## Amina Enkhbold

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Citizenship: Mongolian, Canadian Permanent Resident

Research Interests: Monetary Economics, Macro-finance, Banking

## **EDUCATION**

Ph.D., Economics, University of Toronto 2015-2021 (Expected)

Committee: Serdar Ozkan (advisor), Margarida Duarte

Michelle Alexopoulos

M.A., Economics (Doctoral Stream), University of Toronto 2014-2015

B.A. (Specialized Honours), Economics, York University 2012-2014

Summa cum laude

## Research Projects

Monetary Policy Transmission, Bank Market Power and Wholesale Funding Reliance (Job Market Paper)

US Mortgage Regulation and Market Structure

Cross-Country Monetary Policy Transmission

The Mortgage Credit Channel of Macroeconomic Transmission: Evidence from Shadow Banks

# AWARDS AND GRANTS

Ontario Graduate Scholarship	2020-2021
Graduate Student Conference Travel Grant	2019
University of Toronto Doctoral Fellowship	2014-2020
Faculty of Arts and Sciences Admission Awards	2014-2020

# Professional Experience

Teaching Assistant, University of Toronto

2014 - present

- ECO419: International Macroeconomics
- ECO409: Topics in Money, Banking, and Finance
- ECO373: The Environment: Perspectives from Economics and Ecology
- ECO365: International Monetary Economics
- ECO230: International Economic Institutions and Policy
- ECO209: Macroeconomic Theory
- ECO202: Macroeconomic Theory and Policy
- ECO200: Microeconomic Theory

# SEMINAR AND CONFERENCE PRESENTATIONS

- 2019 Annual Conference of the Canadian Economic Association (Banff), Ryerson University
- 2018 Bank of Canada: Graduate Student Paper Workshop
- 2017 Bank of Canada: Empirical Industrial Organization workshop, Canada Mortgage and Housing Corporation: Housing Finance Symposium

#### LANGUAGES

Mongolian (native), English (fluent), Russian (intermediate), Mandarin Chinese (beginner)

Programming: Stata, Python, MATLAB, Dynare

## REFERENCES

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#### Abstracts

# Monetary Policy Transmission, Bank Market Power and Wholesale Funding Reliance

(Job Market Paper)

This paper studies how market concentration in the banking sector and wholesale funding reliance affect the transmission of monetary policy shocks to mortgage rates. Using US bank- and loan-level data, I document that in response to a monetary policy shock that raises the policy rate by 100 basis points, banks at the 90th percentile of the wholesale funding reliance in concentrated markets transmit 61 basis points to mortgage rates. Banks at the 10th percentile of the wholesale funding reliance in competitive markets transmit 108 basis points to mortgage rates. To explain these facts, I develop a New Keynesian model with a monopolistically competitive banking sector that has a costly access to wholesale funding. My model, relative to a New Keynesian model with a perfectly competitive banking sector, dampens the transmission of monetary policy on mortgage rates, consumption and housing prices. My model is qualitatively consistent with the significant difference in monetary policy transmission between low and high-market power banks with a greater reliance on wholesale funding that I document in the data. I find that in response to an increase of 100 basis points, mortgage rates rise by 22 basis points and housing prices fall by 0.7%. The partial rise in the mortgage rate dampens the fall in borrowers' consumption by 1.5 percentage points. Finally, I study monetary policy transmission under the Basel III liquidity coverage ratio rule that limits excessive reliance on wholesale funding in the banking sector. High market power banks respond strongly to a contractionary monetary policy on mortgage rates because they decrease their reliance on wholesale funding.

#### Cross-Country Monetary Policy Transmission: Evidence from Bank Market Power

Why are mortgage and deposit rates in the euro area dispersed despite being a monetary union? I study a cross-country credit channel of monetary policy transmission via bank market power. My results show that in response to a contractionary monetary policy shock, banks with high market power charge 49 bps lower deposit rate and charge 20 bps higher mortgage rate relative to banks with low market power. The amount of deposits do not change. Lower deposit rate decreases bank funding which makes mortgage rates more expensive. Banks with high market power appear to be less resilient to monetary contractions as they are more constrained by lower profitability margin. As a consequence, monetary policy decisions are transmitted to mortgage and deposit rates mainly through banks with low market power. In periods of financial stress, monetary policy is ineffective in countries with highly concentrated banking.

#### The Mortgage Credit Channel of Macroeconomic Transmission: Evidence from Shadow Banks

This paper solves a model of household mortgage default and labor income risk by incorporating traditional and shadow banks. I study how the interaction between traditional and shadow banks affect the mortgage credit channel of macroeconomic transmission. Shadow banks have been increasingly gaining mortgage market share and have become part of top 10 lenders in the mortgage market after the Great Recession. Shadow banks borrow warehouse lending from traditional banks and securitize mortgage loans to government securitized enterprises. Shadow banks do not face any regulation restrictions and are technologically advanced. They originate loans faster with lower defaults. Traditional banks are deposit takers, have market power over warehouse lending and face regulation constraints. I quantify how macroeconomic shocks affect loan refinancing and household defaults. I evaluate how oil shock

and low monetary policy environment affect the shadow bank funding and loan refinancing.

## US Mortgage Regulation and Market Structure

I study the impact of state anti-predatory lending (APL) laws on the expansion of riskier loans. Banks were supplying low quality mortgages to risky borrowers via predatory practices, such as refinancing with higher fees, lending without regard for the ability to repay and inflating property values above the market price. In response to predatory lending practices, states began implementing APL laws between 1999 to 2006. However, this legislation was partially offset when the Office of the Comptroller Currency exempted national banks from APL laws in 2004. I use the 2004 federal preemption rule, as an exogenous shock to assess the causal impact of APL laws on the mortgage market via national banks. I find that after the federal preemption rule, higher growing national banks increase loan origination by 10% relative to state banks. National banks increase the private share by 1.8% and the growth in marginal government securitized enterprises by 3% in states with tougher APL laws. State banks that face APL laws charge mortgage rate by 25 bps more relative to national banks. Based on these facts, I develop a structural model of the US banking sector. Borrowers choose between national and state banks. Banks compete for mortgage loans and state banks in APL states charge higher mortgage rate while national banks charge lower rate. I use the model to analyze how mortgage loan originations and the rates differ when (i) all banks face the APL laws (ii) only national banks face the APL laws and (iii) no banks face the APL laws.