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TÜRKİYE EKONOMİ KURUMU

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TEA2025
Programme & Abstracts

The 32nd Conference on Economics of Turkish Economic Association

November 13-15, 2025

Eastern Mediterranean University

Famagusta, Northern Cyprus

https://tek.org.tr/conference/2025

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Programme

Program

General Information

Genel Bilgi

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Glenn Jenkins – Queen's University, Canada
Hakan Kara – Bilkent University, Türkiye
Erol Taymaz – METU, Türkiye
Kamil Yılmaz – Koç University, Türkiye

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Hakan Yetkiner – İzmir Ekonomi University, Türkiye
Vedat Yorucu – Eastern Mediterranean University, TRNC

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This conference is organized by:

Turkish Economic Association
Eastern Mediterranean University

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The Organization Committee gratefully acknowledges financial support from the following institutions:

Central Bank of the Turkish Republic of Northern Cyprus
Foundation of Turkish Economic Association
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The Organization Committee also gratefully acknowledges academic support from the following institutions:

Central Bank Review (ESCI, SCOPUS, ULAKBİM-TR Dizin)
Ekonomi-TEK (ULAKBİM-TR Dizin)
World Journal of Applied Economics (ULAKBİM-TR Dizin)
Yıldız Social Science Review

DATES & VENUE — TARİH VE YER

Dates 09.00, Thursday, November 13, 2025 – 13.00, Saturday, November 15, 2025.
Venue Rauf Raif Denktas Culture and Congress Center (KÜKOM), Famagusta, Northern Cyprus

REGISTRATION — KAYIT

Registration and Information Desk is located at **Rauf Raif Denktas Culture and Congress Center**, from 08:30 Thursday, November 13 to 12:00 Saturday, November 15. The desk is open at the following times:

Thursday, November 13	08:30-17:00
Friday, November 14	08:30-17:00
Saturday, November 15	08:30-12:00

BADGE — YAKA KARTI

Participants should kindly wear personal name badges at all times during the Conference. Name badges will be provided in participants' conference bags at the Registration Desk.

SESSIONS — OTURUMLAR

All sessions at TEA2025 conference are in-person. Sessions are moderated by convenors. Each contributed paper will be presented orally for about 15 minutes, and followed by maximum 5 min discussion. The convenor may decide and change the order of presentations. Each conference room is equipped with a PC and a data projector.

LUNCH — ÖĞLE YEMEĞİ

The lunch is served at Eastern Mediterrenean University Beach Club (DAÜ Beach Club) on November 13-15, 2025. Lunch voucher will be provided in participants' conference bags.

TEA GALA DINNER — TEK GALA YEMEĞİ

All participants of TEA2025 Conference are invited to TEA Dinner to be held on Friday, November 14, 2025 at 19.30-22.00 at Salamis Bay Conti Hotel, Fagamusta, Northern Cyprus. The dinner is free for those participants staying at Salamis Bay Conti Hotel. The dinner fee is EURO45 for the other participants.

TRANSFER — TRANSFER

There will be shuttle bus services from/to hotels to/from the conference venue.

AFTER CONFERENCE TRIP — KONGRE SONRASI GEZİ

There will be a sightseeing tour to the Ghost Town Varosha and Old Walled City Famagusta including Lala Mustafa Pasha Mousqe and Namık Kemal Square after the conference on November 15, 2025. The trip will start at 2.30 pm. This trip is free for all participants of TEA2025.

COMMUNICATION **İLETİŞİM**

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TEA2025

Türkiye Ekonomi Kurumu'nun
32. İktisat Kongresi
13-15 Kasım 2025
Doğu Akdeniz Üniversitesi
Gazimağusa, KKTC

Short Programme

Kısa Program

PROGRAM AT A GLANCE

Thursday, November 13, 2025 **Perşembe, 13 Kasım 2025**

08:00-17:30 **Registration**

09:30-10:10 **Opening Ceremony / Açılış Töreni**
Mustafa Besim *(Dean, Faculty of Business and Economics, EMU, Northern Cyprus)*
Hasan Kazdağlı *(President, Turkish Economic Association, Türkiye)*
Hasan Kılıç *(Rector, Eastern Mediterranean University, Northern Cyprus)*
Rifat Günay *(Governor, Central Bank of Turkish Republic of Northern Cyprus)*
Olgun Amcaoğlu *(Minister of Economy and Energy, Turkish Republic of Northern Cyprus)*

10:10-10:50 **Keynote Address / Davetli konuşmacı**
Hakan Kara (*Bilkent University, Türkiye)*

10:50-11:20 Coffee Break / Kahve Arası

11:20-12:00 **Keynote Address / Davetli konuşmacı**
Erol Taymaz – METU, Türkiye

12:00-14:00 Lunch / Öğle Yemeği

14:00-15:20 **Sessions / Oturumlar**
T1A PANEL: Değişen Dinamiklerle Kuzey Kıbrıs Ekonomisinin Dönüşümü
T1B FIRM DYNAMICS and INTERNATIONAL TRADE
T1C CORPORATE FINANCE, RISK and GOVERNANCE
T1D LABOR MARKET and EMPLOYMENT
T1E MACROECONOMIC MODELLING and POLICY
T1F HOUSEHOLD BEHAVIOUR
T1G TEKNOLOJİK DÖNÜŞÜM, AR-GE ve DİJİTALLEŞME

15:20-15:40 Coffee Break / Kahve Arası

15:40-17:00 **Sessions / Oturumlar**
T2A ENVIRONMENTAL ECONOMICS
T2B ECONOMIC GROWTH
T2C SUSTAINABILITY, GOVERNANCE and DEVELOPMENT
T2D PRICES and MARKET DYNAMICS
T2E TOPLUMSAL CİNSİYET ve EŞİTSİZLİK
T2F ENFLASYON DİNAMİKLERİ

Friday, November 14, 2025 **Cuma, 14 Kasım 2025**

08:30-17:30 Registration

09:00-10:20 Sessions / Oturumlar
F1A MACROECONOMICS
F1B FINANCIAL STABILITY and CREDIT MARKETS
F1C GEOPOLITICS and GLOBAL ECONOMIC DYNAMICS
F1D TECHNOLOGY and ECONOMIC TRANSFORMATION
F1E HEALTH and DEMOGRAPHIC ECONOMICS
F1F MAKROEKONOMİK YAPI ve EKONOMİK DALGALANMALAR

10:20-10:40 Coffee Break / Kahve Arası

10:40-11:20 Keynote Address / Davetli konuşmacı
Martin Ellison – University of Oxford, UK

11:30-12:10 Keynote Address / Davetli konuşmacı
Glenn Jenkins – Queen's University, Canada

12:10-14:00 Lunch / Öğle Yemeği

14:00-14:40 Keynote Address / Davetli konuşmacı
Kamil Yılmaz – Koç University, Türkiye

14:40-15:00 Coffee Break / Kahve Arası

15:00-16:20 Sessions / Oturumlar
F2A ENVIRONMENTAL POLICY
F2B FINANCIAL MARKETS
F2C ECONOMICS of GLOBAL SUPPLY CHAINS
F2D STRATEGIC DECISION-MAKING and INFORMATION DESIGN
F2E TARIM ve GIDA GÜVENCESİ
F2F EKONOMİ POLİTİKASI ve FİNANSAL İSTİKRAR

19.30-10.30 Gala Dinner

Saturday, November 15, 2025 **Cumartesi , 15 Kasım 2025**

08:30-13:30 Registration

09:00-10:20 Sessions / Oturumlar
S1A CENTRAL BANKING and INFLATION
S1B ENERGY MARKETS and ECONOMIC DYNAMICS
S1C LABOR and the FUTURE of WORK
S1D ÇEVRE EKONOMİSİ ve YEŞİL DÖNÜŞÜM
S1E MONETARY POLICY AND THE FIRM
S1F LABOUR and SOCIAL SECURITY

10:20-10:40 Coffee Break / Kahve Arası

10:40-11:20 Keynote Address / Davetli konuşmacı
Selva Demiralp – Koç University, Türkiye

11:30-12:10 Keynote Address / Davetli konuşmacı
Banu Demir Pakel – University of Oxford, UK

12:10-13:00 Lunch / Öğle Yemeği

13:00-14:20 Sessions / Oturumlar
S2A MONETARY POLICY
S2B POVERTY, SUSTAINABILITY and DEVELOPMENT
S2C INTERNATIONAL FINANCIAL MARKETS
S2D SOSYOEKONOMİK ve KÜLTÜREL DÖNÜŞÜM DİNAMİKLERİ
S2E PARA ve BANKACILIK
S2F MACROECONOMIC SHOCKS, EXCHANGE RATES and HOUSING

14:30-17:30 After Conference Trip

Programme

Program

DAY 1

OPENING SESSION

Nov. 13 / 13 Kasım	09:30-10:10	Room **Small Hall**

Mustafa Besim (*Dean, Faculty of Business and Economics, EMU, Northern Cyprus)*
Hasan Kazdağlı *(President, Turkish Economic Association, Türkiye)*
Hasan Kılıç *(Rector, Eastern Mediterranean University, Northern Cyprus)*
Rifat Günay *(Governor, Central Bank of Turkish Republic of Northern Cyprus)*
Olgun Amcaoğlu *(Minister of Economy and Energy, Turkish Republic of Northern Cyprus)*

KEYNOTE ADDRESS I

Nov. 13 / 13 Kasım	10:10-10:50	Room **Small Hall**

The great (monetary) experiment
Hakan Kara (*Bilkent University, Türkiye)*

Convenor: **Hasan Kazdağlı** (Turkish Economic Association, Türkiye)

KEYNOTE ADDRESS II

Nov. 13 / 13 Kasım	11:20-12:00	Room **Small Hall**

Sınai Kalkınma ve İmalat Sanayiinde Yeşil Dönüşüm
Erol Taymaz (*METU, Türkiye)*

Convenor: **Cihan Yalçın** (CBRT, Türkiye)

T1A PANEL
Değişen Dinamiklerle Kuzey Kıbrıs Ekonomisinin Dönüşümü

Nov. 13 / 13 Kasım | 14:00-15:20 | Room **Arsinoe**

Emine Tahsin *(İstanbul University, Türkiye)*
Mustafa Besim *(EMU, Northern Cyprus)*
Mustafa İsmihan *(EMU, Northern Cyprus)*
Yenal Süreç *(EMU, Northern Cyprus)*

Convenor: **Mustafa Besim** (EMU, Northern Cyprus)

T1B FIRM DYNAMICS and INTERNATIONAL TRADE

Nov. 13 / 13 Kasım | 14:00-15:20 | Room **Salamis**

Trade Liberalization and Firm-Level Prices
Uğur Aytun *(Middle East Technical University, Türkiye)*
Erol Taymaz *(Middle East Technical University, Türkiye)*
Kamil Yılmaz *(Koç University, Türkiye)*

Characteristics of High Growth Firms in Turkiye over the period 2006-2023
M. Teoman Pamukçu *(Middle East Technical University, Türkiye)*
Feride Gönel *(Yildiz Technical University, Türkiye)*
Hüseyin Taştan *(Yildiz Technical University, Türkiye)*
Hikmet Kaya *(Yildiz Technical University, Türkiye)*

Even the Announcement Matters? The Effect of CBAM on Exports and Exporters
Uğur Aytun *(Middle East Technical University, Türkiye)*
Gunhild Berg *(World Bank, USA)*
Seyit Mümin Cılasun *(TED University, Türkiye)*
Etkin Özen *(World Bank, USA)*

Export Performance of Turkish Firms Compared to EU and OECD Countries
Fatma M. Utku-İsmihan *(MoAF and METU, Türkiye)*

Convenor: **Oya Kent** (Istanbul Okan University, Türkiye)

