

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)

Progressive income taxes and means-tested child benefits aim to support low-income families; however, their interaction creates high and non-linear effective marginal tax rates (EMTRs), especially for low-income mothers. I document this equity-efficiency trade-off using Australian household survey data (HILDA), and explore how tax and child benefit systems should be designed to maximize welfare. To this end, I develop a dynamic general equilibrium model of overlapping generations, calibrated to Australia (2012–2018), with rich household heterogeneity in family structure, female human capital, and uninsurable earnings risks. I find that optimal tax reform reduces tax progressivity, shifting tax burdens from high- to low-income brackets to incentivize longer work hours. This scheme produces a modest welfare gain but disadvantages some low-education parents, undermining the objectives of child benefits. A joint optimal system combines reduced tax progressivity, benefiting high-education parents, with a universal lump-sum child benefit at 30% of average income to compensate low-education parents for the increased tax liabilities. This yields superior parental and overall welfare outcomes, but the resulting tax burden imposes notable losses on non-parents. Moderately scaled-back transfers provide smaller welfare gains but at substantially lower costs to non-parents, whereas larger transfers lead to excessive tax burdens that harm the intended beneficiaries. These findings highlight the importance of policy coordination and fiscal sustainability in effectively supporting parents while balancing equity and efficiency.

WORKING PAPERS

"Child-Related Transfers, Means Testing and Welfare"

2023

(with Chung Tran)

Status: Ongoing

(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 exerts 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

This paper examines the evolution of earnings distribution over three decades of uninterrupted economic growth in Australia from 1991 to 2020. Using a 10% sample of taxpayer records, we document key statistics for earnings inequality, dynamics, and mobility. Our results reveal moderate upward mobility, particularly among younger workers. However, we also find an upward trend in earnings inequality, driven mainly by growth at the top of the income distribution, with men experiencing higher levels of inequality than women. Additionally, idiosyncratic earnings risk—measured through dispersion and skewness—remained persistent throughout this period. These findings enhance understanding of income inequality dynamics, highlighting steady mobility over the life cycle and enduring top-end inequality despite stable economic conditions.

PUBLICATION	<p>"Lifecycle Earnings Risk and Insurance: New Evidence from Australia" 2023 (with Chung Tran) <i>Economic Record</i>, 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 to Chung Tran)</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 (Student Survey Results)</p>
RESEARCH POSITION	<p>Core member, Macro Public Finance Lab, Australian National University 2023 - Present</p>
PRESENTATIONS	<p>2025 (scheduled) <i>American Economic Association (AEA) Annual Meeting (poster)</i></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	Chung Tran Associate Professor Research School of Economics, Australian National University chung.tran@anu.edu.au +61 2 6125 5638 Robert G. Gregory Emeritus Professor Research School of Economics, Australian National University bob.gregory@anu.edu.au +61 2 612 52192 Dana Hanna Associate Dean (Education) and Senior Lecturer College of Business and Economics, Australian National University dana.hanna@anu.edu.au +61 2 6125 4487	