

# Tomas Dutra Schmidt

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## WORK EXPERIENCE

### INTERNATIONAL MONETARY FUND

WASHINGTON, D.C., U.S.A.

#### FUND INTERNSHIP PROGRAM | OFFICE OF RISK MANAGEMENT

June 2023 - Sept. 2023

- Evaluated enterprise risk factors related to the IMF's impartiality by analyzing the language and tone of Executive Board minutes, identifying topics associated with perceived uneven treatment of member countries and its potential reputational risks
- Assessed the consistency of Board discussions to detect governance and credibility risks, applying textual analysis to strengthen risk monitoring within the IMF's enterprise risk management framework

#### RESEARCH ANALYST | STRATEGY, POLICY, AND REVIEW | MACROFINANCIAL UNIT

March 2019 - Sept. 2020

- Developed and published the Systemic Risk Tracker, a surveillance tool that analyzes global financial systemic risk, helping country teams deliver consistent, data-driven, and evenhanded policy advice
- Prepared and maintained databases like the Financial Development Index for assessing macro-financial conditions

### INTER-AMERICAN DEVELOPMENT BANK

WASHINGTON, D.C., U.S.A.

#### RESEARCH FELLOW | CLIMATE CHANGE & SUSTAINABLE DEVELOPMENT

Jan. 2017 - July 2017 / Feb. 2018 - March 2019

- Conducted data preparation and econometric analysis using Stata, ArcGIS, and other statistical tools to support research on topics such as determining the impact of land titling on deforestation and identifying the effects of public infrastructure investments on climate change mitigation
- Analyzed and computed producer support estimates of agricultural goods in Latin American countries to evaluate the state and composition of contemporary agricultural markets, identify any distortions and inefficiencies, and publish the findings through the Bank's website in a publication called *Agrimonitor*

### EUROPEAN CENTRAL BANK

FRANKFURT, GERMANY

#### DIRECTORATE GENERAL OF ECONOMICS TRAINEE | LABOR SURVEILLANCE

July 2017 - Jan. 2018

- Provided quantitative research and assistance to the Labor, Structural and Supply Side Economics department by monitoring private-sector debt sustainability of households and non-financial corporations in Europe
- Conducted econometric research on labor market developments in Europe, estimating how changes in household financing conditions led to uneven labor market margin adjustment responses across countries

### GLOBAL TRADE ALERT

ST.GALLEN, SWITZERLAND

#### RESEARCH ANALYST

July 2016 - Jan. 2017 / July 2017 - Jan. 2018

- Researched, identified, and reported how tariff and non-tariff policies implemented by national governments may impact and distort global trade flows, with a focus on Brazil and South Africa
- Compiled and integrated data in R to produce maps, tables, graphs, and reports depicting the evolution of the number of national measures implemented by countries worldwide that affect trade

### TELEFONICA

BARCELONA, SPAIN

#### DATA ANALYST INTERN

Aug. 2014 - Aug. 2015

- Evaluated the commercial activity of Telefonica in Catalonia and produced automated reports on its main productivity and competitiveness indicators drawing data using SQL

## EDUCATION

### GOETHE UNIVERSITY

FRANKFURT AM MAIN, GERMANY

#### PHD IN ECONOMICS

Sept. 2020 - Present

Doctoral Advisors: Alexander Ludwig and Alfons Weichenrieder

Full Scholarship awarded by the German Academic Exchange Service (DAAD)

### BARCELONA GRADUATE SCHOOL OF ECONOMICS

BARCELONA, SPAIN

#### MASTER DEGREE IN INTERNATIONAL TRADE, FINANCE AND DEVELOPMENT

Sept. 2015 - July 2016

Degree awarded jointly with Universitat Pompeu Fabra and Universitat Autònoma de Barcelona

### GEORGE WASHINGTON UNIVERSITY

WASHINGTON, D.C., U.S.A

#### BACHELOR OF ARTS. DOUBLE MAJOR IN INTERNATIONAL AFFAIRS AND ECONOMICS

Sept. 2009 - June 2013

Concentration in International Economics, Minor in History

# SKILLS

## PROGRAMMING

Expert user:

Stata • R • Python • Tableau • MATLAB •  $\text{\LaTeX}$

Proficient:

Dynare • Mathematica • VBA • SQL • Power BI • MS Access

Familiar:

SAS • ArcGIS • QGIS • SPSS • Eviews • Fortran

## SPOKEN & WRITTEN

Native fluency:

English, Spanish, Portuguese

Professional proficiency:

Catalan

Elementary proficiency:

German, Italian

# PUBLICATIONS

## PAST

- [1] Dutra Schmidt, Tomas and Iossifov, Plamen, (2021). "Cyclical Patterns of Systemic Risk Metrics: Cross-Country Analysis" IMF Working Paper. [SSRN Link](#)
- [2] Dutra Schmidt, Tomas and Riera-Crichton, Daniel. (Forthcoming). "Macroeconomic Efficiency of Public Spending and Climate Change". World Bank Working Paper. [Link to latest draft](#)
- [3] Chacón, Ángel; Dutra Schmidt, Tomas; Egas, Juan José; Shik, Olga and De Salvo, Carmine Paolo, (2018). "Análisis de políticas agropecuarias en Panamá". Inter-American Development Bank. [Link](#)
- [4] De Salvo, Carmine Paolo; De los Santos, Jesús; Dutra Schmidt, Tomas; Muñoz, Gonzalo and Egas, Juan José (2018) "Políticas agropecuarias, el DR-CAFTA y cambio climático en la República Dominicana". Inter-American Development Bank. [Link](#)

## WORK IN PROGRESS

1. "Modeling the Distribution of Tax Evasion: Implications for the Tax Gap"  
Selected for presentation at:
  - 40th European Economic Association (EEA), Bordeaux, France (August 25–28, 2025)
  - 31st International Conference on Computing in Economics and Finance (CEF), Santiago, Chile (July 7–9, 2025)
2. "Systemic Risk and Offshore Financial Wealth: A Portfolio Choice Perspective" (Preliminary Title)
3. "Political Bureaucrats? Evidence from Chile on Political Partisanship in Central Banking." with Yan Carriere.
4. "Quantifying Predisposing Factors for Evenhandedness at the IMF: An NLP/ Textual Analysis Approach" with Juliana Araujo and Marina Rousset (Preliminary Title).

# TEACHING

**INTRODUCTION TO DATA SCIENCE WITH PYTHON** Taught graduate students fundamental data science techniques using Python. Emphasized applications to economic and policy-related datasets through hands-on projects and coding exercises.

**LINEAR ALGEBRA, DIFFERENCE AND DIFFERENTIAL EQUATION SYSTEMS, AND INTRODUCTION TO MATLAB** Delivered a course introducing key mathematical tools for economics, including linear transformations, eigenvalues, and dynamic systems. Integrated MATLAB programming for solving numerical problems related to macroeconomic modeling.

# CERTIFICATES AND ADDITIONAL COURSES

- MicroMasters in Data Analytics: Essential Tools and Methods at the [Georgia Institute of Technology](#).
- CEPR Course: "Heterogeneous-Agent Macro in the Sequence Space" taught by Prof. Ludwig Straub at Mannheim University. Selected to attend by the [Center for Economic Policy and Research](#).
- LSE's Computational Macroeconomics Summer School: "Solving and simulating models with heterogeneous agents" taught by Profs. Wouter den Haan and Pontus Rendahl. Selected to attend by the [London School of Economics](#).
- Attended Workshop on "Providing Incentives for Tax Compliance through Tax Audit Design" hosted by [Einaudi Institute](#).
- PhD course in "Tax Systems" by Prof. Joel Slemrod. [Study Center Gerzensee](#), Foundation of the Swiss National Bank.
- Attended the 7th Lindau Nobel Laureate Meeting on Economic Sciences. Selected to attend as a Young Economist by the [Lindau Executive Secretariat](#).