Baris Sovbilgen

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ABOUT

Data scientist and economist with 10+ years of experience in building predictive models, developing statistical evaluation methods, and conducting data visualization. Well-versed in both regular statistical methods and machine learning algorithms with good knowledge of Python, R, and SQL.

EXPERIENCE

Data Scientist

Dec 2022 - Present

Sambla Group, Stockholm, Sweden

Skills Used: Python · Google Cloud (Vertex AI, BigQuery, Cloud Build, Cloud Functions, Cloud Run) · SQL · Machine Learning · Vector Databases · Statistics · Dashboard Building

Data Analyst

Jan 2022 - Dec 2022

The Governance and Local Development Institute, Gothenburg, Sweden Skills Used: $R \cdot Dashboard Building \cdot Machine Learning \cdot Statistics$

Freelance Data Scientist

Jan 2019 - Jan 2022

Skills Used: R · Python · SQL · Machine Learning · Statistics

Assistant Director

Feb 2018 - Jan 2022

Researcher

Sep 2015 - Feb 2018

Istanbul Bilgi University Center for Financial Studies, Istanbul, Turkey

Skills Used: R · Python · Web Scraping · Machine Learning · Statistics · Economics · Quantitative Research

Assistant Professor

Sep 2018 - Jan 2022

Lecturer

Sep 2015 - Sep 2018

Istanbul Bilgi University, Istanbul, Turkey

Skills Used: R · Python · Machine Learning · Statistics · Economics · Teaching · Quantitative Research

Adjunt Lecturer

Feb 2018 - Aug 2019

MEF University, Istanbul, Turkey

Skills Used: R Machine Learning Statistics Economics Teaching

Research Assistant

Oct 2010 - Aug 2015

Bahcesehir University Center for Economic and Social Research (Betam), Istanbul, Turkey

Skills Used: R MATLAB Statistics Economics Quantitative Research

EDUCATION

Ph.D, Economics

Sep 2011 - June 2015

Istanbul Bilgi University, Istanbul, Turkey

Title of Doctoral Dissertation: Three Essays on Forecasting

Master of Arts, International Economics

Oct 2008 - Sep 2010

Konstanz University, Konstanz, Germany

Title of Master Thesis: How do Stock Prices Respond to Macro Shocks?

Bachelor of Science, Systems Engineering

Sep 2003 - Feb 2008

Yeditepe University, Istanbul, Turkey

Title of Final Project: Bond Portfolio Selection Using Fuzzy Multiobjective Linear Programming

Montana State University, Bozeman, U.S.A

SKILLS

Programming Languages & Softwares: R, Python, Matlab, SQL, MS Office, MS Power BI, Stata, EViews.

Languages: Turkish (native), English (fluent), Swedish (Basic).

PUBLICATIONS Big data financial transactions and GDP nowcasting: The case of Turkey, Journal of Forecasting, 2023.

> Nowcasting Turkish Food Inflation Using Daily Online Prices, Journal of Business Cycle Research, 2023.

> Nowcasting US GDP Using Tree-Based Ensemble Models and Dynamic Factors, Computational Economics, 2021.

> Identifying U.S. Business Cycle Regimes Using Dynamic Factors and Neural Network Models, Journal of Forecasting, 2020.

> Determinants of Turkish female labour force participation: an analysis with manufacturing firm-level data, joint with Nazli Karamollaoglu, Applied Economics Letters, 2020.

> A general model for financial crises: An application to eurozone crisis, joint with Haluk Yener and Thanasis Stengos, Applied Economics Letters, 2020.

> Identifying Turkish Business Cycle Regimes in Real Time, Applied Economics Letters, 2020.

> Evaluating the Effect of Geopolitical Risks on the Growth Rates of Emerging Countries, joint with Huseyin Kaya & Dincer Dedeoglu, Economics Bulletin, 39(1), 2019.

> On the Performance of Wavelet Based Unit Root Tests, joint with Burak Alparslan Eroglu, Journal of Risk and Financial Management, 11(3), 2018.

