Darapheak Tin

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EDUCATION	**Australian National University** Canberra, Australia

EDUCATION

Australian National University — Canberra, Australia
Ph.D. - Economics — 2019 - 2025 (expected)
DISSERTATION: "*Topics in Optimal Design of Taxes and Child Benefits*"

M.A. - Economics — 2015 - 2017

University of Toronto — Toronto, Canada
B.B.A. - Economics Specialist — 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)

While means-tested child benefit and progressive tax systems aim to support low-income families, my empirical documentation based on Australian household survey data (HILDA) reveals that their interaction creates high, non-linear effective marginal tax rates for low-income mothers. Building on these findings, this paper explores the joint optimization of both systems using 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 reform would reduce tax progressivity, encouraging labor supply primarily among highly educated women; however, it also raises tax liabilities for low-income parents, thereby undermining the objectives of child benefit programs. A joint optimal system combines reduced tax progressivity, benefiting high-education parents, with a universal lump-sum child benefit at 30% of median income to compensate low-income parents for the increased tax liabilities. This approach substantially improves parental and overall welfare, though the resulting tax burden imposes notable losses on non-parent households. A moderately scaled-back benefit, while not optimal, yields welfare gains for parents at a lower cost 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 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

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).

PUBLICATION	**"Lifecycle Earnings Risk and Insurance: New Evidence from Australia"** 2023

PUBLICATION

"Lifecycle Earnings Risk and Insurance: New Evidence from Australia" 2023
(with Chung Tran)
Economic Record, 99(325): 141-174, 2023 (Article, Slides)

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.

Research Grant: This research was supported by the Australian Research Council. (Grant: DP210102784 to Chung Tran)

RESEARCH POSITION

Core member, Macro Public Finance Lab, Australian National University   2023 - Present

PRESENTATIONS

2025 (scheduled)
American Economic Association (AEA) Annual Meeting (poster)
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)
2023
37th PhD Conference in Economics and Business (University of Melbourne)
17th Western Economic Association International (WEAI) Conference
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)
2021
Workshop of the Australasian Macroeconomics Society (WAMS)
ALife Conference (Crawford School of Public Policy, Australian National University)
PhD Workshop (Australian National University)

TEACHING EXPERIENCE

Associate Lecturer, Australian National University   2022 - 2023
Economic Policy Issues (undergraduate and graduate)
Mathematical Techniques for Economic Analysis (graduate)
Public Sector Economics (undergraduate)

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)

Average score in teacher evaluations: **4.5/5**   (Student Survey Results)

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)	2019 - 2023
	Fourth-Year Honours List for Excellence in Academic Achievement (University of Toronto)	2013
	First Prize for Excellence in Academic Achievement (Royal University of Phnom Penh)	2009
	Admission Scholarships (Royal University of Phnom Penh)	2009

PROFESSIONAL EXPERIENCE/ SERVICES

External Reviewer

Green Ideals: Exploring Sustainability in ASEAN and Beyond	September 2024
Assessment of Land Resources and Economic Potential of Land Use Transformation in Cambodia	September - November 2023
Cambodian Financial Technology Development Policy	June 2023
Prosperity or Distress? An Impact Assessment of Microfinance in Cambodia	May - June 2023
Climate Economic Growth Impact Model	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

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