T1C CORPORATE FINANCE, RISK and GOVERNANCE

Nov. 13 / 13 Kasım | 14:00-15:20 | Room **Lambousa**

Advisors as Local Information Conduits in M&A Transactions
Khaoula Agrebi *(Sabanci University, Türkiye)*
Evrim Akdoğu *(Sabanci University, Türkiye)*
Serif Aziz Simsir *(Sabanci University, Türkiye)*

Climate and Geopolitical Risks, Market Volatility, and Insurance Stock Returns in China: Evidence from Quantile-on-Quantile and Wavelet Analysis
Ishaq A. H. Talahmeh *(Eastern Mediterranean University, Northern Cyprus)*

In and out of debt: when and why?
Rumeysa Bilgin *(Istanbul Sabahattin Zaim University, Türkiye)*

Valuing Strategic Flexibility in the Polycrisis Era: An Expanded Real Options Taxonomy and Methodological Framework
Sara Rafat *(Eastern Mediterranean University, Northern Cyprus)*
Reza Askary *(Eastern Mediterranean University, Northern Cyprus)*

Convenor: **Cahit Adaoğlu** (Eastern Mediterranean University, TRNC)

T1D LABOR MARKET and EMPLOYMENT

Nov. 13 / 13 Kasım | 14:00-15:20 | Room **Soli**

The Causal Impact of Paternal Worklessness on Young Female's Probability of Being NEET: Evidence from a Developing Country
Deniz Karaoğlan Yurtseven *(Gebze Technical University Türkiye)*

Composition of the Unemployed and Vacancy Pools and the Labor Market Match Efficiency (Very Preliminary)
Meltem Chadwick *(SEACEN Center, Malaysia)*
Gönül Şengül *(Özyeğin University, Türkiye)*

Does employment protection affect wages, inequality, and unemployment? Theory and Evidence
Tolga Aksoy *(Yildiz Technical University, Türkiye)*
Burak Ünveren *(Yildiz Technical University, Türkiye)*

Convenor: **Erol Taymaz** (METU, Türkiye)

T1E MACROECONOMIC MODELLING and POLICY

Nov. 13 / 13 Kasım | 14:00-15:20 | Room **Porta Del Mare**

Nonlinear Unit Root Testing in the Yield Spread: A Fourier-Threshold Approach
Esra Hasdemir *(Atılım University, Türkiye)*
Tolga Omay *(Atılım University, Türkiye)*
Özge Çamalan *(Atılım University, Türkiye)*

Are Intergovernmental Transfers Sticky? An Empirical Analysis of the Flypaper Effect in Türkiye
H. Hakan Yılmaz *(TEPAV, Türkiye)*
Eda Yeşil *(Kırıkkale University, Türkiye)*
Pelin Varol İyidoğan *(Hacettepe University, Türkiye)*

A Conceptual Framework for Financial Forecasting: Algorithms, Application, and Limitations
Reza Askary *(Eastern Mediterranean University, Northern Cyprus)*
Oğuzhan Kirilmaz *(Eastern Mediterranean University, Northern Cyprus)*
Sara Rafat *(University of Kyrenia, Northern Cyprus)*

Convenor: **Hakan Yetkiner** (Izmir University of Economics, Türkiye)

T1F HOUSEHOLD BEHAVIOUR

Nov. 13 / 13 Kasım | 14:00-15:20 | Room **Othello**

Automatic Enrollment and Household Saving in Türkiye
Emre Özyerden *(Hitit University, Türkiye)*
Thomas Post *(Maastricht University, Netherland)*
N. Semih Öz *(Ankara University, Türkiye)*

From Access to Financial Resilience: How Inclusion Has Evolved in Türkiye? (2011–2021)
N. Merve Hamzaoğlu *(İstanbul Kültür University, Türkiye)*

Household Consumption Response to Income Changes by Wealth Quintile: Evidence from UKHLS, 2009-2021
Pranvera Backlund *(Eastern Mediterranean University, Northern Cyprus)*
Cem Payaslioglu *(Eastern Mediterranean University, Northern Cyprus)*

Convenor: **Celal Küçüker** (TEA, Türkiye)

T1G TEKNOLOJİK DÖNÜŞÜM, AR-GE ve DİJİTALLEŞME

Nov. 13 / 13 Kasım 14:00-15:30 Room **Meeting Room**

Türkiye'de Robotlar Servet Eşitsizliğini Etkiliyor mu?
Melike Saraç *(Nigde Omer Halisdemir University, Türkiye)*
Burcu Berke *(Nigde Omer Halisdemir University, Türkiye)*

Dijitalleşmeden Yeşil Karmaşıklığa: Türkiye İllerinden Ampirik Kanıtlar
Ebru Burcu Yardımcı Bozdoğan *(Başkent University, Türkiye)*
Başak Dalgıç *(Hacettepe University,Türkiye)*
Burcu Fazlıoğlu *(TOBB University, Türkiye)*

Robotlaşmanın Verimlilik Üzerindeki Etkisi Sektörlere Göre Değişir mi?
Özlem Fikirli *(Bartın University, Türkiye)*
Hasan Şahin *(Ankara University, Türkiye)*

Yapay Zeka'nın (YZ) Türk Kamu Mali Yönetiminde Dijitalleşmeye Etkisi
Recep Emre Eriçok *(Istanbul University,Türkiye)*

Convenor: **Murat Donduran** (Yıldız Technical University, Türkiey)

T2A ENVIRONMENTAL ECONOMICS

Nov. 13 / 13 Kasım | 15:40-17:00 | Room **Arsinoe**

Environmental Efficiency Assessment of Countries Using SFA: A Panel Data Analysis (2000–2024)
***Onur Akkaya** (Kilis 7 Aralık University, Türkiye)*

Stranded Capital in Production Networks: Implications for the Economy of the Euro Area
***Zeynep Kantur** (Başkent University, Türkiye)*
***Patrick Grüning** (Latvijas Banka, Latvia)*

Empirical Investigation of fluctuations in LNG gas prices by implementing Wavelet Coherence Transformation Method: The case of Qatar
***Vedat Yorucu** (Eastern Mediterranean University, Northern Cyprus)*
***Massoud Rashid Ali** (Eastern Mediterranean University, Northern Cyprus)*

The Effects of Circular Economy Products on Export Diversification: An Analysis of Emerging Market Economies
***Gökçe Manavgat** (Toros University, Türkiye)*

Convenor: **Nigar Taşpınar** (Eastern Mediterranean University, TRNC)

T2B ECONOMIC GROWTH

Nov. 13 / 13 Kasım | 15:40-17:20 | Room **Salamis**

Public Debt in a Simple Model of Endogenous Growth
***Hakan Yetkiner** (Izmir University of Economics, Türkiye)*

Regional Income Convergence and Spatial Structure in Turkish Provinces (2004–2023)
***Nilüfer Kaya Kanlı** (İzmir University of Economics, Türkiye)*
***Bige Küçükefe** (Tekirdağ Namık Kemal University, Türkiye)*

Effects of the Crises (Covid-19 and the Russia-Ukraine war) on the GDP Growth: Insights from Brazil and Indonesia during 1980–2024
***Cagay Coskuner** (Eastern Mediterranean University, Northern Cyprus)*
***Rola Ma Mukhaimar** (Eastern Mediterranean University, Northern Cyprus)*

Measuring Firm-Specific Geopolitical Risks and Their Impact on Investment Decisions in Türkiye
***Aslıhan Atabek Demirhan** (CBRT, Türkiye)*
***Saide Simin Bayraktar** (CBRT, Türkiye)*

Evaluation of the Entrepreneurship-Based Ranking of OECD Countries
***Ayhan Demirci** (Toros University, Türkiye)*

Convenor: **Serdar Sayan** (TOBB-ETU, Türkiye)

T2C SUSTAINABILITY, ENVIRONMENT and DEVELOPMENT

Nov. 13 / 13 Kasım | 15:40-17:00 | Room **Lambousa**

On the Dynamic Effects of the EU Carbon Border Adjustment Mechanism and Potential Global Responses: An Intertemporal General Equilibrium Exploration
Jean Mercenier *(Université Panthéon-Assas (Paris 2) & CIRED)*
Ebru Voyvoda *(Middle East Technical University, Türkiye)*
A. Erinç Yeldan *(Kadir Has University, Türkiye)*

Aid, Governance, and Entrepreneurship: Revisiting the Role of Development Assistance in Business Creation
Charbel Bassil *(Qatar University, Qatar)*
Georges Harb *(Lebanese American University)*
Arsalan Safari *(Qatar University Qatar)*

Unequal Aftershocks: Heterogeneous Labor Market Adjustment Following an Earthquake
Mahmut Ablay *(CBRT, Türkiye)*
M. Nurullah Güleç *(CBRT, Türkiye)*

Does Age Bring Sustainability? Time Use and Carbon Emissions in an Ageing Türkiye
Nazlı Şahanoğulları *(Istanbul Kültür University, Türkiye)*

Convenor: **Deniz Karaoğlan Yurtseven** *(Gebze Technical University, Türkiye)*

T2D MARKET DYNAMICS

Nov. 13 / 13 Kasım | 15:40-17:20 | Room **Soli**

Weekly Red Meat Prices in Turkey: A New Dataset and Volatility Evidence
Burçhan Sakarya *(Başkent University, Türkiye)*
Aykut Ekinci *(Alanya University, Türkiye)*
Murat Kırcı *(Karadeniz Technical University, Türkiye)*

An Econometric Analysis of the Turkish Art Market: Constructing Hedonic Price Indices
Hüseyin Taştan *(Yıldız Technical University, Türkiye)*

Effects of Oil Price Oscillation and Exchange Rate Dynamics on the Changes in Economic Performance: Evidence from Emerging Oil-Exporting Economies
David Babatunde *(Eastern Mediterranean University, Northern Cyprus)*
Cagay Coskuner*(Eastern Mediterranean University, Northern Cyprus)*
Vedat Yorucu *(Eastern Mediterranean University, Northern Cyprus)*

The long-run Market Power in the Liquid Milk Market of Türkiye
İrfan Esendağlı *(Eastern Mediterranean University, Northern Cyprus)*
Mustafa İsmihan *(Eastern Mediterranean University, Northern Cyprus)*

The Impact of Post-2001 Disinflation on Foreign Direct Investment Inflows in Turkiye
Ece Handan Guleryuz *(Marmara University, Türkiye)*

Convenor: **Cihan Yalçın** (CBRT, Türkiye)

T2E TOPLUMSAL CİNSİYET ve EŞİTSİZLİK

Nov. 13 / 13 Kasım | 15:40-16:40 | Room **Porta Del Mare**

Kadınların İşgücüne Katılımı ve Bebek Ölümleri: Türkiye'de Çifte Yük Hipotezi Analizi
Derya Bilgin *(İstanbul Kültür University, Türkiye)*

Kadın İstihdamı ve Şiddet Arasındaki Karmaşık İlişki: Türkiye İçin Bir Bayesyen Ağ Analizi
Miraç Eren *(Ondokuz Mayis University, Türkiye)*
İlyas Sucu *(Ondokuz Mayis University, Türkiye)*
Muhammed Daştan *(Ondokuz Mayis University, Türkiye)*
İrem Gülsün Zengin *(Ondokuz Mayis University, Türkiye)*

Kantil Regresyon Analizi Çerçevesinde Cinsiyet Eşitsizliğinin Heterojen Belirleyicileri
Murat Eren *(Iğdır University, Türkiye)*

Convenor: **Fatma Güven Lisaniler** (Eastern Mediterranean University, Northern Cyprus)

