Christine Tewfik

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Citizenship	Canadian
Languages	English, French (intermediate), German (basic)
Research Interests	Macroeconomics, Business Cycles, Monetary Theory
Teaching Interests	Macroeconomics, Microeconomics, Econometrics/Statistics
Education	
2010-present	PhD, Economics, University of Toronto (Expected 2017)
	Dissertation: Essays in Macroeconomics and Financial Frictions Committee: Shouyong Shi (co-supervisor), Miquel Faig (co-supervisor), Gueorgui Kambourov
2009-2010	MA, Economics, University of Toronto
2005-2009	BA (Honours), Economics with Minor in Mathematics, Carleton University

Awards

University of Toronto Doctoral Completion Grant, 2015-2016 Award for Excellence in Teaching by Teaching Assistants, University of Toronto, 2014 Ontario Graduate Scholarship, 2010-2011, 2011-2012, 2012-2013, 2014-2015 University of Toronto Fellowship

- 2009 (Masters), 2010-2014 (PhD)
- Top-up, 2010-2011
- Performance bonus, 2012

SSHRC Canadian Graduate Scholarship (Masters), 2009

University of Toronto Graduate Admission Award, 2009

Governor General's Silver Medal for highest undergraduate academic standing (Carleton), 2009 Carleton University Economics Scholarship, 2008 Carleton University Irwin Gillespie Award in Economic, 2006 Carleton University Rymes Book Award, 2008 Carleton University L.N. Wadlin Scholarship for Excellence in Mathematics, 2006 Carleton University R.L. Rosenberg Memorial Scholarship in Mathematics, 2005 Carleton University Entrance Scholarship, 2005-2009

Publications and Research Papers

Unemployment and Mortgage Default: The Role of Firm Financial Frictions (Job Market Paper)

Financial Frictions, Investment Delay, and Asset Market Interventions, *Journal of Money, Credit and Banking* vol. 47(S2), pages 155-196 (2015), with Shouyong Shi
Presented at: Canadian Economics Association Annual Conference (2013)
Summer Workshop on Money, Banking, Payments and Finance, Federal Reserve of Chicago (2013)
Midwest Macro Meeting, University of Minnesota (2013)

Professional Experience

2014-2016:	Course Instructor, University of Toronto	
	 Intermediate Macroeconomic Theory for Specialists (2014-2015, Summer 2015, Summer 2016, full year) Intermediate Macroeconomic Theory and Policy for Commerce (2015-2016 full year) 	
2013:	Lead Writing Teaching Assistant, University of Toronto	
	 Part of the Writing Instruction for TAs (WIT) program Worked with instructors in macroeconomics and economic history to incorporate more writing practice and assignments into courses, as well as provided training and support for TAs to help them respond to student writing. 	
2009-present:	Teaching Assistant, University of Toronto	
	Courses (# of semesters)	
	 Twentieth Century Economic History (12) Quantitative Methods in Economics (5) Canadian Economic History (2) International Monetary Theory (2) 	

- Money, Banking and Financial Markets (2)
- Mathematics and Statistics of MA & MFE Students (1)

- Principles of Economics for Non-Specialists (1)
- Wide range of experience holding tutorials and writing workshops, as well as grading essays and marking problem sets
- Responsible for creating and introducing extra essay writing help in Economic History, in the form of an essay outline in order to identify writing issues early on
- 2010-2011: Research Assistant, University of Toronto
 - Diego Restuccia, Macroeconomics and Development
 - Shouyong Shi, Macroeconomics
 - Gustavo Bobonis and Matthew Turner, Economics of Climate Change
- 2007-2009: Teaching Assistant, Carleton University
 - Courses (# of semesters)
 - Introduction to Economics (8)
 - Calculus with Applications to Business and Economics (1)
 - Differential Equations with Infinite Series for Engineering or Physics (1)
 - Honours Introduction to Probability with Applications (1)
 - International Monetary Problems (1)
 - Introduction to Statistical Modeling 1 (1)
 - Introductory Calculus (1)
 - Probability and Statistics for Engineers (1)
 - Conducted tutorials for a wide range of students from different backgrounds (Economics/Commerce, Mathematics, and Engineering)

Summer 2008: Data Analyst, Office of the Chief Electoral Officer, Ottawa, Ontario

