

# Paul I. Ko

## Contact Information:

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**Citizenship:** United States

## Education

Ph.D. Candidate, Department of Economics, The Pennsylvania State University, 2021 (*Expected*)

B.S. in Economics, Carnegie Mellon University, 2014

B.S. in Mathematics with Minor in Japanese, Carnegie Mellon University, 2014

## Research Fields

International Economics (International macroeconomics and trade), Macroeconomics

## References

**Professor Jonathan Eaton (*Chair*)**  
Distinguished Professor of Economics  
Department of Economics  
The Pennsylvania State University  
[jxe22@psu.edu](mailto:jxe22@psu.edu)

**Professor Kim J. Ruhl**  
Associate Professor of Economics  
Department of Economics  
University of Wisconsin-Madison  
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**Professor Stephen R. Yeaple**  
Professor of Economics  
Department of Economics  
The Pennsylvania State University  
[sry3@psu.edu](mailto:sry3@psu.edu)

**Professor William L. Goffe (*Teaching*)**  
Associate Teaching Professor of Economics  
Department of Economics  
The Pennsylvania State University  
[bill.goffe@psu.edu](mailto:bill.goffe@psu.edu)

## Teaching Experience

### The Pennsylvania State University

2014 - 2019	<i>Instructor</i> Undergraduate: Introduction to Macroeconomic Analysis ( <i>Online</i> ) (2018,2019); Intermediate Macroeconomic Analysis ( <i>Residential</i> ) (2016)
2014 - 2020	<i>Teaching Assistant</i> Undergraduate: Economics of Sports (2018,2019); Labor Economics (2017,2018); Monetary Theory and Policy (2015,2016); Intermediate Macroeconomic Analysis (2014,2015); Introductory Macroeconomic Analysis (2016)

### Carnegie Mellon University

2014	<i>Teaching Assistant</i> Undergraduate: Advanced Microeconomic Theory (for Serra Boranbay-Akan); Principles of Economics (for Onur Kesten);
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## Research Experience and Other Employment

Summer, 2020	Enumerator, The U.S. Census Bureau
Summer, 2013	Research Assistant for Laurence Ales, Carnegie Mellon University
Summer, 2012	Retail Risk Analytics Intern ( <i>Assistant Model Developer</i> ), PNC

## Professional Activities

### Workshop Organizer

*Graduate Workshop for International Political Economy (GSIPE)*  
(Joint workshop with Political Science Ph.D. students)

### Referee

*Contemporary Economic Policy* (1), *PLOS ONE* (1)

### Presentations

2020	Penn State Macroeconomics Reading Group (03/2020) Penn State Trade/Development Reading Group (03/2020) Midwest Trade Meetings, Clemson University (05/2020, <i>cancelled</i> ) 95th Annual WEAI Conference, Denver (06/2020, <i>online session</i> ) Penn State Faculty Summer Seminar (08/2020) YES 2020 (Young Economists Symposium) (08/2020)
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	GSiPE (Graduate Workshop for International Political Economy) (08/2020)
	Federal Reserve Board Pre-Job Market Conference ( <i>invited session</i> ) (08/2020)
	SEA Meetings, New Orleans* (11/2020)
2019	Penn State Graduate Exhibition (03/2019)
	Midwest Macroeconomic Meetings, University of Georgia (05/2019)
	CIREQ Ph.D. Student Conference, McGill University (05/2019)
	Midwest Trade Meetings, Indiana University (06/2019)
	EEA-ESEM 2019, Manchester, UK (08/2019)
2017, 2018	Penn State Trade/Development Reading Group
* <i>scheduled</i>	

## Honors, Scholarships, and Fellowships

2021	Graduate Teaching Assistantship, Schreyer Institute for Teaching Excellence (SITE), Penn State
2014 – 2020	Department of Economics Teaching Assistantship, Penn State
2019	Luellen Graduate Award, Penn State
2014	Best Undergraduate Tepper Honors Thesis Presentation, Carnegie Mellon
2014	Omicron Delta Epsilon (The International Honor Society)
2013	Jeffrey and Gloria Holtman Dietrich College of Humanities and Social Sciences Dean's Innovation Fund, Carnegie Mellon
2013 – 2014	Tepper School of Business Honors
2012	PNC Spotlight Recognition (Internship Award), PNC

