

# Tongtong Hao

**Address:**

Department of Economics  
University of Toronto  
150 St. George St.  
Toronto, Ontario  
M5S 3G7, Canada

**Phone:** +1-416-826-0346**Email:** tongtong.hao@mail.utoronto.ca**Website:** <https://sites.google.com/view/tongtonghao>

---

**Citizenship:**

Chinese

**Research Interests:**

Development Economics, Macroeconomics, Inequality and Mobility

## EDUCATION

Ph.D. in Economics, University of Toronto, Canada 2020 (Expected)

*Committee:* Loren Brandt (supervisor), Gueorgui Kambourov, Xiaodong Zhu

M.A in Economics, University of British Columbia, Canada 2013

B.Sc in Economics, University of Waterloo, Canada 2012

B.Sc in Economics, China University of Geosciences (Wuhan), China 2010

(2+2 program with University of Waterloo)

## RESEARCH

**Structural Transformation and Intra-China Migration** (Job Market Paper)

**The Effect of Migration Policy on Growth, Structural Change, and Regional Inequality in China** prepared for *Carnegie-Rochester-NYU Conference* with Ruiqi Sun, Trevor Tombe and Xiaodong Zhu

**More Unequal yet More Alike, the Changing Patterns of Family Formation, Generational Mobility and Household Income Inequality in China: A Counterfactual Analysis** with Gordon Anderson and Maria Grazia Pittau, *The Journal of Economic Inequality*, 2019 January

**Bold and Brotherless: The Effects of China's Family Planning Policies on Women's Career Outcomes** with Limin Fang and Genet Zinabou

## AWARDS AND GRANTS

University of Toronto Doctoral Fellowship 2013 - 2017

University of British Columbia Faculty of Arts Graduate Award 2012 - 2013

University of British Columbia International Partial Tuition Scholarship 2012 - 2013

University of Waterloo Upper Year Scholarship 2012

University of Waterloo Dean's Honors List 2010-2012

Excellent Student of CUG (top 5%), First-class People's Scholarship CUG 2009

## PROFESSIONAL EXPERIENCE

Teaching Assistant

2013 - present

- ECO 435: Economic Development of China
- ECO 403: Topics in Development Economics and Policy
- ECO 406: Developmental Macroeconomics
- ECO 333: Urban Economics
- ECO 202: Macroeconomics

Research Assistant

2013 - 2017

- Loren Brandt: Advanced data analysis
- Xiaodong Zhu: Data collection and numerical analysis
- Jonathan Hall: Data analysis, coding and map generation

## CONFERENCE PRESENTATIONS

University of Toronto Macroeconomics Brown Bag Seminar (Toronto)	2019
Annual Conference of the Canadian Economics Association (Montreal)	2018
Annual Conference of the Canadian Economics Association (Ottawa)	2016
Waterloo Economics PhD Conference (Waterloo)	2016, 2018
University of Toronto CEPA Brown Bag Seminar (Toronto)	2015

## LANGUAGES

Mandarin (native), English (fluent), Cantonese(fluent)  
*Programming:* Stata, MATLAB, R

## REFERENCES

Loren Brandt  
Department of Economics  
University of Toronto  
150 St. George St.  
Toronto, Ontario  
M5S 3G7, Canada  
brandt@chass.utoronto.ca  
+1-416-978-4442

Gueorgui Kambourov  
Department of Economics  
University of Toronto  
150 St. George St.  
Toronto, Ontario  
M5S 3G7, Canada  
g.kambourov@utoronto.ca  
+1-416-978-8695

Xiaodong Zhu  
Department of Economics  
University of Toronto  
150 St. George St.  
Toronto, Ontario  
M5S 3G7, Canada  
xzhu@chass.utoronto.ca  
+1-416-978-7134

## Abstracts

---

### Structural Transformation and Intra-China Migration

(Job Market Paper)

Since China's 1978 economic reform, its agricultural employment share decreased from 69% to 22% in 2015 over 37 years. In contrast, this level of reduction in agricultural employment share took the US 96 years to achieve. This paper uncovers that China's rapid sectoral labor reallocation was helped by mass migration from Western to Eastern regions. In the late 1990s, the former small-scale migration within the Eastern region was replaced by mass West to East migration. This mass cross-region and cross-sector migration is the major contributing factor for the Eastern region's rapid non-agricultural employment growth, accelerating the region an engine of structural transformation. The 2010s saw an increase in out-of-agriculture reallocation in the West, accelerating the Western region's non-agricultural sectoral growth. To understand how migration contributes to structural transformation and economic growth, I build a two-sector two-region model and study how migration mitigates labor market distortion both between sectors and across regions over the period 1978-2015. Although the sectoral and regional migration barriers have declined over time, the potential output and welfare gain from removing the remaining migration barriers are still high.

### The Effect of Migration Policy on Growth, Structural Change, and Regional Inequality in China

with Ruiqi Sun, Trevor Tombe and Xiaodong Zhu

China's impressive economic growth since 2000 is well known; its significant structural transformation and regional income convergence is less so. Since 2000, while its aggregate income quadrupled, the inequality across provinces fell by a third and the share of employment in agriculture fell in half. Worker migration is central to this transformation, with almost 280 million workers living and working outside their area of (*hukou*) registration by 2015. Combining rich individual-level data on worker location and occupation decisions from 2000 to 2015 with a spatial general equilibrium model of China's economy, we quantify the size and consequences of reductions in internal migration costs. We find that between 2000 and 2015 migration costs fell in half, with the cost of moving from agricultural rural areas to nonagricultural urban ones falling even more. In addition to contributing to growth, these migration cost changes account for the majority of the reallocation of workers out of agriculture and the drop in regional inequality. We compare the effect of migration policy changes with other important economic factors in China, including change in trade costs, capital market distortions, average cost of capital, and productivity. While each contributes meaningfully to growth, migration policy is central to China's structural change and regional convergence. Finally, we find the slow-down in growth between 2010 and 2015 is associated with smaller reduction in inter-provincial migration costs and a larger role of capital accumulation during this five-year period.