Jorge Cruz Lopez, Ph.D.

Funds Management and Banking
Bank of Canada
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Areas of Interest

Asset Pricing
Financial Risk Management
Financial Market Infrastructures

Employment

Principal Researcher
Funds Management and Banking Department, Bank of Canada (Ottawa, Canada) — 2016 - Present
Financial Markets Department, Bank of Canada (Ottawa, Canada) — 2014 - 2015

Lecturer (Finance)
Sprott School of Business, Carleton University (Ottawa, Canada) — 2016 - Present
Telfer School of Management, University of Ottawa (Ottawa, Canada) — 2018
Beedie School of Business, Simon Fraser University (Vancouver, Canada) — 2007 - 2011

Associate Editor of the Bank of Canada *Financial System Review* (FSR) — 2014 - 2015
Financial Markets Department, Bank of Canada (Ottawa, Canada)

Senior Economist — 2011 - 2014
Financial Markets Department, Bank of Canada (Ottawa, Canada)

Research / Teaching Assistant — 2004 - 2010
Beedie School of Business, Simon Fraser University (Vancouver, Canada)

Other Affiliations

Member of the Advisory Board — 2016 - Present
New York Institute of Finance, Financial Times (New York, U.S.A)

Visiting Research Fellow
Department of Finance, HEC Paris (Paris, France) — 2013 - 2014
School of Economics and Finance, QUT (Brisbane, Australia) — 2012 - 2014

Education

Ph.D. in Business Administration (Finance) — 2014
Thesis: *Essays on Collateral and Central Counterparties*
Supervisors: Christophe Pérignon (HEC Paris, France) and Daniel Smith (QUT, Australia).
External Supervisor: Peter Christoffersen (University of Toronto, Canada).
Degree: Beedie School of Business, Simon Fraser University (Vancouver, Canada)
Coursework:
Sauder School of Business, The University of British Columbia (Vancouver, Canada) — 2006 - 2008
Visits and stays:
School of Economics and Finance, QUT (Brisbane, Australia) — 2010 - 2011
Department of Finance, HEC Paris (Paris, France) — 2010

Education (Continued)

M.A. in Financial Risk Management (Graduated Top of the Class) 2006
Project: *Short Term Market Reactions to Equity Carve-Outs of U.S. Traded Companies*
Supervisors: Chris Veld and Christophe Pérignon
Degree: Beedie School of Business, Simon Fraser University (Vancouver, Canada)

B.B.A. Finance (First Class Joint Honours in Finance and Economics) 2005
Project: *Business Bankruptcy Prediction in Canada: A Theoretical Review and an Empirical Model for the Assessment of its Probability.*
Supervisor: Clyde Reed
Degree: Beedie School of Business, Simon Fraser University (Vancouver, Canada)

Additional Training and Courses

Financial and Monetary Economics (ECO 529) Ongoing (2018)
Department of Economics, Princeton University (New Jersey, U.S.A.)

Advanced Workshop for Central Bankers (Macroeconomic Models) 2017
Center for International Macroeconomics, Northwestern University (Evanston, U.S.A.)

Advanced Topics in Empirical Finance 2013
Study Center Gerzensee, Swiss National Bank (Gerzensee, Switzerland)

Systemic Risk Assessment: Identification and Monitoring 2012
Centre for Central Banking Studies, Bank of England (London, England)

Publications

FMIC 2 Special Issue Introduction: A Policy View on Developments in the Field of Financial Market Infrastructures 2018
Journal of Financial Market Infrastructures, 6(2/3), pp. 1–20.
Co-authored with Biliana Alexandrova-Kabadjova, Evangelos Benos, Jo Braithwaite, Ronald Heijmans, Mark Manning, David Murphy and Francisco Rivadeneyra.

Who Pays? CCP Resource Provision in the post-Pittsburgh world 2017
Bank of Canada Staff Discussion Paper, 2017-17.
Co-authored with Mark Manning.

CoMargin 2017
Journal of Financial and Quantitative Analysis, 52(5), pp. 2183 - 2215.
Co-authored with Jeffrey H. Harris, Christophe Hurlin and Christophe Pérignon.

