evaluating the Impact of Bitcoin on International Asset Allocation using Mean-Variance, Conditional Value-at-Risk (CVaR), and Markov Regime Switching Approaches.
- Cryptocurrency Portfolio Optimization
- Examining the Effect of Monetary Policy and Monetary Policy Uncertainty on Cryptocurrencies Market
- Analyzing Economic Growth of Developing Countries using a Bayesian DSGE approach.

# **TEACHING EXPERIENCE**

# Northern Illinois University, DeKalb, IL, USA

#### **Graduate Instructor:**

- Teaching two undergraduate courses: Basic Econometrics Laboratory with R and Economic Data Analysis with Excel.
- **Teaching Assistant:**
- Assist in course design and implementation, conduct recitation sessions, lead study groups, mentor students, and assist the Professor teaching the class in other course-related activities. Courses: Environmental Economics (G), Principles of Microeconomics (U), Econometrics (U), Financial Economics (U)

#### Sharif University of Technology, Tehran, Iran Assistant Lecturer:

Handling different courses and participating in research activities in the department. Courses: Corporate Finance (G), Financial Economics (G)

# **CONFERENCE PRESENTATION**

- The 51th Annual Meeting of Illinois Economic Association, DePaul University, Chicago, IL, USA, Nov 4-5, 2022.
- The 59th Annual Meeting of Missouri Valley Economic Association, St. Louis, Missouri, USA, Oct 6-8, 2022.
- 2022 ECONference of the Northern Illinois University, DeKalb, IL, USA, Apr 13, 2022
- The 50th Annual Meeting of Illinois Economic Association, Virtual, Oct 22, 2021.

# AWARDS

- Graduate School Travel Grant for attending the 59th Annual Meeting of MVEA, 2022.
- Ranked 12th on the nationwide M.A. Entrance Exam of Economics (among 30,000 B.A. holders), Iran, 2010

# 2021-2023

#### 2018-2021

#### 2013-2015

2022-2023 GPA: 4.0/4.0 2018-2020 | GPA: 4.0/4.0 2011-2014 GPA: 3.6/4.0

# **REFEREE EXPERIENCE**

- Journal of Economic Studies
- Studies in Economics and Finance
- Asian Journal of Economics and Banking

# AFFILIATIONS AND PROFESSIONAL MEMBERSHIPS

- Phi Beta Delta Honor Society for International Scholars, Member
- American Economic Association, Member
- Missouri Valley Economic Association, Member
- Illinois Economic Association, Member
- Midwest Economics Association, Member

# **PROFESSIONAL EXPERIENCE**

### Financial Analyst at Lotus Investment Consulting Group, Tehran, Iran

- Managed a team of four to identify challenges of financing small and medium-sized enterprises (SMEs) in Iran. Proposed solutions to alleviate financing barriers and operational bottlenecks, leading to establishing SME Board in the stock market which currently 13 SMEs traded at \$200m market cap total.
- Wrote commercial real estate feasibility study reports for multiple projects such as Atlas Plaza, Iran City Center, and Isfahan City Center, helping them to raise \$300m from banks.

#### Financial Analyst at Iran Fara Bourse Stock Exchange, Tehran, Iran

- Prepared a comprehensive report to study venture capital (VC) in OECD countries. Suggested a VC structure and 4 reform articles in knowledge-based firms protection law, leading to reform 2 articles, and establish a new financing branch for high-risk investments in the stock market which currently 12 VCs traded at \$30m market cap total.
- Participated in a team to study US Treasury bills and issued the first Iran Treasury bill, Akhza1, with \$500m value.

### Financial Analyst at Taban Kherad Financial Research and Consulting, Tehran, Iran April 2013- May 2015

- Designed business feasibility analysis guidelines based on American Productivity & Quality Center benchmarks to evaluate startups and emerging companies for Iran's National Innovative Fund with \$50m capital.
- Conducted DCF analysis, and measured sensitivity to interest and inflation rates for multiple projects valued at \$150m total.

