Raul Guarini Riva

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EDUCATION

Northwestern University, Evanston - USA *2019-2025 (expected)*
Ph.D. in Finance
- Main fields: Asset Pricing, Macro-Finance
- Secondary fields: Machine Learning/Econometrics
- Ph.D. Committee: Viktor Todorov (chair), Torben Andersen (co-chair), Robert Korajczyk, and Caio Almeida

Fundacao Getulio Vargas, Rio de Janeiro - Brazil *2017-2019*
M.Sc. in Economics

Fundacao Getulio Vargas, Rio de Janeiro - Brazil *2013-2016*
B.A. in Economics

WORKING PAPERS

Asymmetric Violations of the Spanning Hypothesis - Job Market Paper
(joint with Gustavo Freire)
We document that the Spanning Hypothesis, which most macro-finance term structure models imply, is violated asymmetrically along the U.S. nominal yield curve. Using an interpretable reduced- form representation of yields and different Machine Learning techniques, we find that macroeconomic variables enhance the predictability of yields only for the shorter end of the yield curve, with no evidence of improvements for the longer end. Such asymmetry leads to higher predictability of bond returns for shorter maturities and economic gains to a mean-variance investor, adding nuance to the debate about yield curve predictability. We provide evidence that this extra predictability comes from more accurate predictions of the path of short rates and not from the term premia. We further show that moments in which the Federal Reserve deviates from the Taylor Rule are associated with sharper increases in the predictability of the short end when conditioning on macro data.

How Much Unspanned Volatility Can Different Shocks Explain?
Runner-up for best Quantitative Finance paper at the 2024 Brazilian Finance Society meeting.

Subjective beliefs, disagreement, and market return predictability
(joint with Felipe Iachan) - submitted

PUBLICATIONS

Intraday Cross-Sectional Distribution of Systematic Risk *Journal of Econometrics, 2023*
(joint with Torben Andersen, Martin Thyrsgaard, Viktor Todorov)
Best paper award at the 2022 SoFiE Annual Meeting in Cambridge, UK

SERVICE AS REVIEWER

- Journal of Financial Econometrics × 2
- International Journal of Forecasting × 1
- Quarterly Review of Economics and Finance × 1

PRESENTATIONS

2024: *FinEML Seminar Series, Machine Learning for Finance Bootcamp at the Fields Institute, Midwest Macro 2024 (Spring), QFFE 2024, 2024 SoFiE Annual Meeting, 2024 IAAE Annual Meeting, Brazilian Finance Society Meeting, Bachelier Society World Congress, European Meeting of the Econometric Society*

2023: *Northwestern Kellogg, SoFiE Summer School (Brussels), Brazilian Finance Society Meeting, 5th International Workshop in Financial Econometrics, COPPEAD-UFRJ, 17th BRMG Conference on Macro and Financial Econometrics, Trends in Macroeconometrics at UIUC*

2022: *Northwestern Kellogg, Brazilian Finance Society Meeting*

TEACHING EXPERIENCE

Econometrics (*Teaching Assistant - 2020, 2021, 2022, 2023*): PhD-level class taught by Viktor Todorov covering basic results on identification, estimation, and inference. Lectures included theory and computational exercises.
Derivatives (*Teaching Assistant - 2020, 2021, 2022, 2023*): MBA and undergrad classes taught both by Viktor Todorov and Costis Skiadas on basic notions of derivative markets, main instruments, the Black-Scholes formula and binomial pricing. Lectures were theory-focused.
Advanced Derivatives (*Teaching Assistant - 2020*): Undergraduate class taught by Robert McDonald on computational methods in derivative pricing, including Monte Carlo pricing of exotic options. I advised students on empirical problems, mostly using R.
Capital Markets (*Teaching Assistant - 2020, 2021, 2022, 2023*): MBA and undergraduate classes taught by Ian Dew-Becker and Viktor Todorov on basic principles of portfolio allocation, CAPM, empirical asset pricing and ESG investing. Lectures included theory reviews and computational implementations in Python.

LANGUAGES

Programming Languages: Python, R, Matlab, SQL, LaTeX, Markdown, Typst
Human Languages: Portuguese (native), English (fluent), French (basic)

REFERENCES

Viktor Todorov
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