

Antoine L. Noël (August 2020)

CONTACT INFORMATION	Queen's University Department of Economics 94 University Avenue Kingston, ON K7L 3N6 Canada	<i>Citizenship:</i> Canada <i>Telephone:</i> +1 (514) 295-8089 <i>E-mail:</i> noela@econ.queensu.ca <i>Website:</i> www.antoinenoel.ca
RESEARCH INTERESTS	International Trade, International Macroeconomics, Political Economy and Macroeconometrics	
EDUCATION	Queen's University , Kingston, Ontario Canada Ph.D. Candidate, Economics: 4.13/4.30 <ul style="list-style-type: none">• Advisors: Amy Hongfei Sun and Morten Ørregaard Nielsen• Named on the U SPORTS Academic All-Canadians board for the season 2018-2019 University of Toronto , Toronto, Ontario Canada M.A., Economics (Doctoral Stream): 3.93/4.00 Université de Montréal , Montreal, Quebec Canada B.Sc., Economics (Honours): 4.21/4.30 (Summa Cum Laude) <ul style="list-style-type: none">• Carabins student-athlete of the year 2016• Named on the U SPORTS Academic All-Canadians board from 2013 to 2016	2017-Present 2017 2016
WORKING PAPERS	Information Asymmetry and Capital Structure: Theory and Evidence, <i>with Amy Hongfei Sun</i> To infinity and beyond: Efficient computation of ARCH(∞) models, <i>with Morten Ørregaard Nielsen</i> (R&R at Journal of Time Series Analysis)	
WORK IN PROGRESS	Measurement Error and Consumption Inequality in Canada, <i>with Brant Abbott</i> (Professor at Queen's University) <i>and Samuel Brien</i> (Ph.D. candidate at Queen's University) WTO, tariffs negotiations and bargaining power	
CONFERENCE PRESENTATIONS	Canadian Econometric Study Group (Poster session)	2019
TEACHING EXPERIENCE	Queen's University , Kingston, Ontario Canada <i>Instructor</i> ECON 250: Introductory Statistics, undergraduate ECON 222: Macroeconomic Theory I, undergraduate <i>Teaching Assistant</i> ECON 222: Macroeconomic Theory I, undergraduate (Head TA) ECON 851: Econometrics II, doctoral level ECON 850: Econometrics I, doctoral level ECON 390: Natural Resource Economics, undergraduate ECON 425: International Trade Theory, undergraduate	 Fall 2020 Fall 2019 Winter 2020 Winter 2019 Fall 2018 Winter 2018 Fall 2017

University of Toronto, Toronto, Ontario Canada*Teaching Assistant*

ECO 100: Introductory Economics, undergraduate

Fall 2016

ECO 100: Introductory Economics, undergraduate

Winter 2017

Université de Montréal, Montreal, Quebec Canada*Teaching Assistant*

ECN 1075: Techniques of Economic Analysis II, undergraduate

Fall 2015

ECN 1000: Principles of Economics, undergraduate

Summer 2016

RESEARCH AND
OTHER
EXPERIENCE**Queen's University**, Kingston, Ontario Canada*Research Assistant* for Brant Abbott (Professor)

Winter 2019

University of Toronto, Toronto, Ontario Canada*Research Assistant* for Varouj Aivazian (Professor)

Summer 2017

Paul Rioux CPA, Montreal, Quebec Canada*Accounting Technician*

Summer 2015

HONORS AND
AWARDS

Joseph-Armand Bombardier CGS - Doctoral

2019-2022

R.S. McLaughlin Fellowship

2018

Queens Graduate Award

2018

Richard S. Malone Memorial Fellowship in Economics

2017

University of Toronto Fellowship

2016

Carabins (Varsity) Scholarships

2012-2016

Alma Mater Scholarship (declined)

2016

André-Raynauld Award

2016

Desjardins Excellence Award

2015

Roger Dehem Award

2015

SAE Excellence Award (Student services)

2015

Marcel Boyer Award

2014

COMPUTER SKILLS

- Statistical Packages: R, Stata
- Languages: Matlab, Ox, Dynare, Python, Javascript, Typescript
- Applications: L^AT_EX, common Windows database, spreadsheet, and presentation software

LANGUAGES

English, French (Native)

VOLUNTEERING

Member of the Varsity Leadership Committee
Special Olympics

2018-2019

2015-Present

SOCCER

Assistant Coach of the Queen's Mens Soccer

2019-2020

Co-Captain of the Queen's Mens Soccer

2018-2019

Coach of the Candiac Soccer Club

2016-2017

Player of the Carabins Men's Soccer

2012-2016

Captain of the Ottawa Fury	2011-2013
Player of the Ottawa Fury	2009-2013
Captain of Cavaliers Men's Soccer	2011-2012
Player of Cavaliers Men's Soccer	2010-2012

REFERENCES

Amy Hongfei Sun Professor, Department of Economics Queen's University Phone: 613.533.6668 Email: hfsun@econ.queensu.ca	Morten Ørregaard Nielsen Professor, Department of Economics Queen's University Phone: 613.533.2262 Email: mon@econ.queensu.ca
Brant Abbott Professor, Department of Economics Queen's University Phone: 613.533.2264 Email: brant.abbott@econ.queensu.ca	Christian Hoefler Head Coach, Queen's Men's Soccer Queen's University Phone: 613.533.6000, ext.74835 Email: qmsoccer@queensu.ca

SELECTED PAPER ABSTRACTS

Information Asymmetry and Capital Structure: Theory and Evidence, *with Amy Sun*

We propose a micro-founded theory of capital structure and document new evidence of firm financing behavior. The theoretical model features two layers of asymmetric information over investment opportunities. In our model, firms operate projects of privately known quality to generate random outputs, the realization of which is also private information. To obtain external funding, firms choose either a transparent contract or an opaque contract to offer to investors: respectively with and without having quality revealed ex ante. We prove the following: First, the optimal transparent contract is an equity contract as it offers investors a part of the ownership. The optimal opaque contract is a debt contract in that investors are paid a rate of return that is independent of the true project quality. Debt and equity arise endogenously in equilibrium as alternative methods of external financing. Secondly, factors such as the project quality, an individual firm's level of internal funds and the cost of verifying quality, all matter for the firm's optimal choice of financing method. Our theory can reconcile a variety of well-documented evidence of firm financing. In addition, we find new empirical evidence that suggests a U-shaped relationship between firms' internal funds and debt ratios. This is consistent with our theory, which proves that all else equal only firms with intermediate levels of internal funds find it optimal to choose equity over debt. The firms with rather low or rather high internal funds choose debt financing instead.

To infinity and beyond: Efficient computation of ARCH(∞) models, *with Morten Nielsen*

This paper provides an exact algorithm for efficient computation of the time series of conditional variances, and hence the likelihood function, of models that have an ARCH(∞) representation. This class of models includes, e.g., the fractionally integrated generalized autoregressive conditional heteroskedasticity (FIGARCH) model. Our algorithm is a variation of the fast fractional difference algorithm of Jensen and Nielsen (2014). It takes advantage of the fast Fourier transform (FFT) to achieve an order of magnitude improvement in computational speed. The efficiency of the algorithm allows estimation (and simulation/bootstrapping) of ARCH(∞) models, even with very large data sets and without the truncation of the filter commonly applied in the literature. We also show that the elimination of the truncation of the filter substantially reduces the bias of the quasi-maximum-likelihood estimators. Our results are illustrated in two empirical examples.