

EDUCATION

Australian National University

Ph.D. - Economics

DISSERTATION: "Topics in Optimal Design of Taxes and Child Benefits"

Canberra, Australia

2019 - 2025 (expected)

M.A. - Economics

2015 - 2017

University of Toronto

B.B.A. - Economics Specialist

Toronto, Canada

2009 - 2013

RESEARCH FIELDS

Primary: Labor Economics, Macroeconomics, and Public Finance

Secondary: Computational Economics

JOB MARKET PAPER

"On the Joint Optimal Design of Taxes and Child Benefits"

[Article](#)

Means-tested child benefits and progressive tax systems both aim to support low-income families, but often create high and non-linear effective marginal tax rate schedules. This paper explores the joint optimization of these systems within a dynamic general equilibrium model of overlapping generations, calibrated to Australia (2012-2018). The model incorporates household heterogeneity in family structure, age and number of children, female human capital, and uninsurable earnings risks. I find that a standalone optimal tax system would reduce tax progressivity, encouraging labor supply among highly-educated women but increasing tax liabilities on low-income parents, thus undermining the objectives of child benefit programs. A jointly optimized system combines low tax progressivity and a universal lump-sum child benefit equal to 30% of median income (around AUD 18,000 in 2018), partly to offset the additional tax burdens on low-income parents. This substantially improves overall and parental welfare, but non-parent households bear notable losses. A moderately reduced benefit, while not optimal, achieves welfare gains for parents with lower costs to non-parents. These findings highlight the importance of coordinating tax and child benefit policies to effectively support vulnerable parents, while cautioning against equity losses for non-parents when policies are optimized solely for overall welfare.

WORKING PAPERS

"Child-Related Transfers, Means Testing and Welfare"

2023

(with Chung Tran)

Status: [Under Review \(IER\)](#)

[Article](#), [Slides](#)

Should child-related transfers be means-tested or universal? Previous studies focus primarily on the U.S. policy settings, and less is known about other designs. We revisit the question from the Australian policy context. We show that means testing exert significant adverse effects on work incentives and human capital development among married mothers. A structural reform that replaces the status quo means-tested system with a universal system improves female labor supply, output, and overall long-run welfare. However, the universal system increases tax burden by 4 percentage points and negatively impacts single mothers—the intended beneficiaries—by reducing their lifetime after-tax earnings and consumption. Hence, failing to curtail the fiscal costs, the universal system could harm the group it aims to help.

"Sustained Growth and Income Dynamics in Australia"

2024

(with Chung Tran and Nabeeh Zakariyya)

Status: *Ongoing*

What do we know about income growth in Australia? How are incomes distributed, and how do earners move within the income distribution? What does this tell us about income inequality and income mobility over time and over the life cycle, and for different demographic groups? This research addresses these questions through the lenses of Australian administrative data (ALIFE and PLIDA) and household survey data (HILDA).

PUBLICATIONS	<p>”Lifecycle Earnings Risk and Insurance: New Evidence from Australia” 2023 (with Chung Tran) Economic Record, 99(325): 141-174, 2023 Article, Slides</p> <p>This paper studies the nature of earnings dynamics using Australian household survey data. Our results indicate that the distribution of earnings shocks displays negative skewness and excess kurtosis, deviating from the conventional linearity and normality assumptions. Family and government insurance plays distinct roles in reducing exposure to earnings risk. Government insurance embedded in the targeted transfer system is important in mitigating the dispersion of shocks, whereas family insurance via market activities is dominant in reducing the magnitude and likelihood of extreme and rare shocks. The size and persistence of earnings risk as well as the insurance role of family and government vary across gender, marital and parental status. Accounting for these non-Gaussian and non-linearity features is thus important for policy design and evaluation.</p> <p>Research Grant: This research was supported by the Australian Research Council. (Grant: DP210102784)</p>
TEACHING EXPERIENCE	<p>Associate Lecturer, Australian National University 2022 - 2023 Economic Policy Issues (undergraduate and graduate) Mathematical Techniques for Economic Analysis (graduate) Public Sector Economics (undergraduate)</p> <p>Teaching Assistant, Australian National University 2017 - 2021, 2024 Microeconomics 1 (undergraduate) Macroeconomics 1 (undergraduate) Economics 1 (undergraduate, honours track) Macroeconomics 2 (undergraduate) International Economics (undergraduate and graduate) Public Choice and Politics (undergraduate)</p> <p><i>Average score in teacher evaluations:</i> 4.5/5</p>
RESEARCH POSITION	<p>Core member, Macro Public Finance Lab, Australian National University 2023 - Present</p>
PRESENTATIONS	<p>2025 (scheduled) American Economic Association (AEA) Annual Meeting (poster)</p> <p>2024 Joint Workshop by Australasian Macroeconomics Society (WAMS) and Laboratory for Aggregate Economics and Finance (LAEF) (scheduled) Labour Econometrics Workshop (LEW) Australian Conference of Economists (ACE) Society for Computational Economics 30th International Conference on Computing in Economics and Finance (CEF) Macroeconomics Seminar Series 2024 (Australian National University)</p> <p>2023 37th PhD Conference in Economics and Business (University of Melbourne) 17th Western Economic Association International (WEAI) Conference</p> <p>2022 21st Society for the Advancement of Economic Theory (SAET) Conference 31st Australian Labour Market Research (ALMR) Workshop PhD Workshop (Australian National University) Tax and Transfer Policy Institute (TTPI) Seminar Series (Crawford School of Public Policy, Australian National University) Macroeconomics Seminar Series 2024 (Australian National University)</p>

2021

Workshop of the Australasian Macroeconomics Society (WAMS)
 ALife Conference (Crawford School of Public Policy, Australian National University)
 PhD Workshop (Australian National University)

SOFTWARE	Primary: Fortran, Stata Secondary: MATLAB (+Dynare), Python, R	
LANGUAGES	Native: Cambodian/Khmer Fluent: English (IELTS 8.5) Work-in-progress: Japanese, Turkish	
AWARDS & SCHOLARSHIPS	Higher Degree Research Scholarships (Australian National University) Fourth-Year Honours List for Excellence in Academic Achievement (University of Toronto) First Prize for Excellence in Academic Achievement (Royal University of Phnom Penh) Admission Scholarships (Royal University of Phnom Penh)	2019 - 2023 2013 2009 2009
PROFESSIONAL EXPERIENCE/ SERVICES	External Reviewer Green Ideals: Exploring Sustainability in ASEAN and Beyond Assessment of Land Resources and Economic Potential of Land Use Transformation in Cambodia Cambodian Financial Technology Development Policy Prosperity or Distress? An Impact Assessment of Microfinance in Cambodia Climate Economic Growth Impact Model	September 2024 September - November 2023 June 2023 May - June 2023 February - April 2018
	Co-Author UN Environment Programme and Korea Environment Institute Report Environmental Sustainability in Asia: Progress, Challenges and Opportunities for the Implementation of the Sustainable Development Goals	March - June 2019
	Intern Climate Change Trust Fund Secretariat (Under UNDP, EU, SIDA and DANIDA)	October 2013 - June 2014
REFERENCES	Associate Professor: Chung Tran Research School of Economics, Australian National University chung.tran@anu.edu.au +61 2 6125 5638 Emeritus Professor: Robert G. Gregory Research School of Economics, Australian National University bob.gregory@anu.edu.au +61 2 612 52192 Associate Dean (Education): Dana Hanna College of Business and Economics, Australian National University dana.hanna@anu.edu.au +61 2 6125 4487	