Shihan Shen
Rice University, P.O. Box 1892
Houston, TX 77251-1892
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Email: sshen@rice.edu

March 4, 2024

National Bureau of Economic Research
1050 Massachusetts Avenue
Cambridge, MA 02138

Dear Organizing Committee,

I am writing to apply for the NBER training workshop on Economics of Executive Compensation. I have been an assistant professor in economics at Rice University since July 2023, and before this I was a Ph.D. student in economics at UCLA. I am excited about this great opportunity and I believe that my research interest and expertise make me an excellent fit for the workshop.

My primary research interests are in macro labor and industrial organization, with a special focus on firm dynamics, market power and economic welfare. Since the executives play a key role in firm decisions, studying their compensation and incentives are important to understand the micro-foundations of competition among firms and study its macro implications.

Motivated by this, I started a research project "**Friend or Foe: Executive Pay Networks and Product Market Conduct**", together with Bruno Pellegrino and Guido Bongioanni. We find that interlocking directorates and relative performance evaluation (RPE) give managers opposite incentives on competition, and would like to quantify the influence of these incentives on firm dynamics and consumer welfare with a general equilibrium model. In this project, I contributed by developing a theoretical framework to construct the network of "friends" and "foes" relationships among firms, and we are now working on bringing the sophisticated data on executive compensation to our model.

I believe my knowledge and expertise in macroeconomics/IO and my enthusiasm on learning more about executive compensation make me an ideal candidate for the workshop. I am eager to attend the workshop not only to advance the project, but more importantly, to systematically study the executive compensation and explore the linkages between the micro foundation and the macro implications. My macro mindset and expertise also provides a new way of thinking and novel perspectives to the workshop.

Please find enclosed my curriculum vitae and a statement on research interests. A letter from my more senior coauthor, **Professor Bruno Pellegrino** will be sent separately. Please visit my personal website (www.shihan-shen.com) for more information, and do not hesitate to contact me if you require any additional materials. I hope you find my research.

Thank you very much for your consideration. I look forward to hearing from you.

Sincerely,
Shihan Shen

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CONTACT INFORMATION

Department of Economics MS-22
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Houston, TX 77251-1892

Email: sshen@rice.edu
Website: https://www.shihan-shen.com

EMPLOYMENT

- Assistant Professor, Department of Economics, Rice University (July 2023 - Present)

EDUCATION

- University of California, Los Angeles 2017 - 2023
  - Ph.D. Economics
    Honor Pass in Comprehensive Exams for Micro, Macro and Econometrics.

- Peking University 2010 - 2017
  - M.A. Economics, China Center for Economic Research (CCER), 2017
  - B.A. Economics, School of Economics, 2014

RESEARCH INTERESTS

- Primary: Macroeconomics, Firm Dynamics, Growth, Innovation
- Secondary: Search and Matching, Monetary

PUBLISHED PAPERS

- Revisiting Capital-Skill Complementarity, Inequality, and Labor Share (2023), with Lee E. Ohanian and Musa Orak. **Review of Economic Dynamics**

WORKING PAPERS

- Customer Acquisition, Rising Market Concentration and US Productivity Dynamics
- Market Liquidity and Bond Issuance: Effects of the Fed's Interventions during the COVID-19 Crisis, with Huifeng Chang
- Monopoly or Efficiency? Aggregate Impact of M&A on Macroeconomic Dynamics

WORK IN PROGRESS

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- The Transmission of Shocks Across Industries: Evidence from a Billion News Articles, with Bruno Pellegrino

CONFERENCES & PRESENTATIONS

- **2024**: University of Houston, SED (Barcelona, scheduled), Third DC Search and Matching Workshop (scheduled), UNC-Chapel Hill (scheduled)
- **2023**: Macroeconomics Across Time and Space Conference Philadelphia, RISE Conference on Firms, Productivity, and Growth, West Coast Search-and-Matching workshop Irvine, ES Meetings (North America Summer, Asia), Wisconsin-Madison, Carnegie Mellon Tepper, Rice University, Peking University (CCER, Guanghua, HSBC), Tsinghua University, National University of Singapore (Econ, Finance), Singapore Management University, CUHK Shenzhen
- **2022**: ES Meeting (Europe Winter), AFA poster, Trans-Atlantic Doctoral Conference (TADC), UCLA macro proseminar
- **2021**: ES Meetings (Asia, China), WEAI, UCLA macro proseminar

TEACHING

- **Rice**: Topics in Macroeconomics (ECON 575), Investments - Undergraduate (ECON 456)
- **UCLA**: TA for Macroeconomics (Graduate level); Investments; Finance; Introduction to Econometrics; Principles of Economics (Macro, Micro)

SELECTED HONORS, GRANTS AND AWARDS

- Dissertation Year Fellowship, Graduate Division, UCLA, 2022-2023
- Best Proseminar Presentations Award, UCLA ($2,500), 2021-2022
- Lewis L. Clarke Graduate Fellowship Fund, UCLA ($3,000), 2020-2021
- Graudate Student Travel Grant, UCLA, 2019-2020
- Graduate Student Fellowship, UCLA, 2017-2018
- Highest Honored Graduate Award, Peking University, 2014, 2017
- Graduate Academic Award, Peking University, 2014, 2016
- First-Class Academic Scholarship, Peking University, 2015