T2F ENFLASYON DİNAMİKLERİ

Nov. 13 / 13 Kasım | 15:40-17:20 | Room **Othello**

Petrol Fiyatı Oynaklığının Türkiye'de Gıda ve Gıda Dışı Enflasyona Yayılma Etkileri
Mustafa Emir Yücel *(Bartın University, Türkiye)*
Hakan Kaya *(Bitlis Eren UniversityTürkiye)*

Türkiye'de Enflasyon İçinde Kur Geçişkenliği Etkisi: 2018 – 2025 Dönemi
Sinan Alçın *(İstanbul Kültür University, Türkiye)*
Deniz Dereli *(İstanbul Kültür University, Türkiye)*

Kahramanmaraş Depremi Sonrası Konut Fiyatlarının Bölgesel Dinamikleri
Ezgi Deryol *(CBRT, Türkiye)*
Ahmet Deryol *(CBRT, Türkiye)*

Türkiye ve KKTC'de Tüketici Enflasyonu: Karşılaştırmalı Zaman Serisi Modelleri ve Nedensellik Analizi
Şiyar Canpolat *(Bitlis Eren University, Türkiye)*

Reel Sektör Firmalarının Döviz Pozisyonu Analizi
Aylin Aslan *(CBRT, Türkiye)*

Convenor: **Tolga Omay** (Atılım University, Türkiye)

DAY 2

F1A MACROECONOMICS

Nov. 14 / 14 Kasım | 09:00-10:20 | Room **Arsinoe**

A Theory of Public Debt Convergence
Hakan Yetkiner *(Izmir University of Economics, Türkiye)*

Output Gap Estimation for Türkiye Economy: Unobserved Components Model and Evidence from the New GDP Series
Ayşe Ertuğrul *(Bahçeşehir University, Türkiye)*

Divergence or Alignment? A Financial Development Convergence Study of E7 and G7 countries
Gülay Elif Yıldırım *(Türk Ticaret Bankası, Türkiye)*

Macroeconomic Stability in the presence of Shocks to Risk Premium, Supply-Side Effects of Interest rates and Accommodative Monetary Policy
Serhan Çiftçioğlu *(Eastern Mediterranean University, Northern Cyprus)*

Convenor: **Hakkı Hakan Yılmaz** (TEPAV, Türkiye)

F1B FINANCIAL STABILITY and CREDIT MARKETS

Nov. 14 / 14 Kasım | 09:00-10:20 | Room **Salamis**

Commercial Loan Supply Condition Structure and an Index
Alper Kara *(CBRT, Türkiye)*
Mehmet Selman Çolak *(CBRT, Türkiye)*
Mahmut Bora Deniz *(CBRT, Türkiye)*

The Impact of Economic Instability on Financial Inclusion in BRICS and Türkiye
Seniha Besim *(Final International University, Northern Cyprus)*

Unravelling the Paradox of Financial Inclusion and Stability: A Dynamic Analysis from selected BRICS+ Economies
Fedhile Bianca Mamba *(Eastern Mediterranean University, Northern Cyprus)*
Cahit Adaoglu *(Eastern Mediterranean University, Northern Cyprus)*

Household Macroprudential Policies, Corporate Credit, and Macro Shocks
Inci Gumus *(Sabancı University, Türkiye)*
Tumer Kapan *(International Monetary Fund, USA)*
Camelia Minoiu *(Federal Reserve Bank of Atlanta)*
Cihan Yalcin *(CBRT, Türkiye)*

Convenor: **Hasan Güngör** (Eastern Mediterranean University, TRNC)

F1C GEOPOLITICS and GLOBAL ECONOMIC DYNAMICS

Nov. 14 / 14 Kasım | 09:00-10:00 | Room **Lambousa**

Competing Silk Roads of Infrastructure in the Turkic World
Assel Tutumlu *(Near East University, TRNC)*
Recep Bülent Şenses *(Near East University, TRNC)*

Routing Around Empire: Trade Reallocation and Insurance Grades under Wartime Sanctions 1803-1810
Aytuğ Zekeriya Bolcan *(Istanbul University, Türkiye)*

Consumer Boycotts, Technology Interdependence, and Defense Gains:
Sectoral Spillovers between Israel and the U.S. during the Israel-Gaza War
Eyad Abdel Hafez *(Eastern Mediterranean University, Northern Cyprus)*
Cahit Adaoglu *(Eastern Mediterranean University, Northern Cyprus)*

Convenor: **Mete Feridun** (Eastern Mediterranean University, TRNC)

F1D TECHNOLOGY and ECONOMIC TRANSFORMATION

Nov. 14 / 14 Kasım | 09:00-10:20 | Room **Soli**

The Digital Entrepreneurship Divide: National Digital Infrastructure as a Predictor of High-Growth Aspiration Entrepreneurship in Emerging Economies
Burak Erkut *(Eastern Mediterranean University, Northern Cyprus)*

AI and Decision-Making in Business: Opportunities, Risks, and Ethics
Humaira Munawar *(Bahçeşehir Cyprus University, Northern Cyprus)*
Vildan Esenyel *(Bahçeşehir Cyprus University, Northern Cyprus)*

Do public credit guarantees boost R&D and innovation?
Ahmet Deryol *(CBRT, Türkiye)*
Leone Leonida *(King's College London, UK)*
Gülçin Özkan *(King's College London, UK)*

Automation Imports and Upgrading in Firm Production Networks
Seda Köymen-Özer *(Başkent University, Türkiye)*
Alessia Lo Turco *(Università Politecnica delle Marche)*
Daniela Maggioni *(Università Cattolica del Sacro Cuore)*

Convenor: **Fatma Utku İsmihan** (MFA, Türkiye)

F1E HEALTH and DEMOGRAPHIC ECONOMICS

Nov. 14 / 14 Kasım | 09:00-10:20 | Room **Porta Del Mare**

Economic Analysis of Chemotherapy Drug Waste in Pediatric Oncology: A Cross-Sectional Study
Babak Abdolkarimi *(Lorestan University of Medical Sciences, Iran)*
Ali Mahdavi *(Lorestan University of Medical Sciences, Iran)*
Sara Taheri *(European University of Lefke, Northern Cyprus)*
Mehmet Aga *(European University of Lefke, Northern Cyprus)*
Zahra Abdoli *(Islamic Azad University, Iran)*
Niki Panahi *(Islamic Azad University, Iran)*

The Effect of Mothers' Education on Family Size, Parental Inputs and Early Child Development: Evidence from Türkiye
Omer Sarigul *(University of Surrey, UK)*

Breaking the Glass Ceiling in Healthcare Leadership: Economic and Labour Market Perspectives
Sara Taheri *(European University of Lefke, Northern Cyprus)*
Mehmet Aga *(European University of Lefke, Northern Cyprus)*

Maternal Exposure to Terrorism and Child Skills Development
Sonkurt Sen *(University of Bonn, Germany)*

Convenor: **Ömer Sarigul** (University of Surrey, UK)

F1F MAKROEKONOMİK YAPI ve EKONOMİK DALGALANMALAR

Nov. 14 / 14 Kasım | 09:00-10:20 | Room **Othello**

Türkiye'de İç Borç Sorunu: Kamu Maliyesi Açısından Bir Değerlendirme
Aynur Uçkaç *(Aydın Adnan Menderes University, Türkiye)*

Göreceli Fiyatlar ve Sektörel Üretkenlik: Küresel Ölçekte Seçilmiş Bölgeler İçin Bir Karşılaştırma
Furkan Börü *(İstanbul Health and Technology University, Türkiye)*

Türkiye Ekonomisinde Okun Yasası: Ampirik Bulguların Meta-Analizi
Onur Akkaya *(Kilis 7 Aralık University, Türkiye)*

TRAMO-X: Uluslararası Ticaretin Anlık Tahmini için Bir Yaklaşım*
Özlem Yiğit *(TURKSTAT, Türkiye)*
Osman Sert *(TURKSTAT, Türkiye)*
M. Fatih Tüzen *(TURKSTAT, Türkiye)*
F. Aydan Kocacan *Nuray (TURKSTAT, Türkiye)*

Convenor: **Yenal Süreç** (Eastern Mediterranean University, TRNC)

KEYNOTE ADDRESS IV

Nov. 14 / 14 Kasım | 10:40-11:20 | Room **Small Hall**

The Ends of 27 Big Depressions
Martin Ellison *(University of Oxford, UK)*

Convenor: **Serdar Sayan** (TOBB-ETU, Türkiye)

KEYNOTE ADDRESS V

Nov. 14 / 14 Kasım | 11:30-12:10 | Room **Small Hall**

Commodity Taxation and the Obesity of the Poor:
Taxation of Sugar Sweetened Beverages and Cosmetics
Glenn Jenkins *(Queen's University, Canada)*

Convenor: **Mustafa Besim** (Eastern Mediterranean University, Northern Cyprus)

KEYNOTE ADDRESS VI

Nov. 14 / 14 Kasım | 14:00-14:40 | Room **Small Hall**

Connectedness Driven-Risk
Kamil Yılmaz *(Koç University, Türkiye)*

Convenor: **Erol Taymaz** (METU, Türkiye)

F2A ENVIRONMENTAL POLICY

Nov. 14 / 14 Kasım | 15:00-16:20 | Room **Arsinoe**

Environmental Taxation and CO_2 Emissions in Turkey: Is There a Signal of Performative Environmentalism?
Hakan Yıldız *(Istanbul Medipol University, Türkiye)*
Serkan Şengül *(Mudanya University, Türkiye)*

Green Transition Indices and Transition Risks: Evidence from Turkey in a Global Context
Seda Ekmen Özçelik *(Ankara Yıldırım Beyazıt University, Türkiye)*

Türkiye's Green Transition and the Potential Role of an Emissions Trading System
Yaprak Karadağ Duymazlar *(İzmir Katip Çelebi University, Türkiye)*
Bernur Açıkgöz *(İzmir Katip Çelebi University, Türkiye)*

Carbon Emissions and Global Value Chains: Evidence from CBAM Sectors
Pınar Tat *(Gebze Technical University, Türkiye)*
Abdullah Altun *(Gebze Technical University, Türkiye)*
Halit Yanıkkaya *(Gebze Technical University, Türkiye)*

Convenor: **Ebru Voyvoda** *(Middle East Technical University, Türkiye)*

F2B FINANCIAL MARKETS

Nov. 14 / 14 Kasım | 15:00-16:20 | Room **Salamis**

Asymmetric Interconnectedness among International Payment Systems, Semiconductors, and Communication Companies
Barış Zıba *(Eastern Mediterranean University, TRNC)*
Nigar Taşpınar *(Eastern Mediterranean University, TRNC)*

Retail demand and the pricing associated with extreme losses
Murat Tiniç *(Vrije Universiteit Amsterdam, Netherland)*
Ahmet Sensoy *(Bilkent University, Türkiye)*
Irem Dastan *(Kadir Has University, Türkiye)*

Oil Prices, Geopolitical Risks, and Sectoral Stock Returns in G7 Economies
Sadia Asghar *(Eastern Mediterranean University, TRNC)*

The Effects of a Macroprudential Policy on Deposit Interest Rates Across Size
Hüseyin Öztürk *(CBRT, Türkiye)*
Tuba Pelin Sümer *(CBRT, Türkiye)*

Convenor: **Seniha Besim** (Final International University, Northern Cyprus)

F2C ECONOMICS of GLOBAL SUPPLY CHAINS

Nov. 14 / 14 Kasım | 15:00-16:20 | Room **Lambousa**

The Impact of Global Supply Chain Shocks on Turkish Integration to Global Value Chain
Hülya Saygılı *(Atılım University, Türkiye)*
Esra Hasdemir *(Atılım University, Türkiye)*

Supply Chain Transformation under Global Uncertainty: Evidence on Sector Level JIT–JIC Dynamics from Türkiye
Nevzat Saygılıoğlu *(Atılım UniversityTürkiye, Türkiye)*
Hülya Saygılı *(Atılım University, Türkiye)*