• Provided support to statisticians, manipulated large datasets, performed data analysis, documented research projects

Summer 2007: Junior Economist, Statistics Canada (Prices Division), Ottawa, Ontario,

- Conducted background research in the financial sector in order to create an industry synopsis to be used to create a services producer price index
- Identified existing data sources and industry contacts, as well as future data needs
- Met with industry analysts to evaluate research progress

Summer 2006: Research Assistant, Canadian Heritage (Cultural Industries), Ottawa, Ontario

- Performed statistical analysis on compiled data in order to determine the effectiveness of various funding programs
- Prepared brief reports on cultural industries and activities in Canada to be included in Treasury Board reports

Computational Skills: MATLAB, Stata, LaTeX, Python

References

Professor Shouyong Shi Department of Economics The Pennsylvania State University 502 Kern Building University Park, PA 16802-3306

phone:(814) 865-2745 email: <u>sus67@psu.edu</u>

Professor Gueorgui Kambourov Department of Economics University of Toronto 150 St. George Street Toronto, ON M5S 3G7

phone: 416-978-8695 email: <u>g.kambourov@utoronto.ca</u> Professor Miquel Faig Department of Economics University of Toronto 150 St. George Street Toronto, ON M5S 3G7

phone: 416-978-0308 email: <u>miquel.faig@utoronto.ca</u>

Professor Emeritus Jon Cohen Department of Economics University of Toronto 150 St. George Street Toronto, ON M5S 3G7

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Dissertation Abstract

Essays in Macroeconomics and Financial Frictions

Job Market Paper: Unemployment and Mortgage Default: The Role of Firm Financial Frictions

The housing crisis has been the unique feature of the Great Recession. The collapse of the mortgage-backed securities market reduced the level of liquidity in the housing market, which had far-reaching consequences for macroeconomic activity. Two particularly salient outcomes of the Great Recession were high and persistent unemployment, as well as a dramatic worsening of firm credit conditions. The purpose of this paper is to analyze how an initial fall in housing market liquidity, linked to rising foreclosure costs for banks, affects labor market outcomes, which can have further feedback effects. I focus on the role that firm financial frictions play in magnifying the shock. To this end, I construct a dynamic macro model that incorporates frictional housing and labor markets, as well as firm financial frictions. Mortgages are obtained from banks that incur foreclosure costs in the event of default. Foreclosure costs also affect the ease with which firms can borrow, and this influences their hiring decisions. I calibrate the model to U.S. data, and find that a rise in foreclosure costs that generates a 10% fall in the firm loan-to-output ratio results in a 3 percentage point rise in the unemployment rate. The rise in unemployment makes it more difficult for indebted owners to avoid defaulting on their mortgage. This rise in default, on the order of 20 percent, creates further slack in the housing market by both increasing the number of houses on the market and reducing the amount of buyers. Consequently, there are large drops in housing prices and in the size of mortgage loans. Notably, when firm financial frictions are absent, I observe a counterfactual fall in the unemployment rate, which mitigates the effects on the housing market, and even results in a fall in the mortgage default rate. I also compare the effects of the shock with a more general shock to the marginal revenue of a firm. I find that large marginal revenue shocks are needed to generate the same quantitative response. The results highlight the importance of the impact of the housing market crisis on a firm's willingness to hire, and how limited access to credit magnifies the initial housing shock.

Financial Frictions, Investment Delay, and Asset Market Interventions

The Great Recession in 2008–09 highlighted the importance of financial frictions. In that recession, governments conducted large-scale asset market interventions. The intent was to increase the overall liquidity in the asset market and thus increase a firm's ability to obtain financing. One particular skepticism of this action is that firms were observed to have delayed investment by hoarding liquid funds, part of which were obtained through the interventions. We construct a dynamic macro model to incorporate financial frictions and investment delay. Investment is undertaken by entrepreneurs who face liquidity frictions in the equity market and a collateral constraint in the debt market. After calibrating the model to the U.S. data, we quantitatively examine how aggregate activity is affected by a shock to equity liquidity and a shock to entrepreneurs' borrowing capacity. We then analyze the effectiveness of government interventions in the asset market after such financial shocks. In particular, we compare the effects of government purchases of private equity and of private debt in the open market. In addition, we examine how these effects of government interventions depend on the option to delay investment.