Mind the Gap: Undercollateralization in the Global and Canadian OTCD Markets 2015
Analyzing the Economics of Financial Market Infrastructures, Chapter 15, pp. 304 - 316, IGI Global, Deutsche Bundesbank, Banco de Mexico, and De Nederlandsche Bank.

The Market for Collateral: The Potential Impact of Financial Regulation 2013
Financial System Review, Bank of Canada, June 2013, pp. 45 - 53.
Co-authored with Royce Mendes and Harri Vikstedt.

Clearing House, Margin Requirements, and Systemic Risk 2011
Review of Futures Markets, 19 Special Edition, pp. 39-54.
Co-authored with Jeffrey H. Harris and Christophe Pérignon.

Working Papers

Netting Relationships and Credit Exposures in Payment Systems
Co-authored with Charles Kahn (University of Illinois at Urbana-Champaign) and Gabriel Rodriguez (McGill University)

Residual Risk and Default Waterfalls in Central Counterparties

Foreign Reserves and Tail Risks
Co-authored with Francisco Rivadeneyra (Bank of Canada)

Work in Progress

Re-evaluating the Role of Financial Market Infrastructures in the Age of Cryptocurrencies and Decentralized Ledger Technologies
Co-authored with Hanna Halaburda (NYU)

Payment Relationships, Interbank Lending, and Monetary Policy
Co-authored with Haoxiang Zhu (MIT)

Determinants of Secured and Unsecured Lending in Interbank Markets
Co-authored with Alfredo Ibanez (ITAM)

Tracking Errors and Higher Order Risks in ETFs
Co-authored with Jesus Sierra (CDIC)

Systemically Important Members in Central Counterparties
Co-authored with Daniel Smith (QUT)

Central Banking Activities

International Representation

Trinity of Stability Research Network 2015
Bank of Canada, Deutsche Bundesbank, Federal Reserve, Princeton University and Sverges Riskbank

Working Groups and Task Forces

Payments Modernization 2016 - Present
Bank of Canada (Ottawa, Canada)
OTC Derivatives 2015
Bank of Canada (Ottawa, Canada)
Financial System Review 2014 - 2015
Bank of Canada (Ottawa, Canada)
Margin Requirements 2012 - 2013
Bank of Canada (Ottawa, Canada)
OTC Collateral Requirements 2012 - 2013
Bank of Canada (Ottawa, Canada)

Teaching Experience

Lecturer (Graduate, MBA)

Financial Management Concentration Integration (Capstone MBA Course) 2016 - Present
Sprott School of Business, Carleton University (Ottawa, Canada)

Lecturer (Undergraduate)

Derivatives 2018 - Present
Sprott School of Business, Carleton University (Ottawa, Canada)

Financial Management 2018
Telfer School of Management, University of Ottawa (Ottawa, Canada)

International Financial Management 2011
Simon Fraser University (Vancouver, Canada)

Investments 2009 - 2011
Simon Fraser University (Vancouver, Canada)

Derivative Securities 2007 - 2011
Simon Fraser University (Vancouver, Canada)

Corporate Banking 2008 - 2010
Simon Fraser University (Vancouver, Canada)

Teaching Assistant (Undergraduate)

Introduction to Corporate Finance 2004 - 2010
Simon Fraser University (Vancouver, Canada)

Managerial Economics 2004 - 2005, 2008
Simon Fraser University (Vancouver, Canada)

Intermediate Macroeconomic Theory 2004 - 2005
Simon Fraser University (Vancouver, Canada)

Labour Economics 2005
Simon Fraser University (Vancouver, Canada)

Other Teaching Activities

Supervision of Doctoral Degree Candidates

External Supervisor for Wenqian Huang, PhD Candidate (Finance) 2014 - 2017
VU University Amsterdam (Amsterdam, The Netherlands)

Supervision of Masters Degree Candidates

External Supervisor for Clayton Wong and David Gontovnick, MSc Finance 2014
Simon Fraser University (Vancouver, Canada)
Internship Supervisor for Miaomiao Duo and Yanan Shao, MS Math Finance 2017
Boston University (Boston, U.S.A.)

