

November 3, 2024

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Dear Recruitment Committee in Robert Day School of Economics and Finance at Claremont McKenna College,

I am writing to apply for the position of Assistant Professor of Economics. I am currently a Ph.D. candidate in Economics at the University of British Columbia, expecting to complete my degree in June 2025. My research interests lie broadly in labor economics, with a focus on both macroeconomic and microeconomic perspectives.

I am especially interested in joining RDS because its strong emphasis on combining theory with empirical approaches closely aligns with my research focus. I am also enthusiastic about the opportunity to collaborate with faculty members like Professors Daniel Firoozi and Florian Madison.

My academic work has provided me with a robust foundation in empirical research and economic modeling, which aligns closely with the responsibilities of this position. In my job market paper, National Firms, Local Effects: Spillovers from Multi-Establishment Employers' Expansions, I analyze how expansions by large national employers influence the wage and hiring policies of local firms. Utilizing Brazilian administrative employer-employee data, I developed an empirical strategy to assess local firms' responses to labor demand shifts, demonstrating that increased competition for workers drives upward wage pressures across the labor market. This research, presented at the Annual Meetings of the Canadian Economics Association in June 2024.

Beyond my job market paper, I am working on *Heterogeneous Firm Sorting and Local Monopsony Power* with Sudipta Ghosh and Xiaojun Guan, which examines the impact of local labor market competition on firms' wage-setting behavior using German administrative data. This project involves identification of stylized facts, designing spatial general equilibrium models, and conducting policy counterfactual experiments.

Additionally, my NBER working paper, Spooky Boundaries at a Distance: Exploring Transversality and Stability with Deep Learning, co-authored with Mahdi Ebrahimi Kahou, Jesús Fernández-Villaverde, Sebastián Gómez-Cardona, and Jesse Perla, explores deep learning approximations in dynamic structural models. Specifically, we show that these approximations can automatically satisfy long-run boundary conditions, potentially simplifying the computation of short-term dynamics in such models.

During my graduate studies at UBC, I served as a teaching assistant for courses in applied econo-

metrics, theoretical econometrics, open macroeconomics, and data science at the advanced undergraduate level. For three years, I was the head TA for UBC's main Applied Econometrics course, conducting 90-minute hands-on sessions each month for over 90 students. Additionally, I served as a TA for the advanced Open Macroeconomics course for two years. These experiences have prepared me to teach a wide range of topics in econometrics and macroeconomics. Although my research focuses on labor economics, I am capable and enthusiastic about teaching undergraduate courses across various areas of economics. Additionally, my experience with computational methods and large data sets equips me to teach computational macroeconomics and data science at both undergraduate and graduate levels.

I am equally passionate about advising. During my Ph.D., I participated in and organized a labor economics reading group and research workshop. This group brings together about ten Ph.D. students each year who meet weekly to discuss research and receive feedback from peers in an informal setting.

I would be happy to provide more details about my background and experience upon request.

Thank you in advance for your consideration.

Sincerely,

Jan Rosa,

Ph.D. Candidate,

University of British Columbia