







Daniel Parra

Researcher

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Qualities



Professional Activities



Research Interests

Macroeconomics, Climate Change, Applied and Financial econometrics.

Education

- 2016-2018 M.Sc. in Economics (Summa Cum Laude) Colombia
Universidad Nacional de Colombia
Thesis with honors distinction: Monetary Policy transmission in Colombia: TVP-VAR approach (in Spanish)
- 2009-2014 M.Sc. in Applied Mathematics (Cum Laude) Colombia
Universidad Nacional de Colombia
Thesis: Estimating the exchange rate peso-dollar volatility using a stochastic volatility model (in Spanish)
- 2003-2008 B.A. in Economics Colombia
Universidad Nacional de Colombia
- 2000-2003 Technologist in Data Systematization Colombia
Universidad Distrital Francisco José de Caldas

Work Experience

2018-current Researcher Central Bank of Colombia
Monetary Policy and Economic Information Division

- Provide intellectual leadership by bringing new ideas into policy discussions and contributing to setting the agenda.
- Interpretation and analysis of quantitative and qualitative results of different research projects.
- Develop econometric applications for forecasting in R Shiny.

2022 Visiting researcher Geneva Graduate Institute (IHEID)
Bilateral Assistance and Capacity Building for Central Banks.

- Develop a research work under the supervision of Luca Benati: "Estimating the Output Gap After COVID: An Application to Colombia"
- Participate in external trainings in Study Center Gerzensee: Course "Bayesian Methods for Empirical Macroeconomics" with professor Gary Koop.

2016-2018 Lead Economist Advisor Central Bank of Colombia
Monetary Policy and Economic Information Division

- Advise the Governor and the Board of Directors on topics related to Monetary Policy and Colombian GDP perspectives.
- Support the preparation of policy papers and presentations for the Governor and the Board of Directors.

2014-2016 Senior Economist Central Bank of Colombia
Economic Studies Division

- In charge of one of the most important models for making monetary policy decisions (Mechanisms Transmission Model).
- Provide technical assistance in the field of monetary policy planning and evaluation and formulation of strategies (scenarios).
- Member of the inter-institutional committee on issues of national accounts and economic measurement between the Colombian Ministry of Finance, the Colombian National Institute of Statistics (DANE) and the Central Bank.

2012-2014 Specialized Economist Central Bank of Colombia
Economic Studies Division

- Develop quarterly reports on Colombian inflation and GDP outlook.
- Develop econometric tools and its assessment.
- Set up, calibrate and maintain the econometric models for inflation and GDP forecast.

Awards and Recognitions

Top 28% Latin America Research IDEAS RePEc ranking

(2016-17) Scholarship in graduated studies in exchange for teaching activities, Universidad Nacional de Colombia

(2010) Employee award of Economic Studies Division Central Bank of Colombia (Banco de la República)

Programming Skills

R



Matlab



Eviews



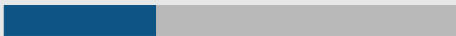
RATS



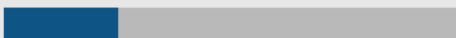
Stata



C++



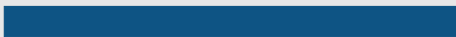
Python



(*)[The skill scale is from 0 (Fundamental Awareness) to 6 (Expert).]

Other IT Skills

Microsoft Office



LaTeX



Bloomberg



(*)[The skill scale is from 0 (Fundamental Awareness) to 6 (Expert).]

2008-2012 Economist
Economic Studies Division

Central Bank of Colombia

- Analyze economic factors to determine relationships between international and regional trends and the Colombian economy.
- Monitor regional events to identify emerging economic trends and issues.
- Develop quarterly reports on international financial markets.

Teaching Experience

Lecturer

Universidad de los Andes

2021-current

Microeconometrics

Universidad Nacional de Colombia

2020

Topics in Econometrics II

2019

Financial Econometrics

2017

Financial Econometrics

2016

Econometrics II

2011-2012

Topics in Econometrics I

2009-2011

Financial Econometrics

Universidad de la Sabana

2021

Programming for economist in R

2012-2016

Macroeconometrics

Teaching assistant

Universidad del Rosario

2011

Financial Risk Econometric Modelling

professor: Luis Fernando Melo

Topics in Econometrics

professor: Luis Fernando Melo

Financial Econometrics

professor: Luis Fernando Melo

2008

Universidad de los Andes

2008

International Finance

professor: Ricardo Bernal

Peer Reviewed Publications

2022

Extreme weather events and high Colombian food prices: A non-stationary extreme value approach.

With Melo, L.F. and Orozco, C. Agricultural Economics, International Association of Agricultural Economists, vol. 53(1), pages 21-40, November.

2020

Nonlinear relationship between the weather phenomenon El Niño and Colombian food prices.

With Abril, D.S. and Melo, L.F. Australian Journal of Agricultural and Resource Economics, 64(4), 1059-1086.

2018

An Exploration of t Money Demand in Colombia: A Non-Linear Approach (in Spanish)

With Ordoñez, D. , Melo, L.F. Revista de Economía del Rosario, 21(1), 5-37.

2016

Impacts of weather anomalies on food prices in Colombia (in Spanish)

With Abril, D.S. and Melo, L.F. Ensayos sobre Política Económica, 34(80), 146-158.