Case Competitions

Founder of Finance International Case Competition 2010
Simon Fraser University (Vancouver, Canada)

Coach for Queen's University ICBC Case Competition and 2007 - 2010
JDC West Competition 2008 (Finance and Accounting)
Simon Fraser University (Vancouver, Canada)

Representative at the Royal Roads International Case Competition 2005
Simon Fraser University (Vancouver, Canada)

Awards, Grants and Fellowships

CDI Research Grant CAD $75,000 — 2012 - 2015
Canadian Derivatives Institute (Montreal, Canada)
Joint with Christophe Hurlin and Christophe Pérignon

Graduate Fellowship CAD$6,250/year — 2005 - 2011
Simon Fraser University (Vancouver, Canada)

President's PhD Research Stipend CAD$6,250 — 2010
Simon Fraser University (Vancouver, Canada)

HSBC Graduate Award in Business Administration CAD$5,200 — 2007
HSBC Canada (Vancouver, Canada)

Keynote Presentations

Managing Risk in Centralized Financial Market Infrastructures — Forthcoming
Paris Innovative Finance and FinTech Workshop, ISC Paris Business School (Paris, France)

New Tools for Identifying, Measuring and Managing Risk in CCPs — 2016
Annual Economics Conference: CCPs and Quantitative Disclosures,
Federal Reserve Bank of Chicago (Chicago, U.S.A)

CoMargin: A collateral system to reduce systemic risk — 2015
4th Annual Collateral Management Forum, Global Leading Conferences (Vienna, Austria)

Seminar Presentations

Swiss National Bank — 2019 (Forthcoming)
Money Market and Foreign Exchange (Zurich, Switzerland)

Federal Reserve Board of Governors — 2018 (Forthcoming)
Payment System Studies section (Washington D.C., U.S.A.)

University of Victoria — 2018 (Forthcoming)
Peter B. Gustavson School of Business (Victoria, Canada)

University of Ottawa — 2018
Statistics and Probability Research Group (Ottawa, Canada)

London School of Economics (LSE) — 2018
Systemic Risk Centre (London, England)

Bank of England
Markets Infrastructure Directorate (London, England) — 2017, 2018
Financial Stability Department (London, England) — 2013
Centre for Central Banking Studies (London, England) — 2012

Bank for International Settlements (BIS)
Committee on Payments and Market Infrastructures, CPMI (Basel, Switzerland) — 2017
BIS Representative Office for the Americas (Basel, Switzerland) — 2016

VU University Amsterdam
Faculty of Economics and Business Administration (Amsterdam, The Netherlands) — 2017

Simon Fraser University
Beedie School of Business (Vancouver, Canada) — 2015, 2017

Seminar Presentations (continued)

Boston University
MS in Mathematical Finance Program, Questrom School of Business (Boston, U.S.A.) 2017
Finance Department, Questrom School of Business (Boston, U.S.A.) 2015

Banco de México (Banxico)
Financial Stability Department (Mexico City, Mexico) 2014, 2017

Federal Reserve Bank of Chicago
Research Department (Chicago, U.S.A.) 2016

U.S. Commodity Futures Trading Commission (CFTC)
Economic Analysis Department (Washington D.C., U.S.A.) 2016

The University of Tokyo
Faculty of Economics (Tokyo, Japan) 2014

Bank of Japan
Financial System and Bank Examination Department (Tokyo, Japan) 2014

Instituto Tecnológico Autónomo de México (ITAM)
Faculty of Business Administration and Department of Mathematics (Mexico City, Mexico) 2014

Queensland University of Technology
School of Economics and Finance (Queensland, Australia) 2014

Bank of Canada
Management Forum Presentation to the Board of Governors (Ottawa, Canada) 2013
Financial Markets Department (Ottawa, Canada) 2011

Reserve Bank of Australia
Financial Stability Department (Sydney, Australia) 2011

Academic Conference Presentations

Joint Bank of Canada and Payments Canada Workshop
5th Edition: Innovations in Payment Systems, FinTech and Central Bank Digital Currencies (Ottawa, Canada) 2018* (Forthcoming)
4th Edition: Payments Research Symposium (Ottawa, Canada) 2017

Summer Workshop on Money, Banking, Payments and Finance 2018
Federal Reserve Bank of St. Louis (St. Louis, U.S.A.)

