

Bastien Buchwalter

✉ SKEMA Business School, Finance Research Center
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Academic Positions

02/2022 – 04/2022 **Visiting Scholar** SKEMA Research Center of AI, Montreal, Canada
08/2020 – present **Assistant Professor** Finance, SKEMA Business School, Paris, France
08/2019 – 08/2020 **Lecturer** Finance, ESSEC Business School, Paris, France
05/2019 – 07/2019 **Visiting Scholar** Bank of Canada, Ottawa, Canada

Education

Ph.D. Finance ESSEC Business School, Paris, France, 2020
M.Res. Finance ESSEC Business School, Paris, France, 2017
M.Sc. Economics Eberhard Karls University, Tübingen, Germany, 2015

Research Interests

Primary Crypto-assets and Financial Stability
Secondary Empirical Asset Pricing and Sustainable Finance

Working Papers

[1] Tail Risk, Core Risk and Expected Stock Returns

Breckenfelder Johannes, Buchwalter Bastien, Tédongap Roméo

We decompose the realized variance into four components: downside tail, downside core, upside core and upside tail. This approach yields better prediction than established predictors such as VIX and the price-dividend ratio.

[2] Multifractal Cryptocurrencies

Buchwalter Bastien, Czellar Veronika, Iyidogan Engin [submitted]

We propose a Markov-switching multifractal model for the high-frequency return of cryptocurrencies. Using AML we estimate all the parameters of the MSM model. Our results further link the critical \bar{k} parameter to the liquidity and other market dynamics of cryptocurrency returns.

[3] **Bitcoin Options and High-Frequency Data for Derivative-Based Trading Strategies**

Buchwalter Bastien, Proelss Juliane, Schweizer Denis

The return of Bitcoin is not predictable, however, the components of it are. Combining return forecasts with a dataset covering more than 10 million bitcoin option trades, we develop profitable trading strategies with long and short positions in bitcoin options.

[4] **How to Optimally Structure and Rebalance a Crypto-asset Portfolio?**

Buchwalter Bastien, Proelss Juliane, Schweizer Denis

This paper investigates portfolio strategies involving only crypto-assets. We analyze optimal investment strategies for various types of investors. A concluding cluster analysis reveals which strategy performs best across various risk metrics.

[5] **Momentum Strategies and Risk Preferences of Crypto-asset Investors**

Buchwalter Bastien, Proelss Juliane, Schweizer Denis [submitted]

This study delves into the momentum effects and investor risk aversion in the dynamic crypto-asset market. Utilizing the largest dataset yet in this context, our analysis allows us to explore the relationship between initial and subsequent returns as well as the impact of investor risk aversion.

[6] **Decrypting Crypto-assets: Introduction to an Emerging Asset Class**

Buchwalter Bastien

This survey explains the blockchain technology for a nontechnical audience and addresses misconceptions about crypto-assets. The greatest misunderstanding consists of the fact that not all crypto-assets are crypto-currencies.

[7] **Contagious Volatility**

Buchwalter Bastien

This paper investigates the financial stability implications of crypto-assets. We identify and quantify two channels via which crypto-assets impact traditional assets: stable coins and crypto-assets used for remittances.

[8] **Sectoral Impulse Response Functions**

Buchwalter Bastien

This paper proposes an overarching theory, coined sectoral impulse response functions, which not only includes orthogonalized and generalized impulse response functions as corner solution but also contains a wide range of alternative specifications that allow to capture heterogeneous dynamics, both within and across markets.

— Conferences, Seminars and Panels —

- 2023 Cryptocurrency Research Conference, Monaco, Monaco
Digital, Innovation, Financing and Entrepreneurship Conference, Montreal, Canada
Forecasting Financial Markets, University of Rennes, Rennes, France
Cross Country Perspectives in Finance Conference, Paphos, Cyprus*
French Inter Business School Finance Conference, Toulouse, France*
Finance Seminar, University of St. Gallen, St. Gallen, Switzerland*
Finance Seminar, University of Luxemburg, Luxemburg, Luxembourg*
Finance Seminar, Rennes School of Business, Rennes, France*
- 2022 Finance Seminar, Concordia University, Montreal, Canada
Asset Pricing Breakfast, ESSEC Business School, Paris, France*
Finance Seminar, SKEMA Business School, Paris, France*
Panelist at Décryptons les cryptos, FrenchTech, Montreal, Canada
Cardiff FinTech Conference, Cardiff University, Cardiff, UK
Future of Finance, Suzhou University, Suzhou, China
FinTech Workshop, INSEEC Research Center, Lyon, France
- 2021 Panelist at Cryptocurrency and Fund Performance, CAIA, Geneva, Switzerland
- 2020 Finance Seminar, NEOMA Business School, Paris, France
Finance Seminar, Boston University, Boston, USA
- 2019 Paris December Finance Meeting, Paris, France
Finance Seminar, ESSEC Business School, Paris, France
Finance Seminar, Bank of Canada, Ottawa, Canada
CEMA Annual Meeting, Carnegie Mellon University, Pittsburgh, USA
Asset and Risk Management, Amundi, Paris, France
Finance PhD Workshop, Université Paris-Dauphine, Paris, France
Fintech Adoption and Economic Behavior, EM Strasbourg, Strasbourg, France
- 2018 Finance Seminar, ESSEC Business School, Paris, France
Computational and Financial Econometrics, University of Pisa, Pisa, Italy
FinTech and Crypto-Finance, NEOMA Business School, Paris, France

*presented by a coauthor

— Personal Information —

Citizenships **French & German**

Languages **French:** native, **German:** native, **English:** fluent

Programming Python, HTML, CSS, Javascript, Matlab

— References —

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