

# Francisco Torralba, PhD, CFA

francisco.torralba@gmail.com - (312)480-8705 - [www.linkedin.com/in/franciscotorralba/](http://www.linkedin.com/in/franciscotorralba/)

**Employment eligibility:** U.S. citizen, authorized to work for any U.S. employer.

Professional economist with 11 years of experience in finance and macroeconomics. Experienced using advanced statistics and econometrics and communicating to expert and non-expert audiences, and proficient with multiple computer languages. Independent, self-motivated, and restless learner.

## EDUCATION

---

<b>Ph.D.</b> , Economics, University of Chicago, Chicago, IL	Aug. 2010
<b>M.A.</b> , Economics, University of Chicago, Chicago, IL	Jun. 2008
<b>B.S.</b> , Economics, Universitat Pompeu Fabra, Barcelona, Spain	Jun. 1999

## EXPERIENCE

---

### Morningstar Investment Management Inc., Chicago, IL

*Director of Research* Jan. 2022 - Feb. 2022

- Replicate, design and execute systematic, quantitative equity strategies and portfolios.
- Promote research, analysis, and data collection best practices.
- Develop training sessions on quantitative methods and economics, for mid-level and junior analysts.

*Senior Economist* Jan. 2015 - Dec. 2021

- Created quantitative assessment of the macroeconomic vulnerability ("country risk") of 30 countries. Used multivariate kernel density in R to produce nine indicators of vulnerability per country.
- Estimated the *long-run* equity risk premium (ERP), using both cash-flow-discount models and time-series models, working with both Matlab and Python. The models were then combined, mitigating model uncertainty.
- Forecast EBIT per share, at the one-year horizon, for a cross section of companies, using company-level fundamentals and analysts' forecasts and working with R. Compared the out-of-sample forecasting performance of random forest with those from traditional panel-data models.
- Estimated the co-movement of revenue of MSCI industries and industry groups with global economic activity, using Stata, as an assessment of the cyclical/defensiveness of industries based on revenue.
- Replicated an existing model of term premiums from the zero-coupon curve in Python, informing internal users about the drivers of sovereign bond yields for six countries.
- Developed model to predict macroeconomic crises using machine learning and traditional methods.

*Economist (Ibbotson Associates, Inc.)* Jun. 2010 - Dec. 2014

- Owned and improved time series forecast of inflation for a client, and delivered monthly updates.
- Independently wrote quarterly commentary on global economic outlook and financial trends, directed to both our external audience (clients) and internal users (portfolio managers and asset class leaders).
- Presented to internal and external audiences, including at our annual conference, on the outlook for the economy and the markets.
- Supervised intern for four months.

### Nuveen Asset Management, Chicago, IL

*Research Analyst* Sep. 2008 - Jun. 2009

- Rated credit quality of municipal bonds in the healthcare and senior living sectors.
- Analyzed financial statements of hospitals and retirement facilities to assess the sustainability of existing and new debt liabilities, and the current pricing of corporate bonds relative to comparable issuers.
- Met schedule of bond issuer reviews per month.
- Led economics committee that produced outlook for growth, inflation, and interest rates.

## University of Chicago, Chicago, IL

### *Research Assistant and Teaching Assistant*

2003 - 2007

- Empirical investigation on the importance of precautionary saving, for prof. A. Lusardi.
- Empirical investigation of the profitability of investments in real estate, for prof. P. Willen.
- TA for classes in: macroeconomics (3), microeconomics, econometrics, and labour economics.

## KPMG, Barcelona, Spain

### *Senior Accountant*

Sep. 1999 - Jul. 2001

- Participated in accounting audits of financial entities (banking, insurance, and mutual funds).
- Prepared, analyzed, and consolidated financial statements.

## BBVA, corporate banking office, Barcelona, Spain

### *Summer intern*

Jun. 1998 - Sep. 1998

- Discounting of trade bills.

## SKILLS

---

### **Econometrics/quantitative analysis**

Time series modeling and forecasting; prediction of binary dependent variables with small samples; analysis of panel data with cross-sectional dependence; random forests and penalized regression; estimation of Bayesian models; forecast combination; assembling and updating customized data sets from public data feeds. Visualization and presentation of data via R, MS Excel, L<sup>A</sup>T<sub>E</sub>X(beamer), and MS PowerPoint.

### **Computer languages and software**

R, Matlab/Octave, Python, Stata, L<sup>A</sup>T<sub>E</sub>X, R Markdown, MS Office. Beginner in SQL, Tableau, and Julia.

### **Natural languages**

Native speaker of Spanish and Catalan; intermediate French.

## CONTINUING EDUCATION

---

Time Series Methods for Risk Analysis, Barcelona School of Econ. (20 hrs.)	Feb. 28-Mar.11, 2022
Stata Conference 2020, Stata Corp. (12 hrs.)	Jul. 30-31, 2020
Machine Learning and Data Science for Economists, NABE (14 hrs.)	Feb. 28-Mar.1, 2018
Communication and Presentation Skills Seminar, NABE (14 hrs.)	Oct. 1-2, 2014
Applied Econometrics Certificate Program, NABE (21 hrs.)	Aug. 18-21, 2014
<b>Chartered Financial Analyst</b> , CFA Institute (~ 900 hrs.)	Aug. 2013
Economic Measurement Seminar, NABE (14 hrs.)	Jul. 25-26, 2011
Graduate Summer School, London School of Economics, London, U.K. (~ 50 hrs.)	Jul. 2000

## PUBLICATIONS

---

"The importance of business owners in assessing the size of precautionary savings," (with E. Hurst, A. Lusardi, and A. Kennickell) *Review of Economics and Statistics*, 92(1), February 2010, 61-69.  
[doi.org/10.1162/rest.2009.11500](https://doi.org/10.1162/rest.2009.11500) (Longer version: [www.nber.org/papers/w11731](http://www.nber.org/papers/w11731).)

## HONORS AND AWARDS

---

Banco de España Graduate Studies Scholarship	2004 - 2006
Fundación Caja Madrid Graduate Studies Scholarship	2002 - 2004
Fundación FUNCAS Graduate Studies Scholarship	2001 - 2002