Curriculum Vitae – Fall 2024

Family name: **Christophe**
Given name: **Barrette**
Gender: Male
Date of birth: 14/05/1999
Citizenship: Canadian
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Qualifications

PhD student in Economics – Bocconi University, Milan, Italy
2024 – Present

MSc in Financial Economics – University of Québec at Montréal, Montréal, Canada
2022 – 2024
Dissertation (Graded excellent): *''Les indices monétaires Divisia dans une nouvelle ère monétaire: éléments d'évidence empirique pour les États-Unis/ Divisia monetary indices in a new monetary era: Elements of Empirical Evidence for the United States''*
Adviser: Prof. Alain Paquet

BSc in Science – University of Québec at Montréal, Montréal, Canada
2018 – 2021
Major in Actuarial studies
Certificate in Economics

Awards and Scholarships

2024 – 2028 PhD Fellowship / *Bocconi University*
2023 Fondation J. -A. DeSève - Master / *University of Québec at Montreal 2023*

Research Interests

Econometrics, Machine Learning, Macroeconomics and Monetary Policy

Working Papers

Barrette, Christophe and Paquet, Alain. "***Shocking the Economy from 1967 up to 2023: Reinforcing the Relevance of Divisia Money in US Monetary Policy***". Available at RePEc:
https://ideas.repec.org/p/bbh/wpaper/24-04.html
ABSTRACT:

Using US quarterly data from 1967 to 2023, which includes the surge and subsequent decline in inflation following the pandemic, as well as the significant expansionary monetary policy from quantitative easing preceding a renewed focus on bringing inflation back to the 2% target, we resort to both traditional and new econometric tools to assess the stability of the sign and size of key macroeconomic variables responses to monetary shocks. Our results reinforce and confirm the importance of a broad Divisia measure for understanding monetary policy transmission and making informed policy decisions. In particular, the overall shape of the price responses to a Divisia-based monetary shock is particularly consistent throughout the entire sample. Monetary policy shocks from the fed funds rate or shadow policy interest rate alone fail to produce responses free from empirical puzzles and consistent with expected intuition, for both earlier and extended sample periods. In contrast, Divisia measures generate IRFs that are puzzle-free and align with economic theory and intuition. They are empirically relevant in explaining output and price dynamics from the late 60s to today.

Goulet Coulombe, Philippe and Klieber, Karin and Barrette, Christophe and Göbel, Maximilian. ''**Maximally Forward-Looking Core Inflation**''. Available at SSRN: https://ssrn.com/abstract=4758517

ABSTRACT:

Timely monetary policy decision-making requires timely core inflation measures. We create a new core inflation series that is explicitly designed to succeed at that goal. Precisely, we introduce the Assemblage Regression, a generalized nonnegative ridge regression problem that optimizes the price index's subcomponent weights such that the aggregate is maximally predictive of future headline inflation. Ordering subcomponents according to their rank in each period switches the algorithm to be learning supervised trimmed inflation — or, put differently, the maximally forward-looking summary statistic of the realized price changes distribution. In an extensive out-of-sample forecasting experiment for the US and the euro area, we find substantial improvements for signaling medium-term inflation developments in both the pre- and post-Covid years. Those coming from the supervised trimmed version are particularly striking, and are attributable to a highly asymmetric trimming which contrasts with conventional indicators. We also find that this metric was indicating first upward pressures on inflation as early as mid-2020 and quickly captured the turning point in 2022. We also consider extensions, like assembling inflation from geographical regions, trimmed temporal aggregation, and building core measures specialized for either upside or downside inflation risks.

Work in Progress

Barrette, Christophe. ''**Model for Employment by Region and Occupation (MERO)**''.

ABSTRACT:

Effective labor market analysis demands timely and accurate employment estimates. We introduce the Model for Employment by Region and Occupation (MERO), designed to provide high-frequency employment data in Quebec. By leveraging multiple datasets, including census and survey data, MERO captures nuanced regional and occupational dynamics that traditional survey often miss. The model integrates high-quality census data with diverse survey inputs, optimizing for both professional and regional disaggregation. This approach ensures that estimates remain closely aligned with census figures while addressing the noise introduced by higher-frequency surveys. Our methodology employs structural equations and filtering techniques, allowing MERO to produce quarterly estimates that are both reliable and relevant. In extensive validation, MERO demonstrates significant improvements in estimating employment trends compared to conventional surveys. This model's adaptability allows for easy generalization to other regions and classification systems, paving the way for more informed labor market decision.

Work Experience

2023 – Present **Research professional**
ESG-UQAM Research Chair in Macroeconomics and Forecasting
Professors: Dalibor Stevanovic and Alain Guay

2021 – 2023 **Teaching assistant**
University of Québec at Montreal
ECO1013 – Microeconomics I Fall 2021, Winter 2023
ECO2013 – Microeconomics II Fall 2022

2021 **Research assistant**
University of Québec at Montreal
Professors: Alain Paquet and Arnaud Dellis

2020 – 2021 **Actuarial intern**
Actuary and Tariffication, Desjardins Insurance

Language Skills

French (native)
English (C1 TOEFL)

IT Skills

R: Excellent; created a package (https://github.com/ChristopheBarrette/Assemblage)
MATLAB: Excellent; coded a function based on a research article.
LATEX: Excellent; wrote a dissertation and multiple projects.
Stata: Fairly good; completed a class.
VBA: Fairly good; completed a class.
Microsoft Office; Good.

Conferences

Presented "***Shocking the Economy from 1967 up to 2023: Reinforcing the Relevance of Divisia Money in US Monetary Policy***" at:

Annual conference of the Society for Economic Measurement (SEM), Georgia Institute of Technology Atlanta, August 2024

Workshop: Montreal Macro Brown Bag, at CIRANO, April 2024

Annual meeting of the Canadian Economics Association (CEA), June 2023

Annual meeting of the Société canadienne de science économique (SCSE), May 2023

Presented "***Shocking the Economy from 1967 up to 2023: Reinforcing the Relevance of Divisia Money in US Monetary Policy***" at:

Annual meeting of the Société canadienne de science économique (SCSE), May 2024