

ANDRÉ B.M. SOUZA

www.andrebmsouza.com | andre.souza@barcelonagse.eu

RESEARCH INTERESTS: Forecasting, Time series econometrics
High-Dimensional statistics, Empirical finance

LANGUAGES: Fluent in Portuguese, English and Spanish

CODING: R, MATLAB, Python, STATA , Ruby on Rails, Bash, HTML, SQL

CITIZENSHIP: Brazilian and Italian

Education

SEP 2017 - CURRENT PhD Candidate in FINANCE AND ECONOMICS,
Expected Completion: Aug 2021 **Universitat Pompeu Fabra, Barcelona**
Advisor: Prof. Christian Brownlees

SEP 2016- JUL 2017 Master of Research in FINANCE AND ECONOMICS,
Universitat Pompeu Fabra, Barcelona
Thesis: "House Prices, Credit Shocks and the Great Recession"
Advisor: Prof. Christian Brownlees
Reader: Prof. José-Luis Peydró

SEP 2015-JUL 2016 Master of Science in FINANCE AND ECONOMICS, Finance track
Barcelona Graduate School of Economics, Barcelona
Thesis: "Pricing CDS under Lévy Models: An application to European Banks"
Advisor: Prof. Christian Brownlees and Prof. Eulalia Nualart

JAN 2011 - JUL 2013 Undergraduate Degree in ECONOMICS
IBMEC, Belo Horizonte, Brazil
Thesis: "Advertising and Quality: How advertising expenditure signals firm quality"
Advisor: Prof. Guilherme Hamdan

JAN 2009 - DEC 2011 Undergraduate Degree in BUSINESS MANAGEMENT
International Business School, Belo Horizonte, Brazil
Thesis: "Strategic Management and Game Theory: Do managers behave strategically?"
Advisor: Prof. Andréa Baroneza

Teaching and Research Assistantship (Graduate Level)

JUL 2018 - *current* Research Assistant to Albert Banal-Estañol
SEP 2018-19 Lecturer: Brush Up in Econometrics - Barcelona School of Management

SEP-DEC 2017-18 TA: Financial Modelling - ESADE Business School

SEP-DEC 2017 TA: Investments - ESADE Business School

SEP 2017-19 TA: Brush Up in Statistics - Barcelona GSE

JUL 2017-19 TA: Time Series Methods for Financial Time Series
Barcelona GSE Macroeconometrics Summer School

JAN - MAR 2017-19 TA: Financial Econometrics

SEP - DEC 2016-19 TA: Financial Accounting - Barcelona School Of Management.

Conferences and Presentations

SUMMER 2018	BARCELONA GSE SUMMER FORUM , <i>Poster</i> <i>Interval Forecasting in Large Panels, with Christian Brownlees</i>
APRIL 2019	ZARAGOZA IXT TIME SERIES ECONOMETRICS , <i>Evaluating Multiple Interval Forecasts, with Christian Brownlees</i>

Research In Progress

Backtesting Global Growth at Risk, joint with *Christian Brownlees*;

We carry out an out-of-sample backtesting exercise of multivariate Growth-at-Risk (GaR) predictions for 24 OECD countries. We consider forecasting methods based on Quantile Regression (QR) and GARCH models. We find evidence of predictability up to one year ahead and that forecasts based on GARCH models dominate those based on QR. Our empirical evidence supports the view that the time-varying dynamics of the lower quantiles of GDP growth cannot be distinguished from those implied by time-varying volatility.

Evaluating Multiple Interval Forecasts, joint with *Christian Brownlees*;

We introduce a framework to evaluate collections of interval forecasts for multiple time series. We propose an evaluation criteria based on the dependence properties of the forecasts. Our criteria assumes that a forecaster prefers, *ceteris paribus*, the collection that minimizes the probability of simultaneous interval forecast violations for a large number of time series. Evaluation of the collections is carried out by means of a simple loss function. We establish that, under mild assumptions, such loss leads to consistent ranking of the forecasts. We apply our framework to evaluate commonly used Value-at-Risk (VaR) forecasting methods for all S&P 500 stocks. We find that methods that take the factor structure of volatility into account substantially reduce dependence across VaR violations.