Circular economy entrepreneurship as a pillar of circular supply chain sustainability: the roles of circular economy capability and net zero policy.
Kolawole Iyiola *(Akdeniz Karpaz Universitesi, Northern Cyprus)*

Convenor: **Burçhan Sakarya** *(Başkent University, Türkiye)*

F2D STRATEGIC DECISION-MAKING and INFORMATION DESIGN

Nov. 14 / 14 Kasım | 15:00-16:00 | Room **Soli**

A Machine Learning and Real Options Framework for Proactive Foreign Exchange Rate Risk Management in Global Supply Chains
Reza Askary *(Eastern Mediterranean University, Türkiye)*
Oğuzhan Kirilmaz *(Eastern Mediterranean University, Türkiye)*
Sara Rafat *(University of Kyrenia, Northern Cyprus)*

Lower bounds for the number of pure strategy Nash equilibria
Nil İpek Şirikçi *(Middle East Technical University, Türkiye)*

Convenor: **Burak Ünveren** (Yıldız Technical University, Türkiye)

F2E TARIM ve GIDA GÜVENCESİ

Nov. 14 / 14 Kasım | 15:00-16:20 | Room **Porta Del Mare**

Finansallaşma, Kalkınma Finansmanı ve Türkiye Tarım-Gıda Sektöründe Gıda Güvencesi
***Elif Karaçimen** (Recep Tayyip Erdoğan Universtiy, Türkiye)*

Çevre Teknolojilerinin Gıda Güvencesi Üzerine Etkisi
***Ergün Aktürk** (Atatürk University, Türkiye)*
***Sena Gültekin** (Atatürk University, Türkiye)*

Küreselleşme Süreci ve Türkiye Tarımı: Sorunlar, Çözümler
***Yaşar Uysal** (Dokuz Eylül University, Türkiye)*

Convenor: **Alper Güzel** (Ondokuz Mayıs University, Türkiye)

F2F EKONOMİ POLİTİKASI ve FİNANSAL İSTİKRAR

Nov. 14 / 14 Kasım | 15:00-16:40 | Room **Othello**

Türkiye'de Varlık Dolarizasyonunun Belirleyicileri: Asimetrik Etkiler ve Histeri Analizi
***Ahsen Emir Bulut** (Dokuz Eylül University, Türkiye)*
***Necmettin Mustafa Kalaysız** (Dokuz Eylül University, Türkiye)*
***Nilgün Acar Balaylar** (Dokuz Eylül University, Türkiye)*

Para Politikası ve Banka Risk Üstlenimi: Türkiye Örneği
***Ayşe Tuncer** (Pamukkale University, Türkiye)*
***Mehmet İvrendi** (Pamukkale University, Türkiye)*

Ekonomik Programların Hazırlanması ve Uygulanmasında Maliye Politikası Para Politikası Uyumu: Türkiye için Bir Öneri
***Hakkı Hakan Yılmaz** (TEPAV, Türkiye)*

Türkiye’de Emisyon Hacmi Tahmini: Kara Kutu Makine Öğrenmesi Modellerinin Yapay Zekayla Açıklanması
***Nurten Sinem Keser** (CBRT, Türkiye)*
***Serdar Murat Öztaner** (CBRT, Türkiye)*

Ekonomik Karmaşıklık ve İktisadi Büyüme İlişkisi
***Yunus Yücel** (Bayburt University, Türkiye)*
***Serap Bedir Kara** (Erzurum Technical University, Türkiye)*
***Aylin Soydan** (İstanbul Okan University, Türkiye)*

Convenor: **Mustafa Nejat Coşkun** (AHBVU, Türkiye)

DAY 3

S1A CENTRAL BANKING and INFLATION

Nov. 15 / 15 Kasım | 09:00-10:00 | Room **Arsinoe**

CBDC implementation: Empirical evidence from a dual-step framework
Halil Tunc *(Eastern Mediterranean University, Northern Cyprus)*
Mete Feridun *(Eastern Mediterranean University, Northern Cyprus)*

Effects of Monetary Policy Shocks on UK Regional Activity: A Constrained MFVAR Approach
Zeyyad Mandalinci *(Bilgi University, Northern Cyprus)*

The Impact of Uncertainty on Firms' Foreign Sales: The Role of Persistence and Expectations
Taha Muhammet Süleyman *(CBRT, Türkiye)*
Abdullah Kazdal *(CBRT, Türkiye)*

Convenor: **Zeynep Kantur** (Baskent University, Türkiye)

S1B ENERGY MARKETS and ECONOMIC DYNAMICS

Nov. 15 / 15 Kasım | 09:00-10:20 | Room **Salamis**

The Determinants of Liquified Natural Gas Prices in Qatar: Empirical Evidence from Wavelet Analysis
Vedat Yorucu *(Eastern Mediterranean University, Northern Cyprus)*
Massoud Rashid Ali *(Eastern Mediterranean University, Northern Cyprus)*

Exploring the Nexus Between Coal, Financial Development, Globalization, Urbanization, Economic Growth and Ecological Footprints in Coal-Consuming Countries
Muri Wole Adedokun *(University of Mediterranean Karpasia, TRNC)*

Gaz Price vs Elecricity Price: Gauss Markov Switching Application
Vedat Yorucu *(Eastern Mediterranean University, Northern Cyprus)*
Ziyad Baddar *(Eastern Mediterranean University, Northern Cyprus)*

Convenor: **Ayşen Sivrikaya** (Hacettepe Universisty, Türkiye)

S1C LABOR and the FUTURE of WORK

Nov. 15 / 15 Kasım | 09:00-10:00 | Room **Lambousa**

When Academic Careers are No Longer Decent Work
Nadia Nourafkan Özen *(Eastern Mediterranean University, Northern Cyprus)*
Cem Tanova *(Cyprus International University, Northern Cyprus)*

Occupational Exposure to AI: Insights from Turkish Case
Abdullah Kazdal *(CBRT, Türkiye)*
Ayşe Özgür Pehlivan *(TOBB Economics and Technology University, Türkiye)*
Begüm Şeren Güler *(Ministry of Foreign Affairs, Türkiye)*

Convenor: **Sonkurt Sen** (University of Bonn, Germany)

S1D ÇEVRE EKONOMİSİ ve YEŞİL DÖNÜŞÜM

Nov. 15 / 15 Kasım | 09:00-10:20 | Room **Soli**

İklim Politikası, Karbon Sızıntısı ve Küresel Ticaret: Literatürün Eleştirel Bir Değerlendirmesi
Afet Ayçe Başalp *(Manisa Celal Bayar University, Türkiye)*

Maliye Politikası Yeşil Büyümenin İtici Gücü Müdür? Karbon Emisyonu Yüksek Olan Ekonomiler Üzerine Bir Analiz
Deniz Erer *(Manisa Celal Bayar University, Türkiye)*
Elif Erer *(Manisa Celal Bayar University, Türkiye)*

Sıfır Karbon Ekonomisine Geçişte Elektrikli Araçlar: OECD Stratejisi ve Türkiye'nin Uyarlanma Dinamikleri
Özgür Utku Macunluoğlu *(Bağımsız Araştırmacı, Türkiye)*

Küresel Değer Zinciri Katılımı ve Enerji Kullanımının Karbon Emisyonlarına Etkisi: Türkiye Örneği
Yunus Yücel *(Bayburt University, Türkiye)*
Serap Bedir Kara *(Erzurum Technical University, Türkiye)*

Convenor: **Murat Donduran** (Yıldız Technical University, Türkiey)

S1E MONETARY POLICY AND THE FIRM

Nov. 15 / 15 Kasım | 09:00-10:00 | Room **Porta Del Mare**

Heterogeneous Impact of the Pandemic on Default Probabilities of Manufacturing Firms
Mehmet Selman Çolak *(Marmara University, Türkiye)*
Oğuzhan Ergin *(CBRT, Türkiye)*
Pınar Deniz *(Marmara University, Türkiye)*

Determinants of Inflation Expectations in Türkiye
Erhan İşcan *(Cukurova University, Türkiye)*

Local Currency Borrowing Constraints and Firm Behavior: Evidence from an Emerging Market
Mehmet Selman Çolak *(CBRT, Türkiye)*
Tuba Pelin Sümer *(CBRT, Türkiye)*
Selay Şahan *(CBRT, Türkiye)*
Muhammed Hasan Yılmaz *(CBRT, Türkiye)*

Convenor: **Cihan Yalçın** (CBRT, Türkiye)

S1F LABOUR and SOCIAL SECURITY

Nov. 15 / 15 Kasım | 09:00-10:00 | Room **Othello**

Heterogeneous Returns to Apprenticeships: Evidence from Canada
Mahmut Ablay *(CBRT, Türkiye)*
Fernando Saltiel *(McGill University, Canada)*

The Role of Business School Professors in Addressing Today's Ethical Crisis in Business
Ronald Jean Degen *(ANEGEPE, Brazil)*

The Social Security Pension System of Northern Cyprus:
Analysis of Deficits and Inequities with Proposals for Sustainability and Fairness
Hasan Ulaş Altiok *(Eastern Mediterranean University, Northern Cyprus)*
Amin Sokhanvar *(Cambridge Resources International, Canada*
Glenn P. Jenkins *(Queen's University, Canada and Cyprus International University, Northern Cyprus)*

Convenor: **Mustafa Özsarı** (Konya Food and Agriculture University, Türkiye)

KEYNOTE ADDRESS VI

Nov. 15 / 15 Kasım | 10:40-11:20 | Room **Small Hall**

Gender Bias in Media Coverage and Its Impact on Inflation Expectations
Selva Demiralp *(Koç University, Türkiye)*

Convenor: **Mustafa Besim** (EMU, Northern Cyprus)

KEYNOTE ADDRESS VII

Nov. 15 / 15 Kasım | 11:30-12:10 | Room **Small Hall**

Plastic Turkey: International Impacts of China's Waste Import Ban
Banu Demir Pakel *(University of Oxford, UK)*

Convenor: **Ayşen Sivrikaya** (Hacettepe University, Türkiye)

S2A MONETARY POLICY

Nov. 15 / 15 Kasım | 13:00-14:20 | Room **Arsinoe**

Does public engagement play a role in CBDC adoption? Empirical evidence from OECD and non-OECD countries
Halil Tunc *(Eastern Mediterranean University, Northern Cyprus)*
Mete Feridun *(Eastern Mediterranean University, Northern Cyprus)*

Economic Structure and Monetary Transmission: Comparing Interest Rate-Inflation Dynamics in Resource-Based versus Diversified Economies
Jean Pierre Dukundane *(Eastern Mediterranean University, Northern Cyprus)*

Does Monetary Policy Influence CO_2 Emissions? ARDL Evidence from the U.S.
Hasan Güngör *(Eastern Mediterranean University, Northern Cyprus)*
Mümine Özçelik *(Eastern Mediterranean University, Northern Cyprus)*

Exchange Rate Policy and Crisis Signals: Constructing an Exchange Market Pressure Index for Nigeria
Obioma Chidiebere Obijama *(Eastern Mediterranean University, Northern Cyprus)*
Foday Joof *(Eastern Mediterranean University, Northern Cyprus)*

Convenor: **Erhan İşcan** (Cukurova University, Türkiye)

S2B POVERTY, SUSTAINABILITY and DEVELOPMENT

Nov. 15 / 15 Kasım | 13:00-14:00 | Room **Salamis**

Determinants of Household Welfare and Poverty in Somalia: Evidence from Somali Integrated Household Budget Survey 2022
Mohamed Mumin Abdulle *(Eastern Mediterranean University, Northern Cyprus)*