CEA Annual Conference 2014, 2017c, 2018
Canadian Economics Association (Canada)

Mini-symposium on Systemic Risk 2018
The Fields Institute for Research in Mathematical Sciences and Global Risk Institute (Toronto, Canada)

*Conference Chair, †Session Chair, ‡Discussant, cCoauthor presentation

Academic Conference Presentations (continued)

2018 Quantitative Risk Management and Financial Analytics Workshop — 2018
University of Ottawa (Ottawa, Canada)

Financial Market Infrastructure Conference II — 2017†
Bank of Canada, Bank of England, Bank of Mexico and De Nederlandsche Bank (Amsterdam, The Netherlands)

FMA Conferences
- Financial Management Association Latin America (Mexico City, Mexico) — 2017
- Financial Management Association Asia (Tokyo, Japan)† — 2014
- Financial Management Association Europe (Istanbul, Turkey) — 2012

NFA Conference — 2012, 2016‡
Northern Finance Association (Canada)

The Sixth Risk Management Conference — 2015‡
University of Toronto, Bank of Canada, McGill University (Mont Tremblant, Canada)

Third BIS Research Network Meeting: Global Financial Interconnectedness — 2015‡
Bank for International Settlements (Basel, Switzerland)

AFA Annual Meetings — 2015
American Finance Association and Office of Financial Research (Boston, U.S.A.)

Auckland Finance Meeting — 2014†
Auckland Center for Financial Research, Auckland University of Technology (Auckland, New Zealand)

Australasian Finance and Banking Conference — 2010†, 2011, 2014
23rd, 24th and 27th Editions, University of New South Wales (Sydney, Australia)

Bank of Canada Conferences
- Collateral, Liquidity and Central Bank Operations (Ottawa, Canada) — 2014
- Fellowship Learning Exchange (Ottawa, Canada) — 2014
- International Financial Markets Workshop (Ottawa, Canada) — 2011
- Financial Intermediation and Market Dynamics Workshop (Ottawa, Canada) — 2011

Third IFSID Conference on Derivatives — 2014
Institut de la Finance Structurée et des Instruments Dérivés de Montréal, HEC Montreal (Montreal, Canada)

Systemic Risk and Financial Regulation Conference — 2014
Banque de France and The Society for Financial Econometrics, SoFiE (Paris, France)

CEMLA Conference — 2012
Centro de Estudios Monetarios Latinoamericanos (Montevideo, Uruguay)

World Business and Economics Research Conference — 2011
World Business Institute (Auckland, New Zealand)

Frontiers in Financial Econometrics Workshop — 2011
The Bendheim Center for Finance, Princeton University and The National Centre for Econometric Research, Queensland University of Technology (Brisbane, Australia)

*Conference Chair, †Session Chair, ‡Discussant, cCoauthor presentation

Academic Conference Presentations (continued)

Conference on Extreme Dependence in Financial Markets 2011
Erasmus University (Rotterdam, The Netherlands)

The 6th Annual Interdisciplinary Research in the Mathematical and Computational Sciences Day 2011
Poster Presentation, Simon Fraser University (Burnaby, Canada)

Ciclo de Conferencias Económicas 2008
Universidad Autónoma del Estado de Hidalgo (Pachuca, Mexico)

[*]Conference Chair, [†]Session Chair, [‡]Discussant, [c]Coauthor presentation

Industry Presentations

Collateral Management Forum 2017
Session presentation, Fleming (New York, U.S.A.)

Cleared and Uncleared Margins: Solutions and Optimization 2017
Session presentation, Risk.net (New York, U.S.A.)

Initial Margin Optimization for Financial Institutions 2017[*]
Session presentation, Global Financial Market Intelligence
(New York, U.S.A.)

New York Institute of Finance, Financial Times
Seminar presentation, Chartered Financial Risk Engineer Program (New York City, U.S.A.) 2016, 2017, 2018
Seminar presentation, Central Banking Training (New York City, U.S.A.) 2017

National Asset-Liability Management Europe Conference 2017
Session presentation, Central Banking (London, England)

Global Risk Management Forum 2016
Session presentation, Fleming (New York, U.S.A.)

5th Annual Collateral Management Forum 2016
Session presentation, Global Leading Conferences (Amsterdam, The Netherlands)

Collateral Excellence 2016[*]
Session presentation, Global Financial Market Intelligence
(New York, U.S.A.)

