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EDUCATION

Ph.D. Economics, McGill University, May 2025
M.A. Economics, Xiamen University, China, 2018
B.A. Chemistry (Major) and Economics (Minor), Xiamen University, China, 2015

FIELDS OF SPECIALIZATION

Primary: Applied Microeconomics (Health, Environmental, Energy Economics)
Secondary: Financial Economics

DISSERTATION

Three Essays on Health and Energy Economics
Committee: Prof. Erin Strumpf, Prof. Franque Grimard, Prof. Jill Baumgartner

JOB MARKET PAPER

“Household Heating Fuel Choice and Behaviours: Evidence from Rural China”, Nov 2024, 77 pages

The Clean Heating Policy, aimed at encouraging households in Northern China to transition from coal to electricity or gas, marks a pivotal effort in combating air pollution. However, the effectiveness of household fuel substitution policies in fuel choices and heating behaviors has seldom been thoroughly assessed. This paper utilizes data from three rounds of a detailed panel dataset collected during the Coal to Electricity program in Beijing to explore the dynamics of heating fuel choice and behavior among rural households. By using a difference-in-differences (DID) approach, my analysis reveals a significant yet partial transition from coal to electricity among affected households and a spontaneous transition towards electricity in areas not directly targeted by the policy. I also study determinants influencing households' fuel choices and behaviors in the absence of coal ban policy. Employing a correlated random effects model to account for unobserved individual heterogeneity, I identify key variables such as fuel prices, household income, education, marital status, and house area that markedly influence these choices. Notable differences are observed in the determinants affecting fuel choices and usage patterns, particularly in the roles of coal prices and income. These findings indicate that choosing fuel types and determining usage levels might be governed by separate household decision-making processes.

RESEARCH PAPERS

“How Do Early-Life Shocks Interact with Subsequent Human Capital Investment? Evidence From Indonesia”, working paper

This paper utilizes two distinct exogenous variables that influence human capital accumulation in rural Indonesia—early-life rainfall shocks and access to free Early Childhood Education and Development (ECED) services—to test the Critical Programming Period hypothesis, which suggests that shocks experienced at birth could have long lasting consequences. The study also explores whether access to ECED services can mitigate the long-term consequences of these negative shocks experienced during the critical programming period. Our analysis reveals that adverse rainfall shocks during the year of

birth negatively impact children's physical health, emotional maturity, and language and cognitive skills. Contrarily, the provision of free ECED services yields mixed results on these developmental dimensions, providing inconclusive evidence of their capacity to mitigate early-life adversities.

“The Impact of Clean Heating Policy on Sleep Patterns in Rural China”, working paper

This paper leverages data from Beijing's Coal to Electricity transition program, applying a DID methodology to explore the coal ban policy's effects on sleep patterns. This analysis recognizes that sleep is not always more is better, and thus, investigates the intervention's heterogeneous impacts across different sleep durations. By examining various sleep outcomes and defining categories such as short sleepers and long sleepers, alongside deviations from recommended sleep durations, this study clarifies which groups are most influenced by the policy. The findings indicate that the policy significantly affects specific demographics: short sleepers, long sleepers, males, and individuals aged 60-70, particularly in regions undergoing substantial shifts from polluting to clean heating fuels. Although the policy successfully changed the way homes are heated from coal to electricity, which should have improved air quality and maintained more consistent temperatures indoors, these changes did not have a big impact on improving sleep quality as might have been expected. Despite cleaner air and better temperature control, these factors did not play a major role in enhancing the sleep experiences of individuals.

TEACHING EXPERIENCE

Teaching Assistant, Mathematics for Economists, McGill University, Summer 2022 and Summer 2023
Teaching Assistant, Political Economy of Trade Policy, McGill University, Fall 2024
Teaching Assistant, Microeconomic Analysis and Application, McGill University, Winter 2024
Teaching Assistant, Labour Markets and Wages, McGill University, Fall 2023
Teaching Assistant, Macroeconomic Policy, McGill University, Winter 2023
Teaching Assistant, Macroeconomic Analysis and Application, McGill University, Winter 2021, Winter 2022, Fall 2023
Teaching Assistant, Microeconomic Theory, McGill University, Fall 2018, Winter 2019, Fall 2019, Winter 2020, Fall 2020, Winter 2021, Fall 2021 and Fall 2022

GRANTS AND AWARDS

Kyoichi Kageyama Award, McGill University, 2020-2021
MITACS Training Awards, McGill University, 2020-2021
Graduate Excellence Award, McGill University, 2019-2021
McCall MacBain Fellowship, McGill University, 2018-2019
The Triple-A Student Award, Xiamen University, 2017
National Scholarship for Graduate Students, Xiamen University, 2016
Xue Ye Scholarship, Xiamen University, 2015-2017

CONFERENCE AND SEMINAR PRESENTATIONS

BHET Research Group Meeting, McGill University, July 2024
CIREQ Lunch Seminar, McGill University, March 2024
BHET Research Group Meeting, McGill University, Feb 2024
CIREQ Lunch Seminar, McGill University, June 2022

LANGUAGES

Mandarin Chinese (native), English (fluent), French (Intermediate)

COMPUTATIONAL SKILLS

Stata, Matlab, Python, R, LaTeX

REFERENCES

Prof. Erin Strumpf	McGill University	erin.strumpf@mcgill.ca	514-398-2880
Prof. Franque Grimard	McGill University	franque.grimard@mcgill.ca	514-398-4717
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