Evaluation of the Willingness to Pay of Households for a Potable and Reliable Water Supply in Famagusta, Northern Cyprus
Ridha Moataz Drebika *(Eastern Mediterranean University, Northern Cyprus)*

The Synergistic Effect of Carbon Pricing Mechanisms on Green Innovation
Jahfaith Ugochukwu Irokanulo *(Cyprus International University, TRNC)*
Demet Beton Kalmaz *(Cyprus International University, TRNC)*

Convenor: **Hasan Ulaş Altiok** (Eastern Mediterranean University, Northern Cyprus)

S2C INTERNATIONAL FINANCIAL MARKETS

Nov. 15 / 15 Kasım | 13:00-14:20 | Room **Lambousa**

Impact of high-frequency trading on volatility during normal and extreme periods
Onur Olgun *(Borsa Istanbul, Türkiye)*
Cumhur Ekinci *(Istanbul Technical University, Türkiye)*

The Hidden Fragility of Large Banks: Asymmetric Connectedness and Systemic Risk
Eyad Abdel Hafez *(Eastern Mediterranean University, Northern Cyprus)*
Nigar Taşpınar *(Eastern Mediterranean University, Northern Cyprus)*
Barış Memduh Eren *(University of Kyrenia, Northern Cyprus)*

Dynamic Integration and Volatility Spillovers in Technology-Focused Financial Markets: A Time-Varying Parameter Frequency Connectedness Approach
Mehrza Shafiei Shahidlu *(Eastern Mediterranean University, Northern Cyprus*

Assessing Volatility Spillover Effects Between Sustainable and Non-Sustainable Firms in the Energy Sector
Saba Shirzadifooladi *(Eastern Mediterranean University, Northern Cyprus)*

Convenor: **Vedat Yorucu** (Eastern Mediterranean University, Northern Cyprus)

S2D SOSYOEKONOMİK ve KÜLTÜREL DÖNÜŞÜM DİNAMİKLERİ

Nov. 15 / 15 Kasım | 13:00-14:20 | Room **Soli**

İnançtan Politikalara: Türkiye'de Dindarlık ve Yeniden Dağılım Tercihlerinin Dönüşümü
Emrullah Özden *(Recep Tayip Erdogan University, Türkiye)*

UNESCO Dünya Mirası ve Turizm Gelirleri İlişkisi: Turizm Yoğun Ülkeler Üzerine Panel Veri Analizi
Hande Erk *(Dokuz Eylül University, Türkiye)*
Hamdi Emeç *(Dokuz Eylül University, Türkiye)*

Convenor: **Sami Fethi** (Eastern Mediterranean University, TRNC)

S2E PARA ve BANKACILIK

Nov. 15 / 15 Kasım | 13:00-14:20 | Room **Porta Del Mare**

Merkez Bankaları Enflasyon Beklentilerini Şekillendiriyor mu? Hanelerden, Firmalardan ve Piyasa Katılımcılarından Elde Edilen Kanıtlar
Okan Akarsu *(CBRT, Türkiye)*
Emrehan Aktuğ *(Sabancı University, Türkiye)*
Cihan Yalçın *(CBRT, Türkiye)*

Türkiye'de Ekonomik Politikalarin Gelir Dağilimi Üzerindeki Etkisi
Nagihan Aksoy *(Pamukkale University, Türkiye)*
Mehmet İvrendi *(Pamukkale University, Türkiye)*

Kur Korumalı Mevduatın Getirdikleri Götürdükleri: İktisadi ve Hukuki Bir Analiz
Burhanettin Onur Kireçtepe *(Tokat Gaziosmanpaşa University, Türkiye)*
Bernur Açıkgöz *(İzmir Katip Çelebi University, Türkiye)*

Yeşil Dönüşümün Bankacılık Boyutu: Kamu ve Özel Bankaların Kredi Tahsislerinde Ayrışma
Sabri Kurtoğlu *(CBRT, Türkiye)*
Kaşif Batu Tunay *(Marmara University, Türkiye)*

Convenor: **Tolga Omay** (Atılım University, Türkiye)

S2F MACROECONOMIC SHOCKS, EXCHANGE RATES and HOUSING

Nov. 15 / 15 Kasım | 13:00-14:00 | Room **Othello**

Time-Varying Responses of CDS Spreads to Exchange Rate Shocks: Evidence from Turkey
Bige Küçükefe *(Tekirdağ Namık Kemal University, Türkiye)*
Nilüfer Kaya Kanlı *(İzmir University of Economics, Türkiye)*

It Is Not Your Risk but It Is Your Problem:
Peer Country Effects on Emerging Market Credit Default Swap Spreads
Mehmet Selman Colak *(CBRT, Türkiye)*
Sumeyra Korkmaz *(CBRT, Türkiye)*
Huseyin Ozturk *(CBRT, Türkiye)*
Muhammed Hasan Yılmaz *(CBRT, Türkiye)*

Supply and Demand Dynamics in the Turkish Housing Market
Mehmet Selman Çolak *(CBRT, Türkiye)*
Ahmet Deryol *(CBRT, Türkiye)*
Mehmet Emre Şamcı *(CBRT, Türkiye)*

Convenor: **Mustafa İsmihan** (Eastern Mediterranean University, Northern Cyprus)

Abstracts

Özetler

Trade Liberalization and Firm-Level Prices

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Abstract
In January 1996, Türkiye eliminated or significantly reduced import tariffs on manufacturing products under the Customs Union Agreement with the EU. Although it was arguably one of the most consequential policy shifts in the country's past fifty years, its impact on firm-level price behavior remains unexplored. In this study, we investigate how firms responded to this important trade liberalization. Merging the product-level data on firms' input use and production with changes in tariff rates, we find that the lower input tariff rates are associated with reduced output prices, while changes in output tariffs have no significant effect. We also observe that lower input tariffs boost firm productivity, measured by real output, value added, and total factor productivity. Interestingly, our results are primarily driven by import-competing industries. These firms are also more likely to survive after the facing the input tariff reductions.

Keywords: Trade liberalization, Customs union, Prices, Markups, Production, Tariffs, Markdowns, Productivity, Turkish economy
JEL Codes: F13, F14, L11, L25

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Characteristics of High Growth Firms in Turkiye over the period 2006-2023

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Abstract
In recent years, a relatively small but rapidly growing group of firms called High Growth Firms (HGFs)- has attracted the attention of researchers due to their substantial potential to contribute significantly to both employment creation and the overall competitiveness of national economies. However, despite this growing interest, the literature continues to debate the characteristics of these firms. While the reasons for HGFs' exceptional growth trajectories and strategies are being explored, their distinctive characteristics are also emerging across countries. Although some studies emphasize the dominance of high-tech firms among HGFs, studies indicate their presence is clear in every sector of the economy. Moreover, it appears that firms that are not necessarily small or young can also qualify for HGF status in some countries. Therefore, before undertaking more sophisticated empirical analysis, it is necessary to address the common characteristics of HGFs.
This study aims to identify the characteristics of HGFs in Türkiye and examine their differences from other countries, using GBS (Entrepreneurial Information System) firm-level data. Using the Eurostat-OECD definition of HGFs, the following characteristics will be scrutinized: (i) number and proportion of HGFs at the economy-wide level and at the sector level, (ii) geography of HGFs, and (iii) the role of HGFs on employment creation. Next, the focus will be on the HGF universe and on their main characteristics (by technology level, firm size, export-orientation). The findings will then be compared with those found in studies conducted in other countries.

Key words: Firm-level analysis, High-Growth Firms, Türkiye, firm growth, firm performance
JEL-Codes: D21, D22, L25

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Even the Announcement Matters? The Effect of CBAM on Exports and Exporters

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Abstract
This paper analyzes how Turkish firms react to the introduction of the CBAM, concentrating on two main strategic responses: adjusting production processes to comply with EU climate standards or redirecting exports toward markets with lighter regulation. We specifically assess the effects of the July 2021 CBAM announcement on firms' export patterns and investment choices, drawing on administrative data that cover the full population of firms in Türkiye. We employ a difference-in-differences framework using 2018-2023 customs data. We create an exposure variable as the ratio of a firm's pre-announcement exports of CBAM-covered products to its total exports. A higher value indicates that a substantial share of the firm's exports consists of CBAM-covered products destined for the EU. In our difference-in-differences specification, we interact this exposure measure with a post-July 2021 dummy. We focus on different outcome variables. For the export analysis, we construct two separate sets of variables, one for EU destinations and one for non-EU destinations, to capture potential market-switching behavior. For each group, the export variables are defined as follows: (i) the logarithm of export value of CBAM-covered products, (ii) the logarithm of the number of exported CBAM-covered products, (iii) the logarithm of the number of destination countries for CBAM-covered product exports, and (iv) the weighted average export price of CBAM-covered products. While the first three variables capture potential market-switching responses to the CBAM announcement, the last one reflects possible price adjustments across markets. Another potential firm response to the CBAM announcement is green investment. To assess this, we test whether more exposed firms increase their imports of carbon-reducing products, using the same difference-in-differences setup with the logarithm of such imports as the dependent variable. We also conduct heterogeneity analyses by firm size and financial constraints. The results of the study provide evidence consistent with market-switching behavior.

Keywords: CBAM, firm behavior, market-switching, trade and environment
JEL Codes: F14, F18, D22, Q56

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Export Performance of Turkish Firms Compared to EU and OECD Countries

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Abstract
This paper investigates why exporting firms in Türkiye lag behind their EU and OECD counterparts in terms global competitiveness. Using firm-level data from the World Bank Enterprise Surveys (WBES), we construct comparative sectoral panels (manufacturing, services, and core sectors) and attempt to identify the main determinants of export performance. The study combines theoretical insights from international trade models and empirical evidence on global value chain (GVC) participation, digital adoption, and firm heterogeneity. We argue that macroeconomic instability, structural bottlenecks in infrastructure, innovation, and access to finance explains Türkiye's weaker positioning relative to EU and OECD averages. The results emphasize first the urgent need to strengthening the trust in the legal system of the country to prevent further outflow of resources from the country and to ensure the flow of resources and foreign capital investments back into the country. Secondly, to increase the competitiveness of Turkish exporting firms there is need to improve managerial capacity, integration into global production networks and strong digital infrastructure.

Keywords: Trade, Export, Exporting Firms, Türkiye, OECD; EU
JEL Codes: F14, L25, L30

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Advisors as Local Information Conduits in M&A Transactions

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Abstract
Advisors play a critical role in mergers and acquisitions, yet the mechanisms through which they reduce information asymmetry remain unclear. Using 9,007 U.S. mergers and acquisitions announced between 1980 and 2022, we show that acquirer advisor proximity to the target significantly mitigates this problem. More specifically, hiring an advisor from the target's state reduces bid premiums by 15.7 percentage points, lowers target announcement returns by 4.42 percentage points, and increases acquirer returns by 1.01 percentage points. These effects are robust to instrumental variable analysis and are strongest in deals with heightened information asymmetry, such as those involving geographically distant or small targets, or advisors lacking industry expertise or reputation. Our results identify geographic proximity as a novel and flexible channel through which acquirers improve valuation accuracy and avoid overpayment, highlighting the strategic role of local knowledge in M&A advisory services.

Keywords:: Mergers and Acquisitions, M&As, Financial Advisors, Local Knowledge, Information Asymmetry.
JEL Codes: G34.