PROFESSIONAL ACTIVITIES

- **Conference organization**: 2023 RISE Conference on Firms, Productivity, and Growth
- **Referee**: Review of Economic Dynamics, Theoretical Economics
- **University/Department Service**: Macro Seminar Co-organizer, 2023-2024; Faculty Recruitment Committee, 2023-2024

SKILLS

- **Computational** : Matlab, Stata, R, SAS
- **Languages**: Chinese (*native*), English (*Fluent*)

Updated: Fed 2024

Columbia Business School

Dr. Bruno Pellegrino
Kravis Hall, Suite 768
655 W. 130th Street
New York, NY, 10027

Dear Dirk and Kelly,

I am writing to provide my **highest recommendation** in support of Shihan Shen's application for the NBER Workshop on Economics of Executive Compensation. Shihan has recently joined Rice University as an assistant professor. She works at the intersection of Corporate Finance and Macroeconomics. I have known her for a long time: like myself, she got her PhD at UCLA; we wrote our dissertations under the same advisor. She is three years my junior. We have been talking a lot and I followed her progress closely. Shihan is productive; intelligent and a fast learner. She also wrote a great job market paper that will be well-published and well-cited.

After Shihan's rookie job market, I recruited her alongside Guido Bongioanni (whom I am also recommending for this workshop) to work on a new project: "*Friend or Foe: Executive Pay Networks and Product Market Conduct*". In this project, we dissect highly-granular data from tens of thousands of executive compensation contracts with the objective of studying how the incentives built in the executives' income process affects the product market conduct of the firms they manage. Using a GE model of oligopoly similar to Pellegrino (2019), we plan to quantify their impact on firm profitability and product market competition.

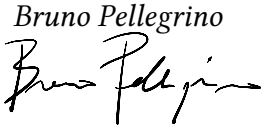
When I found out through Twitter that you were organizing this Doctoral Workshop, I immediately thought it was an awesome idea and advised Shihan and Guido to apply. I am glad they took up my advice: I attended a similar NBER doctoral workshop as a graduate student (the Entrepreneurship one, organized by our mutual colleague David Robinson) and I had a great experience. The workshop will provide them with the foundational knowledge of the literature that they need to write an impactful paper. Also, they will learn a lot by interacting with top scholars like you. I know your work well enough to know it's going to be a great event. As their senior coauthor, I will indirectly benefit from their participation as well.

Shihan and Guido both deserve to participate and I would be ecstatic if they could both have the opportunity to. If you are overwhelmed with demand and can't choose both, I would pick Shihan if you want the strongest candidate, and Guido to give priority to a PhD student.

In sum, I recommend Shihan without any reservation. She is really talented and fully devoted in research, an insightful economist in all regards. Please do not hesitate to contact me if you have any questions.

Sincerely,

Bruno Pellegrino



Statement of Motivation and Research Interests

Shihan Shen

My primary research interests are in macroeconomics and industrial organization, with a special focus on firm dynamics, market power and economic welfare. In this line of research, I apply rich empirical, theoretical, and quantitative-theoretic tools, and work with both micro and macro data.

I first became interested in executive compensation because I found that a large proportion of executive compensation is based on relative performance (RPE). Given the importance of executives in a firm, the RPE exerts a motive for managers to hurt competitors' profits rather than pursue the maximization of their own firm's profits. This may greatly influence how firms decide on pricing, production and investment in an oligopolistic market, and generate critical macro implications.

Motivated by this, I started a research project "**Friend or Foe: Executive Pay Networks and Product Market Conduct**", together with Bruno Pellegrino (Columbia Business School) and Guido Bongioanni (European University Institute). The key idea of this project is to develop a network of "friends" and "foes" relationships among firm using granular data on executive compensation: interlocking directorates incentivize softer competition among product market rivals, while relative performance evaluation (RPE) rewards managers for aggressive product market conduct. Then we embed the network into a general equilibrium model to quantify the influence of these incentives on individual firm supply decisions, markups, allocative efficiency, and consumer welfare. So far, we have developed the theoretical framework, and are currently constructing the network using detailed compensation data from Institutional Shareholder Services (ISS). To the best of our knowledge, our paper is the first to consider the macroeconomic implications of RPE-based incentive plans.

Our project matches perfectly with the workshop's topics of executive labor market, managerial behavior and firm outcomes, and the causes of variation in pay contracts. However, I look forward to the workshop not just to advance the project, but more importantly, to gain a profound understanding of the executive pay in a systematic manner, and to explore the linkages between the micro foundation and the macro effect. My macro mindset and expertise also provides a new way of thinking and novel perspectives to the workshop, making me an ideal candidate for the workshop.

I believe the research of executive pay is of paramount importance, not only to the management and finance literature, but also contributes to our understanding of the macroeconomics. Going forward, I hope to delve deeper into research that lie at the intersection of executive compensation and firm dynamics/macroeconomics, and the training workshop will be a perfect starting point.

Shihan Shen

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Thank you very much for your consideration. I look forward to hearing from you.

Sincerely,
Shihan Shen