> Evaluating Nowcasts of Bridge Equations with Advanced Combination Schemes for the Turkish Unemployment Rate, joint with Ege Yazgan, Economic Modelling, 72, 2018.

> Nowcasting the New Turkish GDP, joint with Ege Yazgan, Economics Bulletin, 38(2), 2018.

> Nowcasting Turkish GDP and News Decomposition, joint with Michele Modugno & Ege Yazgan, The International Journal of Forecasting 32(4), 2016.

NATIONAL

Time-Varying Taylor Rule Estimation for Turkey with Flexible Least Square Method, PUBLICATIONS joint with Burak Alparslan Eroglu, Bogazici Journal, 2019.

> Estimating the Forward-Looking Taylor Rule for Turkey under Multiple Structural Breaks, joint with Burak Alparslan Eroglu and Haluk Yener, Current Issues in Turkish Economics, 2019.

> Evaluating the Asymmetric Effects of Production, Interest Rate and Exchange Rate on the Turkish Stock Prices, joint with Husevin Kaya, Ege Academic Review, 19(2), 2019.

> The Exchange Rate Pass-Through for Main Consumption Groups, joint with Huseyin Kaya, Finans-Politik & Ekonomik Yorumlar Dergisi, 56(648), 2019. (in Turkish)

An Evaluation of Inflation Expectations in Turkey, joint with Ege Yazgan, Central Bank Review, 17(1), 2017.

CONFERENCES "Nowcasting Turkish Food Inflation Using Daily Online Prices"

2020 7th International Conference on Economics-Turkish Economic Association, Vir-

"Nowcasting US GDP Using Gated Recurrent Units"

2020 40th International Symposium of Forecasting, Virtual

2020 3rd International Conference on Empirical Economics and Social Sciences, Virtual

"Forecasting US recessions using large scale data sets and machine learning algo-

2020 EconTR2020 International Conference on Economics, Eskişehir

2019 39th International Symposium of Forecasting, Thessaloniki, Greece

"Producing Short-Term Forecasts of Turkish Gross Domestic Product: A Bottom-Up Approach from the Demand Side"

2020 International Applied Statistics Conference, Virtual

"Producing and Analyzing Density Nowcasts of Gross Domestic Product"

2020 2. Uluslarası İzmir İktisat Kongresi, Virtual

"Quantile Panel Data Analysis of the Female Employment Ratio in Turkish Manufacturing Firms"

2020 19th International Conference of MEEA, Virtual

"Evaluating the Effect of Oil Prices and the Exchange Rate on Producer and Consumer Food Prices in Turkev"

2020 4th International Congress on Economics, Finance, and Energy, Virtual

"Identifying US Business Cycle Regimes Using Dynamic Factors and Neural Network Models"

2018 Conference on Advances in Applied Macro-Finance, Istanbul

"Nowcasting Recessions Using Machine Learning Algorithms"

2018 Workshop on Advances in Econometrics Methods, Istanbul

"Predicting US Recessions: A Factor Augmented Neural Network" 2017 Econ Anadolu 2017, Eskisehir

"An Evaluation of Inflation Expectations in Turkey"

2014 International Conference on Economics-Turkish Economic Association, Antalya

"Credit Crunch or not? Case of Turkey during the Global Economic Crisis"

2012 73rd International Atlantic Economic Conference, Istanbul

2012 International Istanbul Finance Conference 2012, Istanbul

TEACHING Istanbul Bilgi University

Advanced Econometrics II (M.Sc.)

Macroeconomics for Finance (M.Sc.)

Financial Analysis and Reporting (M.Sc.)

Thesis Seminar (M.Sc.)

Machine Learning for Managerial Decision Making (B.A.)

Statistics II (B.A.)

Office Applications for Business and Economics (B.A.)

Business Finance (B.A.) Current Issues in Finance (B.A.) Introduction to Economics (B.A.)

MEF University

Model Building and Validation (M.Sc.) Forecasting (M.Sc.) Forecasting (B.A.) R For Social Sciences (B.A.)