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Climate and Geopolitical Risks, Market Volatility, and Insurance Stock Returns in China: Evidence from Quantile-on-Quantile and Wavelet Analysis

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Abstract
This paper examines how climate-related threats, geopolitical risk, and global market volatility jointly and asymmetrically influence the stock returns of insurance firms in China. Using daily observations from April 2012 to February 2025, the analysis applies Quantile-on-Quantile regression together with Wavelet Coherency in order to capture both nonlinear dependence and time–frequency dynamics. The framework incorporates the Physical Climate Risk Index, the Transition Climate Risk Index, the Geopolitical Risk Index, and the VIX as a measure of global investor sentiment. The findings indicate a pronounced nonlinear pattern that varies across market regimes. Moderate levels of PCRI and TCRI are associated with improved returns during bullish periods but result in significant losses when markets are under stress. Geopolitical risk offers only limited safe-haven effects in upward markets and exerts strong downward pressure when returns are low. Market volatility, proxied by the VIX, emerges as the most persistent negative driver at the lower and middle quantiles, highlighting insurers' vulnerability to capital outflows in unstable environments. Wavelet results further reveal that these effects intensify during episodes of major geopolitical conflicts or severe climate shocks.

Keywords: Insurance stock returns; Geopolitical risk; Climate risk; Market volatility; QQR.
JEL Codes: G32, C58, Q54.

In and out of debt: when and why?

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Abstract
Previous literature investigates why some firms use debt financing and others are zero-leveraged. The outcome successfully revealed the factors connected with the firm's financing decisions. However, the main question is why some leveraged firms decide to be all equity firms and why some zero-leveraged firms start to use debt financing. The reasons for these two decisions will help the research community understand the fundamental nature of firms' capital structure decisions. This study aims to answer this question using a hand-collected quarterly data set of publicly traded Turkish firms that change their capital structure status from leveraged to unleveraged, or vice versa, from 2018 to 2022. The total sample comprises 425 firms, from which 63 report zero leverage, and 53 firms perform at least one capital structure shift during the research period. The findings reveal the significant role of firm-specific factors such as profitability, working capital management and corporate governance preferences in firms' decisions to change from zero-leverage to leveraged or reverse.

Keywords: Capital structure, Zero-leverage phenomenon, Developing Countries
JEL Codes: G32, G34

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Valuing Strategic Flexibility in the Polycrisis Era: An Expanded Real Options Taxonomy and Methodological Framework

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Abstract
The contemporary business landscape is characterized by polycrisis—the concurrent and interconnected manifestation of geopolitical instability, climatic disruptions, cyber threats, and technological shifts. This paper argues that traditional valuation methodologies, anchored in static, deterministic assumptions, are fundamentally ill-equipped to capture the strategic value of organizational resilience. We propose a comprehensive theoretical extension of Real Options Analysis (ROA) by introducing a unified framework centered on the quantifiable concept of the flexibility premium. Beyond advancing theoretical models, this framework provides actionable insights for policymakers, corporate strategists, and institutional investors seeking to quantify and embed resilience into capital allocation and risk management practices.
We identify, define, and model ten distinct flexibility premiums, integrating advanced stochastic processes (jump-diffusion, compound rainbow options), machine learning forecasting, and copula-based dependence structures to address modern strategic challenges, including ESG integration, AI-driven decision-making, and systemic risk. For each premium, we provide rigorous model specifications, precise calibration techniques using novel data mappings, and prescribe robust empirical testing protocols. Our framework bridges a critical gap between financial theory and strategic management, offering a methodological toolkit for quantifying resilience and establishing a forward-looking research agenda for interdisciplinary scholarship in risk and resilience.

Keywords: Real Options Analysis, Strategic Flexibility, Resilience, Polycrisis, Stochastic Modeling, Risk Integration, ESG, Methodological Framework.
JEL Codes: G32, M11, D81

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The Causal Impact of Paternal Worklessness on Young Female's Probability of Being NEET: Evidence from a Developing Country

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Abstract
This paper examines the causal effect of father's employment status on young female's likelihood of being in neither employment nor education or training (NEET) for the first time in Türkiye, a middle income, developing country during a period which includes an economic and sociological downturn, namely the COVID-19 pandemic. In the empirical analysis, we use 2018-2023 waves of Turkish Labor Force Statistics (TLFS) micro data sets. We pool the six waves of the survey data set and end up with 161,022 observations of young females aged between 15-24, living with their parents. We examine the impact of paternal worklessness on young daughter's probability of being NEET separately for 15-24, 15-19 and 20-24 age groups. Instrumental Variable (IV) estimation results suggest that there is a significant negative causal relationship between father's joblessness and young female's probability of being NEET. Since father's worklessness is a sign of lower household income or lower socioeconomic status (SES), we can state that difficulty in reaching resources or having less networks lead to adverse long-term effects among young females.

Keywords: NEET, young females, instrumental variable estimation, Türkiye
JEL Codes: J01, J08, C26

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Composition of the Unemployed and Vacancy Pools and the Labor Market Match Efficiency (Very Preliminary)

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Abstract
Our knowledge of what determines the efficiency with which vacancies and unemployed workers are matched remains limited due to the complex interplay of factors such as search frictions, labor market institutions, skill mismatches, and geographic immobility. Empirical evidence is often constrained by data limitations and measurement challenges, making it difficult to isolate the drivers of matching efficiency across different economic contexts and over time. This paper contributes to the literature by using regional data from a developing country between 2008 and 2020. Using administrative Turkish data on registered unemployment, vacancies, and matching, we estimate the regional matching efficiency across 81 cities. We explore the effects of average age, education, and gender composition of the unemployed pool, as well as the skill composition of the vacancies, on regional variation in match efficiencies. We find that both the GDP and the population density increase the match efficiency in that city. Controlling for GDP and population density, skill composition of the vacancy pool affects the match efficiency of a region. Not only the vacancy pool, but also the applicant pool, in terms of education and age, also matters.

Keywords: Unemployment, Vacancies, Matching Function, Matching Efficiency, Composition Effect.
JEL Codes: J63, J64

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Does employment protection affect wages, inequality, and unemployment? Theory and Evidence

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Abstract
This paper empirically documents and theoretically explains how stronger employment protection legislation increases wages despite decreasing unemployment and income inequality. On the empirical front, we use a panel dataset from 40 countries covering the period from 1975 to 2019. Employing a newly constructed labor regulation index, we find that stricter employment protection is associated with higher wages, lower inequality, and reduced unemployment. To explain these findings, we incorporate employment protection legislation into a game-theoretical efficiency-wage model where workers lose their jobs if monitoring detects shirking. However, the dismissal is subject to judicial review. We show that equilibrium wages increase but unemployment and inequality decrease with the probability that courts rule in favor of workers in case of dismissal. These results suggest that well-designed dismissal protections can enhance labor market equity without compromising efficiency.

Key Words: Dismissal law, wage, inequality, unemployment
JEL Codes: C23, E25, J08

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Nonlinear Unit Root Testing in the Yield Spread: A Fourier-Threshold Approach

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Abstract
This paper develops a novel Fourier-Threshold Augmented Dickey-Fuller (Fourier-TAR) unit root test that simultaneously accommodates structural breaks and nonlinear threshold effects in time series analysis. Traditional unit root tests frequently fail to reject nonstationarity when structural changes or asymmetric adjustment dynamics are present, leading to potentially misleading inferences about persistence in economic variables. Our proposed test integrates flexible Fourier series to capture unknown structural breaks with threshold autoregressive models to detect regime-dependent mean reversion behavior. Monte Carlo simulations demonstrate that the Fourier-TAR test exhibits superior small-sample properties and significantly higher power compared to conventional linear tests and those incorporating only single features. The empirical application focuses on U.S. Treasury yield spreads, revealing strong evidence of mean reversion when both structural breaks and nonlinear adjustment are properly modeled, contrasting with standard test results that suggest unit root behavior. The findings have important implications for monetary policy effectiveness and economic forecasting, as they confirm the existence of long-run equilibrium relationships in the term structure while highlighting the regime-dependent nature of yield curve dynamics. This methodology provides researchers with a robust framework for analyzing stationarity in complex economic time series.

Keywords: Unit root test; Structural breaks; Threshold autoregression; Fourier function; Yield curve
JEL Codes: C12, C22, C24, G12

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Are Intergovernmental Transfers Sticky?: An Empirical Analysis of the Flypaper Effect in Türkiye

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Abstract
The flypaper effect refers to the tendency of fiscal transfers from central to local governments to be directed toward direct expenditures rather than reducing local taxes which weakens the financial autonomy of municipalities and increases their dependence on central government revenue sources. In the case of Turkey, more than 70% of metropolitan municipalities' revenues depend on tax shares transferred from the central government. In this regard, the motivation of our study is primarily based on the impact of metropolitan municipal total own-source revenues on fiscal performance in different regimes defined by the level of dependency on the central government. Within this scope, we employ a non-linear threshold panel data approach to assess the existence of the flypaper effect in Türkiye over the period 2015-2022 period for 30 metropolitan municipalities. The main findings of our analysis reveal that the level of fiscal decentralization in Turkey is low and that the flypaper effect exists. More clearly, we find out that the effect of municipal own-source revenue on the budget balance is positive in the first regime, in which the revenue share from the central government is below the threshold value. On the other hand, in the second regime where the revenue share exceeds the threshold, the improving effect of total own-source revenues of metropolitan municipalities on the fiscal performance is reversed. In this case, it is necessary to increase the capacity for own-source revenues, reduce dependence on central transfers, and encourage accountable fiscal management in order to strengthen the fiscal performance of municipalities.

Keywords: flypaper effect, fiscal performance of local authorities, panel data analysis
JEL Codes: C23, H70, H77

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A Conceptual Framework for Financial Forecasting: Algorithms, Application, and Limitations

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Abstract
Financial forecasting represents a critical domain in quantitative finance, driven by a complex and evolving methodological landscape. This paper presents a comprehensive conceptual framework that synthesizes this landscape into a structured taxonomy, linking specific prediction targets—direction, level, volatility, and their combinations—to their optimal algorithmic implementations. We systematically analyze a broad spectrum of approaches, from traditional statistical models (ARIMA, GARCH) and machine learning (SVM, XGBoost) to deep learning architectures (LSTM, Transformers) and emerging paradigms like hybrid and Explainable AI (XAI) models. For each, we detail the theoretical justifications, requisite input features, application nuances, and key limitations, drawing upon a wide body of literature to provide an evidence-based guide. Furthermore, we discuss the critical trade-offs inherent in model selection, the importance of rigorous benchmarking, and the foundational "No-Free-Lunch" theorem that dictates context-dependent efficacy. The paper concludes by outlining promising future research directions, including causal AI and foundation models. This work serves as an essential resource for navigating the field, underscoring that there is no single superior algorithm, but rather a set of powerful tools whose effectiveness is contingent on a well-defined forecasting objective within a holistic conceptual framework.

Keywords: Financial Forecasting, Machine Learning, Deep Learning, Algorithmic Trading, Time Series Analysis, Explainable AI, Volatility Modeling.
JEL Codes: C45, C53, G17

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Automatic Enrollment and Household Saving in Türkiye

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Abstract
This study examines the effects of Türkiye's 2017 automatic enrollment reform in private pensions (Otomatik Katılım Sistemi - OKS) on household saving behavior. Using five annual waves of the nationally representative Household Budget Survey (2015–2019), we implement intention-to-treat difference-in-differences and triple-differences estimations on public-sector households. Results show that eligibility for automatic enrollment increased the likelihood that a household reports saving by approximately 13–20 percentage points and shifted portfolios toward reform-linked instruments by nearly 29 percentage points. The reform also modestly broadened household portfolios by 0.2–0.4 additional instruments. Notably, we also observe substantial spillover effects: ineligible public-sector households increased their saving rates (from about 38% to 57%) and their use of pension-linked instruments (from 3% to 23%). Findings are robust across alternative control groups and age-window robustness checks. These results provide the first household-level evidence from Türkiye that default-based enrollment can initiate formal saving and reshape portfolios in a middle-income context characterized by low saving rates and strong informal saving traditions.

