## WENMEI TU

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# PLACEMENT DIRECTORS

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## **EDUCATION**

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

## FIELDS OF SPECIALIZATION

Primary: Applied Microeconomics 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.

#### **OTHER RESEARCH PAPERS**

"How Do Early-Life Shocks Interact with Subsequent Human Capital Investment? Evidence From Indonesia", work in progress

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", work in progress

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**

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

# LANGUAGES

Mandarin Chinese (native), English (fluent)

# COMPUTATIONAL SKILLS

Stata, Matlab, Python, R, LaTex

## REFERENCES

Prof. Erin Strumpf Prof. Franque Grimard Prof. Jill Baumgartner McGill University McGill University McGill University erin.strumpf@mcgill.ca514-398-2880franque.grimard@mcgill.ca514-398-4717jill.baumgartner@mcgill.ca514-398-6688