# Serkan KOCABAŞ

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#### **EDUCATION**

Universidad Carlos III de Madrid September 2022 - September 2025

Ph.D. in Economics Madrid, Spain

Universidad Carlos III de Madrid September 2020 - September 2022

Master of Research in Economic Analysis Madrid, Spain

**Barcelona School of Economics** September 2016 - July 2017

Master of Science in Macroeconomic Policy and Financial Markets Barcelona, Spain

Middle East Technical University September 2010 - June 2015

Bachelor of Science in Economics, Honor Student Ankara, Türkiye

EXPRIENCE

European Central Bank, Germany September 2023 - September 2024

Ph.D. Trainee Frankfurt, Germany

• Working on a research project exploring the impact of bank supply shocks on firm-level investment in France, Spain, Italy, and Germany using the AnaCredit credit-registry and Orbis firm-level database. By decomposing loan growth into bank supply, firm demand, industry, and common shocks following Amiti and Weinstein (2018), we find that idiosyncratic bank supply shocks play a significant role in shaping investment dynamics from 2019 to 2023. We also find that the effects of bank supply shocks vary depending on firm characteristics such as size, age, sector, and reliance on bank loans.

BBVA Research, Turkey

November 2017 - August 2020

Economist Istanbul, Türkiye

- The macroeconomic analysis of Turkey; together with the update of several econometric models
- Using the dynamic factor model for nowcasting Turkey's GDP growth
- Understanding of inflation dynamics in Turkey by estimating a Bayesian VAR
- Yield curve estimation in Turkey by extended Nelson-Siegel Model including macroeconomic variables
- Using the BEAR toolbox for forecasting and policy analysis
- Nowcasting the Turkish unemployment rate by using real-time data from Google
- Measuring Retail Trade index using card transactional data for Turkey
- Using natural language processing (NLP), also known as text mining, to the analysis of the communication policy (i.e. statements and minutes) of the Central Bank of Turkey (CBRT)
- Composing Foreign Affairs Index using Google's Big-Query platform and the GDELT project to explore global risk

United Nations, Turkey

January 2016 - March 2016

Intern at UNICEF Country Office

Ankara, Türkiye

- Assisted in preparation of various projects (supply arrangements for Syrian children)
- Assisted in preparation of UNICEF-MoNE Rolling Work Plan 2016 2017

#### METU-TEKPOL, Turkey

October 2014 - July 2015

Ankara, Türkiye

• Assisted in preparation of projects about technological change (The importance of occupations in Turkish Labor Markets: Job and Wage Polarization)

• Assisted in research and working papers for faculty members (Impact of the population exchange of Armenian people on the Turkish population and economic growth after the First World War)

### Research Interests

Project Assistant

- Macroeconomics, Monetary and Fiscal Theory and Policy, International Macroeconomics
- Production Networks, Financial Networks, Business Cycles

## Carbon Policy and Investment: Evidence from Firm Heterogeneity

Abstract: This paper studies how carbon policy shocks affect firms' investment decisions differently, using 3 million firm-level observations on investment from the ORBIS database. The carbon policy shocks are constructed by employing high-frequency data and the structural environment of the European carbon market after replicating Känzig (2021) methodology. The impact of the carbon policy shocks on firms' investment is estimated using a local projection approach, specifically, panel OLS local projection, presented by Jordá (2005) and following Cloyne et al. (2018). Firms' investment reactions to carbon policy shocks are heterogeneous. Also, firms react to carbon policy shocks contemporaneously. I investigated the different firm characteristics regarding their age, size, leverage, and sector in which they operate, I found that more financially constrained firms which are younger, small-sized, and high-leverage, have the highest investment reduction to carbon policy shocks. Besides, firms respond similarly at the sectoral level, meaning there is a presence of inter-sectoral input-output linkages after the carbon policy shocks. Finally, industries that produce non-durable goods within the manufacturing sector have much stronger investment reductions than others.