Keywords: Automatic enrollment, household saving, private pensions.
JEL Codes: D14, G28, H55

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From Access to Financial Resilience: How Inclusion Has Evolved in Türkiye? (2011–2021)

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Abstract
Financial inclusion is a cornerstone of sustainable economic development and personal well-being. By enabling access to formal savings, credit, and insurance mechanisms, inclusive financial systems help individuals build resilience to economic shocks, reduce vulnerability, and improve their capacity for long-term planning. In emerging economies like Türkiye, understanding the determinants of financial well-being is particularly critical in the face of rapid digitalization, demographic change, and external shocks such as the COVID-19 pandemic. This study investigates the evolution of financial resilience in Türkiye using individual-level data from the 2011, 2014, 2017, and 2021 waves of the World Bank's Global Findex Database. Drawing on Life-Cycle Theory and Institutional Theory, the study estimates a series of discrete choice (logit) models to identify the key socioeconomic and behavioral predictors of individuals' ability to mobilize emergency funds. Explanatory variables include age, gender, education, income, saving habits, formal account ownership, and use of digital financial services. The results suggest that financial literacy, digital access, and formal saving behavior are significant drivers of financial resilience, whereas informal borrowing is negatively associated. The findings provide insights for policy frameworks aiming to promote inclusive, shock-resilient financial systems tailored to Türkiye's evolving demographic and institutional landscape.

Keywords: Financial inclusion, financial resilience, household behavior, Global Findex, personal finance
JEL Codes: D12, G51, D91

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The Impact of the 1997 Education Reform on Educational and Cultural Expenditure

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Abstract
This paper examines the long-term effects of education on household expenditure patterns, focusing on cultural goods and services and education services. The 1997 reform in Turkey, which extended mandatory schooling from five to eight years, generated a sharp discontinuity in educational attainment based on date of birth. Using nationally representative microdata from the 2018 Household Budget Survey, we implement a fuzzy regression discontinuity design, instrumenting household head education with reform eligibility. We find no significant effect of additional schooling on household spending on cultural goods and services, whether in absolute terms or as budget shares. In contrast, reform-induced increases in schooling significantly increase the share of the budget allocated to education services, with effects concentrated among urban households and those with school-age children. These results are robust to alternative bandwidths, polynomial specifications, and placebo cutoffs. The findings contribute to the literature by linking exogenous education gains to intergenerational human capital investment, while highlighting the limited short-run impact of education reforms on broader cultural consumption.

Keywords: Schooling, Education expenditure, Cultural consumption
JEL Codes: I21, D12, J24

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Household Consumptin Response to Income Changes by Wealth Quintile: Evidence from UKHLS, 2009-2021

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Abstract
The UK's economic policy changes from 2009 to 2021, in the aftermath of the Global Financial Crisis, Brexit, and the Covid-19 pandemic, impacted the financial well-being of UK households. Using the Euler regression equation, our research estimates the consumption response to income changes in UK households by wealth quintile, therefore becoming the first to use panel data from the UK Household Longitudinal Survey between 2009 and 2021. Unlike most studies, which focus on conditional consumption responses, our research also analyzes unconditional consumption responses to income changes, thereby isolating the typical influence issue of heterogeneity and outliers. We find that the lowest wealth holders exhibit a modest reaction in consumption to changes in income. Wealthier households have an almost zero response of consumption to income changes, suggesting that net wealth holdings play a crucial role in enabling UK households to smooth consumption over time and buffer income shocks. Lastly, our research contributes further to recent studies that evidence the negative wealth effects on consumption response to changes in income in the wealthiest households.

Keywords: household consumption, wealth quintiles, consumption response, income changes.
JEL Codes: D12, D31, E21, G51.

Are Robots Affecting Wealth Inequality in Türkiye?

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Abstract
Throughout history, wealth concentration has been high globally, with a large portion of total wealth concentrated in the hands of the top 1% income group. Consequently, as income inequality increases, this share of wealth has steadily increased. While studies on the factors affecting wealth inequality exist in the literature, it can be noted that this topic has been less researched for Türkiye. The study aims to investigate the macroeconomic determinants of wealth inequality for Türkiye between 1999 and 2023 using the ARDL method. This study differs from the literature in that it reveals the effects of new technologies or robots on wealth inequality (or the top 1% income group) after controlling for the effects of other control variables (financial development, savings, economic growth, and inflation). The findings indicate that robot use and financial development increase wealth inequality in Türkiye, while the associated inequality decreases as savings and inflation rates increase, and economic growth creates a U-shaped relationship in this type of inequality.

Keywords: Wealth inequality, robot, ARDL, Türkiye.
JEL Codes: C22, D31, O15

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Türkiye'de Robotlar Servet Eşitsizliğini Etkiliyor mu?

Özet
Dünyada tarihsel süreç içerisinde servet yoğunlaşmasının yüksek olup toplam servetin büyük bir kısmının üst %1 gelir grubunun elinde toplandığı ve dolayısıyla, gelir eşitsizliği de arttıkça bu türden servet payının giderek arttığı görülmektedir. Literatürde servet eşitsizliğini etkileyen faktörlere yönelik çalışmaların varlığına karşın, Türkiye için bu konunun daha az araştırıldığı belirtilebilir. Çalışmanın amacı Türkiye için 1999-2023 döneminde servet eşitsizliğinin makroekonomik belirleyicilerini ARDL yöntemini kullanarak araştırmaktadır. Çalışmanın literatürden farkı, diğer kontrol değişkenlerinin (finansal gelişme, tasarruf, ekonomik büyüme ve enflasyon) etkileri kontrol edildikten sonra yeni teknolojilerin veya robotların kullanımının servet eşitsizliği (veya üst %1 gelir grubuna) olan etkilerinin ortaya konulmasıdır. Bulgular, Türkiye için robot kullanımı ve finansal gelişmenin servet eşitsizliğini arttırdığını gösterirken, tasarruf ve enflasyon oranı arttıkça ilgili eşitsizlik azalmakla birlikte ekonomik büyümenin bu türden bir eşitsizlikte U şeklinden bir ilişki yarattığı bulunmuştur.

Anahtar Kelimeler: Servet eşitsizliği, robot, ARDL, Türkiye.

Jel Kodları: C22, D31, O15

From Digitalization to Green Complexity: Empirical Evidences from Turkish Provinces

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Abstract
Digitalization is a key instrument for achieving sustainable development goals, with digital transformation and green growth recognized as top priorities by countries and international organizations. The Green Complexity Index (GCI) is calculated based on the diversity of green products within the export structure and the knowledge intensity required for their production. The study fills an important gap in the literature by examining the impact of digitalization on green complexity across 81 provinces of Turkey over the period 2007–2021 using the System-GMM method. In the analysis, different measures of digitalization such as fixed and mobile broadband subscriptions and fiber optic infrastructure were employed; the findings reveal that digitalization enhances green complexity in low-income provinces, whereas the effect remains limited in high-income provinces, suggesting the presence of a possible saturation phenomenon. Regarding other variables, a nonlinear relationship was identified between economic growth and green complexity; while growth initially stimulates green production patterns, its effect becomes stagnant or even negative beyond a certain income threshold. Moreover, factors such as financial accumulation, industrial structure, and education were found to generate heterogeneous effects at the provincial level. The results underscore the key role of digital technologies in fostering sustainable and sophisticated production, offering practical insights for policymakers pursuing green transformation.

Keywords: Green Complexity, Digitalization, Türkiye.
JEL Codes: Q55, O33, R11

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Dijitalleşmeden Yeşil Karmaşıklığa: Türkiye İllerinden Ampirik Kanıtlar

Özet
Dijitalleşme, sürdürülebilir kalkınma hedeflerine ulaşmada temel bir araç olup, dijital dönüşüm ve yeşil büyüme hem ülkeler hem de uluslararası kuruluşlar tarafından öncelikli hedefler arasında görülmektedir. Yeşil Karmaşıklık Endeksi (GCI), ihracat yapısındaki yeşil ürünlerin çeşitliliği ve bu ürünlerin üretiminde gerekli olan bilgi yoğunluğu temel alınarak hesaplanan bir endekstir. Bu açıdan çalışma, System-GMM yöntemiyle 2007-2021 dönemi için Türkiye'nin 81 ilinde dijitalleşmenin yeşil karmaşıklık üzerindeki etkisini inceleyerek literatürdeki önemli bir boşluğu doldurmaktadır. Çalışmada, sabit ve mobil geniş bant abonelikleri ile fiber optik altyapı gibi farklı dijitalleşme ölçütleri kullanılmış; dijitalleşmenin düşük gelirli illerde yeşil karmaşıklığı arttırdığı, yüksek gelirli illerde ise etkinin sınırlı kaldığı ve bunun muhtemel bir doygunluk olgusuna işaret ettiği ortaya konulmuştur. Diğer değişkenler incelendiğinde ise, ekonomik büyüme ile yeşil karmaşıklık arasında doğrusal olmayan bir ilişki olduğu; büyümenin başlangıçta yeşil üretim biçimlerini teşvik ettiği, ancak belirli bir gelir eşiğinden sonra etkisinin durağanlaştığı ya da negatif yönde geliştiği tespit edilmiştir. Ayrıca, finansal birikim, endüstriyel yapı ve eğitim gibi faktörler iller düzeyinde heterojen etkiler yaratmaktadır. Sonuçlar, dijital teknolojilerin sürdürülebilir ve sofistike üretimi desteklemedeki rolünü vurgulamakta ve yeşil dönüşümü teşvik etmeye yönelik politika yapıcılar için pratik içgörüler sunmaktadır.

Anahtar Kelimeler: Yeşil Karmaşıklık, Dijitalleşme, Türkiye.
JEL Kodları: Q55, O33, R11

Does the Effect of Robotization on Productivity Vary Across Sectors?

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Abstract
Robots equipped with advanced digital technologies enhance firms' competitiveness by providing various benefits such as higher productivity and lower costs. This trend has led to an exponential increase in the number of industrial robots worldwide. Although robotization is generally associated with productivity growth, it is debated whether its effects across different sectors are similar. This study analyzes the relationship between robotization and total factor productivity across industries from 2011 to 2019, with a comparative focus on advanced and emerging economies. The results show that the impact of robotization varies between these groups. In advanced economies, a positive correlation exists between robotization and total factor productivity in the plastics and chemical products sector. Conversely, in the electrical/electronic sectors of advanced economies, as well as in the automotive and electrical/electronic sectors of emerging economies, robotization hurts total factor productivity. This negative correlation may result from poor allocation or inefficient deployment of robots, as well as insufficient internalization of new digital technologies. Alternatively, it might be due to complementary sectoral dynamics such as resource misallocation and shortages of skilled labor.

Keywords: Total factor productivity, robotics, artificial intelligence.
JEL Codes: L50, O25, O30

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Robotlaşmanın Verimlilik Üzerindeki Etkisi Sektörlere Göre Değişir mi?

Özet
İleri dijital teknolojilerle donatılan robotlar, verimlilik artışı ve maliyet minimizasyonu gibi pek çok avantaj sunarak firmaların rekabet gücünü artırmaktadır. Bu durum, dünya genelinde endüstriyel robot sayısının eksponansiyel biçimde artmasına yol açmaktadır. Her ne kadar robotlaşma genel olarak verimlilik artışıyla ilişkilendirilse de, tüm sektörlerde aynı etkiye sahip olup olmadığı tartışmalıdır. Bu çalışmada, 2011–2019 döneminde sektörlerdeki robotlaşma ile toplam faktör verimliliği arasındaki ilişki incelenmektedir. Gelişmiş ülkeler ile yükselen ekonomiler karşılaştırmalı olarak ele alınmaktadır. Elde edilen bulgular, gelişmiş ülkelerin sektörlerindeki robotlaşma ile yükselen ekonomilerdeki robotlaşma arasındaki etkilerin farklılaştığını göstermektedir. Gelişmiş ülkelerde plastik ve kimyasal ürünler sektöründe robotlaşma ile toplam faktör verimliliği arasında pozitif yönlü bir ilişki bulunmuştur. Buna karşılık, gelişmiş ülkelerin elektrik/elektronik sektöründe ve yükselen ekonomilerin otomotiv ile elektrik/elektronik sektörlerinde robotlaşma toplam faktör verimliliğini olumsuz etkilemektedir. Bu ters yönlü ilişki, robotların yanlış veya verimsiz biçimde konumlandırılmasından ve yeni dijital teknolojilerin henüz yeterince içselleştirilmemesinden kaynaklanabilir. Diğer taraftan kaynak tahsisindeki sorunlar, nitelikli işgücü eksiklikleri gibi tamamlayıcı sektörel dinamikler temelinde de ortaya çıkabilir.