# CERTIFICATIONS

- Complete Python Bootcamp from Zero to Hero in Python, Udemy. July 2020
- R Programming A-Z<sup>TM</sup>: R For Data Science with Real Exercises! Udemy. June 2020
- Quantitative Prediction of Economic Variables by MATLAB, Central Bank of Iran. May 2014
- Empirical Finance, GSME & Iran's National Elites Foundation, Sharif University of Technology. February 2013
- Bank Credit and Business Cycles, Central Bank of Iran. January 2012

# **TECHNICAL SKILLS**

- Advance Financial and Time-series Econometrics
- Data analysis and visualization tools: R (Advanced), SQL, Tableau, Maple, SAS, LaTeX, Excel and PowerPoint
- Programming Languages: Python and Julia

# LEADERSHIP/COMMUNITY SERVICES

#### Network of Nations, Dekalb, IL

• Participate in weekly food distributions among refugees and international students.

August 2018- Present

August 2022- present July 2022- present June 2022- present

August 2016- July 2018

#### June 2015- July 2016

## APPENDIX

#### **Paper Abstracts:**

# • COVID Lessons: Was There Any Way to Reduce the Negative Effect of COVID-19 on the United States Economy?

This paper aims to assess the economic impact of uniform COVID-controlling policies that were implemented by the US government in 2020 and compare it with hypothetical targeted policies that consider the heterogenous effect of COVID-19 on different age groups. To accomplish this, I began by showing that the adjusted SEQIHR model is a good fit to the US COVID-induced daily death data in that it can capture the nonlinearities of the data very well. Then, I used this model with extra parameters to evaluate the economic effects of COVID-19 through its impact on the job market. The results show that targeted COVID-controlling policies could reduce the US death rate and GDP loss to 0.03 percent and 2 percent, respectively. By comparing these results with uniform COVID-controlling policies, which led to a 0.1 percent death rate and 3.5 percent GDP loss, we could conclude that the death rate reduction is 0.07 percent. For the same percent of GDP loss, executing targeted policy could diminish 75 percent of COVID-induced deaths. Approximately 378,000 Americans died because of COVID-19 during 2020, therefore, reducing the death rate to 0.03 percent means saving a significant proportion of the COVID-19 casualties, around 280,000 lives.

#### Evaluating the Impact of Bitcoin on International Asset Allocation using Mean-Variance, Conditional Valueat-Risk (CVaR), and Markov Regime Switching Approaches.

This paper aims to analyze the effect of Bitcoin on portfolio optimization using mean-variance, conditional value-at-risk (CVaR), and Markov regime switching approaches. I assessed each approach and identified weaknesses, which were used to develop the subsequent approach. Though the results of the mean-variance and CVaR frameworks indicate that Bitcoin improves the diversification of a an already well-diversified international portfolio, they assume that assets' returns are developed linearly and normally distributed, which is inaccurate especially for Bitcoin return. Due to this, I developed a Markov regime switching approach to analyze the effect of Bitcoin on the performance of an international portfolio. The results indicate that there are two regimes based on the assets' returns: 1) bear state, where returns have low means and high volatility, 2) bull state, where returns have high means and low volatility.

#### Detection of Structural Regimes and Analyzing the Impact of Crude Oil Market on Canadian Stock Market: Markov Regime-Switching Approach.

This study aims to analyze the impact of the crude oil market on the Toronto Stock Exchange Index (TSX) based on monthly data from 1970 to 2021 using Markov-switching vector autoregressive (MSI-VAR) model. The results indicate that TSX return contains two regimes, including: positive return (regime 1), when growth rate of stock index is positive; and negative return (regime 2), when growth rate of stock index is negative. Moreover, regime 1 is more volatile than regime 2. The findings also show the crude oil market has negative effect on the stock market in regime 1, while it has positive effect on the stock market in regime 2. In addition, we can see this effect in regime 1 more significantly in comparison to regime 2. Furthermore, two period lag of oil price decreases stock return in regime 1, while it increases stock return in regime 2.

#### Identifying the Main Factors of Iran's Economic Growth using Growth Accounting Framework.

This paper aims to present empirical analysis of Iranian economic growth from 1950 to 2017 using data from the World Bank, Madison Data Bank, Statistical Center of Iran, and Central Bank of Iran. The results show that Gross Domestic Product (GDP) per capital increased by 2 percent annually during this time, however this indicator has had a huge fluctuation over time. In addition, the economic growth of Iran and oil revenue have close relationship with each other. In fact, whenever oil crises happen, great fluctuation in growth rate and other indicators happened subsequently. Even though the shares of other sectors like industry and services in GDP have increased over time, the oil sector still plays a key role in the economic growth of Iran. Moreover, growth accounting analysis shows contribution of capital plays a significant role in economic growth of Iran. Furthermore, based on growth accounting framework the steady state of effective capital is 4.27 for Iran's economy.