## Certificates

2020	Graduate Student Online Teaching Certificate
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## Skills

### Programming

Matlab, R, Stata, L<sup>A</sup>T<sub>E</sub>X, and Visual Basic

### Languages

English (Native), Korean (Native), Japanese (Basic)

## Working Paper

### *“Dissecting Trade and Business Cycle Co-movement” - Job Market Paper*

In the past three decades, international business cycles have become highly synchronized across countries. However, there is a lack of consensus on whether this is due to an increase in the correlation of country-specific shocks or due to increased economic integration. To understand this empirical phenomenon, I develop a multi-country real business cycle model with international trade that captures several potential explanations: shocks to productivity, demand, leisure, investment, sectoral expenditures, and trade-linkages. Then I match the data exactly with the endogenous outcomes of the model so that shocks fully account for the data, including GDP and trade shares. Calibrating the model to a panel of developed (G7) countries during 1992–2014, I find that trade-linkage shocks, which capture increased economic integration and the volatility of trade flows, are essential in synchronizing international business cycles. In contrast, correlated country-specific shocks play relatively minor roles. This suggests that trade shocks due to economic integration have been the primary driver of the co-movement of international business cycles. Furthermore, I use my model to address the *trade co-movement puzzle*, which states that international real business cycle models should be predicting a much stronger link between trade and cross-country GDP correlations. Once I account for the trade-linkage shocks, the model predicts a strong link between trade and business cycle co-movement. This finding suggests that incorporating the dynamics of trade shocks is crucial when studying international business cycles.

## Work In Progress

### *“Global and Local Effects on the Labor Share Decline” (with Chung Han Yang)*

Stable labor shares in national income have been one of the main stylized macroeconomic facts of the 20th century, first established by Kaldor (1961). However, this fact has been challenged; we observe that the labor shares have been declining since the 1980s across the world. Yet, there is still a lack of consensus on why the world is experiencing this global empirical phenomenon. To answer this question, we develop a multi-country dynamic trade model with firm heterogeneity that incorporates various shocks that capture the competing stories in the literature: (i) the rise of superstar firms, (ii) changes to composition in consumption, (iii) fall in prices of capital/investment, and (iv) increase in international trade. To back out the wedges that capture these stories, we saturate the model by matching the model’s endogenous outcomes with each country’s GDP, investment, compensation of employees, and bilateral trade shares exactly.

### *“Intra-Household Inequality and Gender-Equitable Inclusive Growth” (with Gee Young Oh)*

As the world has experienced large economic growth, labor force participation for females has been consistently lower than that of males across many countries — suggesting that the growth may not have been inclusive in terms of gender. This paper offers new insights about achieving inclusive economic growth in terms of gender equity by tying it to gender equality between females and males in households. Through the lens of a structural household model, we study how intra-household inequality, in aggregate, affects gender-equitable inclusive growth. By investigating gender-bias parameters in the household model, we examine how resolving the micro-level inequality resolves the aggregate level inequality in gender gaps in labor force participation.

*“Disentangling the Impact of Trade and Financial Sanctions: Evidence from Iran” (with William Walsh)*

What are the macroeconomic impacts of economic and financial sanctions? Developed countries widely use trade and financial sanctions to put political pressure on targeted countries, but little is known about these sanctions' effects on the macroeconomy. In particular, we study the 2012 recession in Iran and the European Union's trade and financial sanctions. Did internal shocks cause the recession in Iran, or did the imposed sanctions have a bite? To answer this question, we build a small open economy model that fully account for GDP, consumption, employment, and net exports of Iran to disentangle the impacts of the Iranian recession. In our counterfactual analysis, we study how Iran's GDP and consumption would have evolved if the E.U. had not imposed the sanctions.

Last updated: November 12, 2020