2016

Impact of Holy Week on the Industrial Production Indexes by Sector in Colombia (in Spanish)

With Abril, D.S. and Melo, L.F. Revista de Economía del Rosario, 19(1), 59-84.

2014

Relationship between financial system systemic risk and the real sector: A FAVAR approach (in Spanish)

With Cabrera, W.A. and Melo, L.F. Ensayos sobre Política Económica, 32(75), 1-22. (indexed in Scopus, Elsevier)

2014

Forecasts in a less volatile economy: the Colombian case (in Spanish)

With Cajiao, S. and Melo, L.F. Coyuntura Económica. Vol. XLIV, No. 2, pp. 35-59. Fedesarrollo.

Referee Activities

Estudios de Economía

Revista Cuadernos de Economía

Revista Desarrollo y Sociedad

Revista de Economía Institucional

Revista de Economía del Caribe

Revista Ensayos Economía

Academic

Referees

Prof. Luis Fernando Melo

Professor

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Senior Econometrician

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Prof. Munir Jalil

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Executive Director-Chief Economist
Andean Region at BTG Pactual

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Chapters in Books

- 2016 Chapter 10 in book: Equitable, competitive and sustainable development of the agricultural sector in Colombia. (in Spanish)
Editors: Cano, C.G., Iregui, A.M., Ramírez, M.T. and Tribín, A.M.
Banco de Desarrollo de América Latina and Banco de la República.
- 2015 Chapter 17 in book: Monetary policy and financial stability in open small economies (in Spanish)
Editors: Gómez, J.E. and Ojeda, J.N. Banco de la República.
- 2013 Chapters 1 and 2 in book: Capital flows, external shocks and policy responses in emerging countries. (in Spanish)
Editors: Rincón, H. and Velasco, A.M. Banco de la República.

Conference Presentations

- 2019 Nonlinear Relationship between the Weather Phenomenon El Niño and Colombian Food Prices
Conference on Climate Change and its Impact in the Financial System
Mexico City, Mexico, 5th and 5th December
- 2019 Nonlinear Relationship between the Weather Phenomenon El Niño and Colombian Food Prices
XXIV Meeting of the Central Bank Researchers Network
Madrid, Spain. 30th and 31th October
- 2013 Do the different types of capital flows respond to the same fundamentals and in the same degree? Recent evidence for emerging markets
Fourth BIS Consultative Council for the Americas Research Conference: Financial stability, macroprudential policy and exchange rates.
Santiago, Chile. 25th and 26th April
- 2013-2016 Economic Seminars, Banco de la República, 8th April 2016 and 10th July 2013

Working papers

- 2023 Estimating the Output Gap After COVID: An Application to Colombia With Granados, C. IHEID Working Papers 04-2023, Economics Section, The Graduate Institute of International Studies.
- 2016 Sectoral Production Indices Heterogeneity in the Colombian Manufacturing Industry (in Spanish)
With Abril, D.S. , Melo, L.F. Borradores de Economía, 888, Banco de la República.
- 2012 Do the different types of capital flows respond to the same fundamentals and in the same degree? Recent evidence for emerging markets (in Spanish) With Arias, F., Garrido, D. and Rincón, H.
Borradores de Economía, 717, Banco de la República (English version).
- 2012-current A list of other working papers can be found in my ideas repec profile

Certifications and courses

- 2022 Advanced Courses for Doctoral Students and Faculty Members 2022
Gerzensee, Switzerland
- Bayesian Methods for Empirical Macroeconomics
Professors: Gary Koop.
- 2019 Global Initiative Program of the Bank of Korea Academy
Seoul, Korea
- Forecast combination and methods of forecast evaluation
Professors: Barbara Rossi.
- 2012 Centre for Central Banking Studies, Bank of England
London, UK
- Applied Bayesian econometrics for central bankers
Professors: Andrew Blake and Haroon Mumtaz.
- 2010-21 International Summer School in the Universidad de los Andes and the
Universidad del Rosario
Bogotá, Colombia
- Introduction to Data Science (2021)
Professors: Jorge Gallego and Fernanda Sobrino
 - Econometrics and Machine Learning: The new research frontiers in applied economy
(2019)
Professors: Roberto Rigobon and Alvaro Riascos
 - Topics on Liquidity in Macro Finance(2014)
Professors: Pierre-Olivier Weill and Saki Bigio
 - International Economics(2010)
Professors: Roberto Rigobon and Rodrigo Suescún
- 2009-20 Short Courses in Banco de la República
Bogotá, Colombia
- Nowcasting and Measurement of Economic Activity (2020)
Professor: Boragan Aruoba
 - Empirical Macroeconomics (2020)
Professor: Christiane Baumeister
 - Macroeconomic forecasting and nowcasting with mixed frequency and large datasets
(2019)
Professor: Massimiliano Marcellino
 - Financial Frictions and the Macroeconomics(2012)
Professor: Lawrence Christiano
 - Methods for applied macroeconomic research(2011)
Professor: Fabio Canova
 - The ABC of RBCs models: An introduction to dynamic macroeconomic models(2009)
Professor: George McCandless
- 2012 International Monetary Fund (IMF)
Use of DSGE Models in the Process of Policy Formulation
professors: Ruy Lama and Juan Pablo Medina.