Arsène K. Brou

Department of Finance, Insurance and Real Estate, Université Laval, Québec, Canada
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Education

Ph.D. in Quantitative Finance 2020 – **Expected 2025**
Université Laval, Québec, Canada
Advisor: Richard Luger

M.Sc. in Statistics and Quantitative Economics (ISE) 2016 – 2019
Ecole Nationale Supérieure de Statistique et d'Économie Appliquée (ENSEA), Abidjan, Côte d'Ivoire

Intensive two-year B.Sc. in Economics - Mathematics 2014 – 2016
Institut National Polytechnique (INP-HB), Yamoussoukro, Côte d'Ivoire

Fields of Interests

Primary fields: Financial Econometrics, Macro-Finance, Forecasting, Risk Management

Secondary fields: Portfolio Management, Numerical Methods

Working papers

1. A new decomposition approach to modeling financial returns: conditioning sign on magnitude
2. The economic value of reward-to-risk timing strategies using return-decomposition GARCH models
3. Finite-sample multiple variance ratio tests for the random walk hypothesis

Experience

Lecturer

GSF-2107: Quantitative Investment Analysis and Programming, Undergraduate Winter 2022, Fall 2024

R and VBA Programming with Applications in Finance, Graduate Fall 2022 – Present

Teaching Assistant

GSF-3105: Computational Finance, Undergraduate Fall 2023

GSF-7000: Financial Econometrics II, Graduate Winter 2021 – Present

GSF-6094: Quantitative Risk Management, Graduate Fall 2021 – Present

GSF-2107: Quantitative Investment Analysis and Programming, Undergraduate Fall 2020, Winter 2021, Fall 2021

Research Assistant Jan 2020 – Aug 2021
for Prof. Issouf Soumaré

Research support for the writing of the book Commodity Exchanges: Concepts, Tools and Guidelines

Non Academic

Consultant in Statistics, Centre for Affordable Housing Finance in Africa (CAHF),
Johannesburg Area, South Africa – 5 months 2019

- Study on housing finance for low-income households
- Implementation of a survey design; Supervision of data collection; Analysis of results
  https://housingfinanceafrica.org/app/uploads/Rapport-CIV-CIL-final-1.pdf

Internship (Corporate Credit Risk Management), Banque Nationale d'Investissement (BNI),
Abidjan, Cote d'Ivoire – 5 months 2018

- Score model and PD (Probability of Default) calculation for corporates according to Basel agreements
- Estimation of a transition matrix between default classes
- Determination of the explanatory factors of default for the companies in the bank's portfolio

Recent Conferences

A new decomposition approach to modeling financial returns: conditioning sign on magnitude

2024 Africa Meeting of the Econometric Society (AFES 2024)
June 2024, Abidjan, Cote d'Ivoire (virtual)

57th Annual Conference of the Canadian Economics Association (CEA 2023)
June 2023, Winnipeg, Canada

62e Conférence annuelle de la Société Canadienne des Sciences Économiques (SCSE 2023)
May 2023, Québec, Canada

Centre de Recherche sur les Risques, les Enjeux Economiques et les Politiques Publiques (CRREP) Ph.D. Student Day
May 2023, Université Laval, Québec, Canada

16th International Conference on Computational and Financial Econometrics (CFE 2022)
December 2022, King's College, London, United Kingdom

P.h.D Workshop in Economics, Statistics, and Finance (online)
December 2022, Montréal, Canada

The economic value of reward-to-risk timing strategies using return-decomposition GARCH models

58th Annual Conference of the Canadian Economics Association (CEA 2024)
June 2024, Toronto, Canada

63e Conférence annuelle de la Société Canadienne des Sciences Économiques (SCSE 2024)
May 2024, Montréal, Canada

17th International Conference on Computational and Financial Econometrics (CFE 2023)
December 2023, University of Applied Sciences, Berlin, Germany (virtual)

P.h.D Workshop in Economics, Statistics, and Finance (online)
December 2023, Montréal, Canada

Software, Languages and Association Memberships

Software: R, C++, Rcpp, Julia, VBA, Stata, LaTeX, Bloomberg terminal

Languages: French (native), English (fluent)

Association Memberships: Canadian Economics Association, Econometric Society, CRREP

Fellowship, Awards and Grants

CEA Student Travel Grant	2024
Ph.D. Student Scholarship, CRREP, Université Laval	2024
Fellowship, CRREP	2021 – Present
Université Laval Finance Department Entrance Scholarship (Ph.D.)	2020 – 2024
Ph.D. Student Scholarship, CRREP, Université Laval	2022
Scholarship, Fonds Conrad-Leblanc, Université Laval	2022
Scholarship, Chaire IG Gestion de Patrimoine en Planification Financière	2022
Ph.D. Student Research Scholarship, Université Laval	2022
Public Forum Debate Winner (with a team), ENSEA	2019

Leadership, Talks and Volunteering Activities

Talk with M.Sc. Students from ENSEA and Many other Universities in Abidjan, Côte d'Ivoire, about pursuing a Ph.D. in North America	2024
Chair for the CEA Conference - Financial Economics: Portfolio Management session	2024
Invited talk on Côte d'Ivoire's Economy and Culture; Model United Nations final preparation St. Lawrence college, Québec, Canada	2024
Chair for the SCSE Conference - Finance session	2023
Member of the organizing committee for the 9th Africa Business and Entrepreneurship Research Society (ABERS) Conference	2022

REFERENCES

Richard Luger (Advisor)
Full Professor of Finance
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