# Shocks and Frictions in Euro Area and Turkey Business Cycles: a Bayesian DSGE Approach

Abstract: In the joint work of the master's project, we provided a version of the DSGE model following Smets and Wouters (2007) for the Euro-Area-19 and Turkey. The model included nominal and real rigidities, such as sticky prices, wages that adjusted following a Calvo mechanism, and investment adjustment costs. The theoretical framework encompassed seven orthogonal disturbances for each structural equation. Using Bayesian techniques and data on seven macroeconomic variables, the model aimed to describe the main features of the economies for policy analysis. On one side, we elaborated on the framework offered by the New Keynesian DSGE models, comparing its ability to capture data dynamics for two intrinsically different economies, Turkey, an emerging, small open, and the Euro-Area, an advanced economy. On the other hand, we also assessed the relative importance of the different structural shocks as sources of business cycle movements in the two economies considered. In particular, we focused on identifying the main drivers of output and consumption dynamics

# Structural Transformation and Labor Productivity in the Manufacturing Industry in Turkey

Abstract: The purpose of the paper was to analyze the role and contribution of the structural transformation in explaining the rise of labor productivity in the sub-sectors of the manufacturing sector, which contributes to the growth of the Turkish economy. Therefore, this study examined the effect of structural transformation on labor productivity growth in the manufacturing industry in Turkey from 1981-2000. Structural transformation is defined as the movement of the factor inputs of the sector from sectors that have relatively low productivity to industries that have relatively high labor productivity. The conventional shift-share analysis has been used to show the effect of structural transformation on the rise of labor productivity in the manufacturing sector. The empirical results did not support the structural bonus hypothesis. Instead, they showed that the structural transformation is not crucial in explaining the rise of labor productivity for the period of 1981-2000. Moreover, the structural transformation seemed to be a burden for the rise of labor productivity rather than an aid during 1981-2000

## HONORS, ACHIEVEMENTS, CERTIFICATES, AND SCHOLARSHIPS

- Qualifying Exams: Passed exams in Microeconomics, Macroeconomics, and Econometrics, Universidad Carlos III
- Excellence Teaching Award, Universidad Carlos III
- Grant Formacion de Personal Investigador (FPI), Ministry of science and innovation of Spain
- Grant Programa de Personal Investigador Predoctoral en Formacion, PIPF UC3M 01 1920
- Scholarship for the Master of Research in Economic Analysis, Universidad Carlos III, 2020 2022
- Scholarship for the Master of Science in Macroeconomic Policy and Financial Markets, Barcelona School of Economics, 2016 - 2017
- Scholarship for the Bachelor of Science in Economics, Middle East Technical University, 2010 2015

# Conferences, short courses and summer schools

Macroeconomic and Financial Aspects of Climate Change Institution: Banco de España and Universidad Carlos III de Madrid	November 2024 Madrid, Spain
Rethinking Macroeconomic Policy in Times of Turmoil Institution: CEPR, Athens University of Economics and Business, and Bilkent University	June 2023 Aegina, Greece
Finance for Macroeconomists: HF Analysis, News, Surprises and Shocks Professors: Refet Gürkaynak Institution: The EABCN Training School, CEPR and Bilkent University	November 2022 Online
Summer School on Economic Foundations for Energy and Climate Policies Institution: European University Institute	September 2022 Florence, Italy
The Macroeconomics of Climate Change Professors: John Hassler and Per Krusell Institution: The EABCN Training School and IIES Stockholm University	September 2022 $Online$

## EXTRACURRICULAR ACTIVITIES

European Central Bank Aviation Club	2023 - 2024
Aviation Team Member	Frankfurt, Germany
Garanti-BBVA Sailing Club	2017 - 2020
Sailing Team Member	Istanbul, Türkiye
Garanti-BBVA Theatre Club Theater Team Member	2017 - 2020 Istanbul, Türkiye
Middle East Technical University Aviation Society Paragliding Team Member	2012 - 2014 Ankara, Türkiye

# TEACHING EXPERIENCE

- TA Monetary and Financial Macroeconomics: English, Professor Hernan D. Seoane. Universidad Carlos III. Spring 2022, Spring 2023, Spring 2024
- TA Principle of Economics: English, Professor Antonio Romero Medina. Universidad Carlos III. Fall 2025

### Computer Skills

- Programming: Matlab, Stata, R, Julia, and Python
- Other: LATEX, Microsoft Office

#### LANGUAGES

Turkish: NativeEnglish: Fluent

• Spanish: Pre-Intermediate

• French: Beginner

#### CITIZENSHIP

• Countries of citizenships: Belgian and Turkish

## References

- Prof. Evi Pappa, Universidad Carlos III de Madrid, Department of Economics. ppappa@eco.uc3m.es
- Alvaro Ortiz, BBVA Research. <u>alvaro.ortiz@bbva.com</u>
- Beatrice Pierluigi (Head of Division), European Central Bank. beatrice.pierluigi@ecb.europa.eu
- Lorena Saiz, European Central Bank. Lorena.saiz@ecb.europa.eu