Derivatives World Congress 2015
Panel presentation, American Leaders (Chicago, U.S.A.)

Enterprise Collateral Conference 2014[†]
Session presentation, WB Research (London, England)

Euro-Asia Economic Forum 2013[†]
Panel Presentation (Xi'an, China)

Toronto Financial Information Summit 2013
Panel Presentation (Toronto, Canada)

[*]Conference Chair, [†]Session Chair, [‡]Discussant, [c]Coauthor presentation

Editorial Duties

Journal of Financial Market Infrastructures 2017
Co-Editor, Special Issue Financial Market Infrastructure Conference II Proceedings
(Amsterdam, The Netherlands)

Financial System Review 2014 - 2015
Associate Editor, Bank of Canada (Ottawa, Canada)

Journal Refereeing

The Sixth Public Investors Conference Proceedings 2017
Bank for International Settlements, World Bank, Bank of Canada
(Washington D.C., U.S.A.)

Journal of Financial Market Infrastructures 2017

Canadian Journal of Economics 2015, 2016

Quantitative Finance 2014, 2015

Revue Finance (Association Française de Finance) 2014

Scientific Committees

New Zealand Finance Meeting 2015, 2016, 2017, 2018
Auckland Center for Financial Research, Auckland University of Technology
(Auckland, New Zealand)

Joint Bank of Canada and Payments Canada Workshop
5th Edition: Innovations in Payment Systems, FinTech and Central Bank Digital Currencies (Ottawa, Canada) 2018

Bank of Canada Student Paper Award
Bank of Canada (Ottawa, Canada) 2018
Bank of Canada and Canadian Economics Association (Ottawa, Canada) 2017

International Conference on Information Systems (ICIS) 2018
Association for Information Systems (San Francisco, U.S.A.)

ANR Generic Call for Proposals 2018
The French National Research Agency
L'Agence nationale de la recherche (Paris, France)

NFA Conference 2017, 2018
Northern Finance Association (Canada)

First International Conference on Physics, Mathematics and Statistics 2018
The University of Hong Kong and Georgia State University (Shanghai, China)

Prepasup International Conference 2015
Prepasup (Paris, France)

Organizing Committees

Financial Market Infrastructure Conference

3rd Edition: Organizing Committee — 2018 - 2019
Bank of Canada, Bank of England, Bank of Mexico and De Nederlandsche Bank, Federal Reserve Bank of Chicago (Ottawa, Canada)

2nd Edition: Organizing Committee — 2017
Bank of Canada, Bank of England, Bank of Mexico and De Nederlandsche Bank (Amsterdam, The Netherlands)

Joint Bank of Canada and Payments Canada Workshop

5th Edition: Conference Chair, Innovations in Payment Systems, FinTech and Central Bank Digital Currencies, Bank of Canada and Payments Canada (Ottawa, Canada) — 2018

Bank of Canada Seminar Series

Lead Coordinator, Funds Management and Banking Department (Ottawa, Canada) — 2016 - 2017

Lead Coordinator, Financial Markets Department (Ottawa, Canada) — 2011 - 2013

Global Risk Management Forum — 2016, 2017
Advisory Committee, Fleming (New York, U.S.A.)

FMA Latin America Conference — 2017
Panel Organizer (Central Banking),
Financial Management Association (Mexico City, Mexico)

Derivatives World Congress — 2016
Advisory Committee, Fleming (Chicago, U.S.A.)

Collateral, Liquidity and Central Bank Operations Conference — 2014
Organizing Committee, Bank of Canada (Ottawa, Canada)

Volunteering and Community Involvement

Big Brother Mentor — 2009
Big Brothers of Greater Vancouver (Vancouver, Canada)

Christmas Toy Ride Volunteer — 2002 - 2008
Rotary International (Pachuca, Mexico)

Radio Show Co-host – Yucastereo — 2004 - 2006
CJSF Radio 90.1 FM (Vancouver, Canada)

Volunteer Teacher — 1999 - 2000
Casa del Niño DIF Orphanage (Pachuca, Mexico)

Personal Information

Citizenship: Mexican (Canadian Permanent Resident)
Hobbies: Soccer, chess, taekwondo (World Taekwondo Federation First Degree Black Belt).