Anahtar Kelimeler: Toplam faktör verimliliği, robotik, yapay zeka.
JEL Kodları: L50, O25, O30

The Impact of Artificial Intelligence (AI) on Digitalisation in the Turkish Public Fiscal Administration

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Abstract
The digitalisation process in the Turkish public sector, which began in the 2000's with e-government applications, has progressed further due to technological developments. This has resulted in the implementation of many digital applications in public fiscal administration. The most important of these applications are The Integrated Public Fiscal Administration Information System and The Artificial Intelligence-Supported Accounting and Advanced Analytics Project. In addition to these digital applications, the impact of artificial intelligence, which is now being widely implemented, can also be seen in The Turkish Public Fiscal Administration. The use of artificial intelligence in the budget process, the production of data-driven solutions in public finance and public expenditure processes, artificial intelligence-supported decision-making methods in public procurement, data analytics and early warning systems in auditing, and digitalisation strategies and ethical principles are among the issues addressed in recent years. In this context, The National Artificial Intelligence Strategy 2021-2025 has been published to ensure coordination on artificial intelligence in Türkiye. Furthermore, to examine the effects of artificial intelligence, a Parliamentary Research Commission on Artificial Intelligence has been established in The Grand National Assembly of Türkiye in 2024. Therefore, establishing a legal framework for artificial intelligence and evaluating its potential contributions to public services and public fiscal administration are also on the agenda. The aim of this study is to examine the impact of artificial intelligence on digitalisation in The Turkish Public Fiscal Administration. In conclusion, it is predicted that artificial intelligence will continue to be used intensively in both public services and public fiscal administration in the near future.

Keywords: Digitalisation, artificial intelligence, public fiscal administration.
JEL Codes: H20, H30, H60, H83

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Yapay Zekâ (YZ)'nın Türk Kamu Mali Yönetiminde Dijitalleşmeye Etkisi

Özet

2000'li yıllarda e-devlet uygulamalarıyla başlayan Türk kamu sektöründeki dijitalleşme süreci, teknolojik gelişmelerle birlikte daha da ilerlemiştir. Bu durum, kamu mali yönetiminde birçok dijital uygulamanın gelişimiyle sonuçlanmıştır. Bu uygulamaların en önemlileri, Bütünleşik Kamu Mali Yönetim Bilişim Sistemi ve Yapay Zekâ Destekli Muhasebe ve İleri Analitik Projesi'dir. Bu dijital uygulamaların yanı sıra, günümüzde yaygın olarak uygulanmakta olan yapay zekânın etkisi Türk Kamu Mali Yönetimi'nde de görülmektedir. Bütçe sürecinde yapay zekâ kullanımı, kamu maliyesi ve kamu harcamaları süreçlerinde veriye dayalı çözümlerin üretilmesi, kamu alımlarında yapay zekâ destekli karar alma yöntemleri, denetimde veri analitiği ve erken uyarı sistemleri, dijitalleşme stratejileri ve etik ilkeler son yıllarda ele alınan konular arasında yer almaktadır. Bu bağlamda, Türkiye'de yapay zekâ konusunda koordinasyonu sağlamak amacıyla Ulusal Yapay Zekâ Stratejisi 2021-2025 yayımlanmıştır. Ayrıca, yapay zekânın etkilerini incelemek üzere, 2024 yılında Türkiye Büyük Millet Meclisi'nde bir Yapay Zekâ Meclis Araştırması Komisyonu kurulmuştur. Bu nedenle, yapay zekâ için bir yasal çerçeve oluşturulması ve kamu hizmetlerine ve kamu mali yönetimine potansiyel katkılarının değerlendirilmesi de gündemdedir. Bu çalışmanın amacı, yapay zekânın Türk Kamu Mali Yönetimi'nde dijitalleşmeye etkisini incelemektir. Sonuç olarak, yapay zekânın yakın gelecekte hem kamu hizmetlerinde hem de kamu mali yönetiminde yoğun olarak kullanılmaya devam edeceği öngörülmektedir.

Anahtar Kelimeler: Dijitalleşme, yapay zekâ, kamu mali yönetimi.
JEL Kodları: H20, H30, H60, H83

Environmental Efficiency Assessment of Countries Using SFA: A Panel Data Analysis (2000–2024)

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Abstract
This study aims to evaluate the environmental efficiency of countries over the period 2000–2024 using a Stochastic Frontier Analysis (SFA) framework. Environmental efficiency, defined as the ability of a country to minimize environmental degradation while maintaining economic output, has become a critical concern in the context of sustainable development and global climate policy. By employing SFA, which allows for stochastic noise and inefficiency separation in production processes, this research quantifies the relative performance of countries in managing environmental impacts effectively. The dataset comprises annual data from 2000 to 2024, covering multiple countries across different regions and income levels. Key input variables include economic indicators such as GDP, energy consumption, industrial output, and population, while output variables primarily reflect environmental impacts, including carbon dioxide emissions, particulate matter concentration, and other relevant ecological indicators. By constructing a panel data stochastic frontier model, the study accounts for time-invariant country-specific effects and unobserved heterogeneity, providing robust efficiency scores for each country. Methodologically, the SFA model distinguishes between random shocks and inefficiency in environmental performance. Countries with efficiency scores closer to one are considered more efficient, demonstrating effective management of resources and environmental externalities relative to their economic activity. Conversely, lower scores indicate greater inefficiency and higher levels of avoidable environmental impact. This approach offers policymakers and researchers a quantitative tool for benchmarking performance, identifying best practices, and highlighting areas requiring targeted environmental interventions. The results reveal significant variation in environmental efficiency across countries and over time. High-income countries tend to exhibit higher efficiency scores, reflecting advanced technologies, stricter regulatory frameworks, and greater investment in green infrastructure. In contrast, emerging economies often face trade-offs between rapid economic growth and environmental sustainability, resulting in lower efficiency scores. Temporal trends also indicate gradual improvements in environmental efficiency globally, suggesting the influence of international climate agreements, technological diffusion, and domestic policy measures aimed at reducing emissions and promoting sustainable practices. The study contributes to the literature by providing a comprehensive, multi-year assessment of country-level environmental efficiency using an SFA-based approach. It highlights the importance of integrating economic and environmental objectives and offers empirical evidence to support policy decisions aimed at fostering sustainable growth. Furthermore, the derived efficiency scores can serve as benchmarks for international cooperation, environmental investments, and the allocation of resources toward sustainability initiatives. In conclusion, this research underscores the value of SFA as a methodological tool for evaluating environmental efficiency. The findings emphasize that improving environmental performance requires a combination of technological innovation, policy enforcement, and international collaboration. By identifying efficient and inefficient countries, the study offers actionable insights for promoting environmentally sustainable development over the long term.

Keywords: Mediterranean Countries, SFA, Panel Data Analysis.
JEL Codes: Q56, C23, Q51

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Stranded Capital in Production Networks: Implications for the Economy of the Euro Area

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Abstract
The decarbonization of the economy to tackle climate change might render assets stranded, impacting not only the relevant sector but also causing a ripple effect across all sectors. We develop a multi-sector New Keynesian E-DSGE model with input-output linkages and investment networks to examine the economic impact of exogenous and endogenous capital asset stranding. Given its strategic role in the economy, we place particular emphasis on the mining sector, presenting and interpreting most of our results through its lens. Exogenously stranding capital in the mining sector or all brown sectors implies environmental benefits with short-run output losses and inflationary pressures that fade as production shifts toward greener and less carbon-intensive sectors in the long run. Brown investment taxes turn out to be less favorable policies. Doubling the carbon tax yields significant relocation activities at relatively small economic costs. If the central bank responds strongly to short-run inflationary pressures of carbon tax increases, economic costs become larger. The endogenous capital asset stranding channel in the model amplifies the output effects in the carbon tax policy scenarios.

Keywords: Capital utilization, Stranded assets, Production network, Climate change, Fiscal policy, Monetary policy.
JEL Codes: E22, E32, E52, E61, L14

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Empirical Investigation of fluctuations in LNG gas prices by implementing Wavelet Coherence Transformation Method: The case of Qatar

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Abstract
This research proposal tries to apply wavelet coherence transformation methodology to examine LNG price patterns in Qatar, focusing on its relationship with economic and environmental drivers like exchange rates, taxes and CO_2 emissions. Qatar has been chosen as a case study, which is one of the most important LNG exporting country. For empirical tests, this research study has implemented monthly data ranging from 2005 to 2023. The results revealed that there is a positive/negative correlation between LNG export prices and CO_2 emissions. In the short run, during the pandemic, there is a strong positive/negative linkage between the LNG prices and CO_2 emissions, while in the long run, there are also positive/negative and meaningful relationships between the LNG prices and CO_2 emissions between 2005 and 2023. The reverse effect was also detected, which has empirically validated the hypothesis that, during the decline of exports and the rate of pollution in the atmosphere has declined. This finding has also been supported in the existing energy literature. These outcomes have implications for environmental sustainability targets in the Kyoto Protocol and Qatar. The MATLAB and Python software have been utilized to process data, such as conducting more sophisticated statistical computations and wavelet coherence.

Keywords: Qatar. Wavelet Coherence Transformation, LNG gas price, exchange rates, taxes and CO_2 emissions

The Effects of Circular Economy Products on Export Diversification: An Analysis of Emerging Market Economies

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Abstract
With the growing global interest in sustainability and the green transition, the circular economy has emerged as a key strategy aimed at decoupling resource consumption and environmental degradation from economic growth. While the existing literature offers extensive studies on the environmental impacts of circular economy practices, research addressing their effects on economic structures—particularly on the composition of foreign trade—remains relatively limited. Given that emerging market economies account for a significant share of total world exports, analyzing their trade structures from a sustainability perspective becomes even more critical. This study employs data from the 2022–2024 period for 14 emerging market economies to examine the impact of the share of circular economy products in total exports on export diversification, using the Fractional Logit Model. Fifteen products, classified under HS2022 at the four-digit level, were considered as circular economy products. The findings reveal that an increase in the share of circular economy products in exports reduces export concentration, thereby enhancing export diversification. Accordingly, promoting production and exports based on the circular economy may strengthen the resilience of foreign trade, particularly in emerging economies, and support a development trajectory aligned with the objectives of the green transition.

Keywords: Circular economy, export diversification, emerging market economies, green transition
JEL Codes: F14, F18, L6, Q56

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Public Debt in a Simple Model of Endogenous Growth

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Abstract
This study seeks to advance the literature on public debt and endogenous growth by adopting a provocative stance: it contends that public debt does not pose a threat to economic sustainability, provided that endogenous growth mechanisms underpin the economy. The analytical framework builds upon the foundational endogenous growth model introduced by Barro (1990), but incorporates several distinctive modifications. These include unbalanced budget assumption, heterogenous taxation across factor incomes, income-dependent government expenditure, and the adoption of the decentralized Ramsey equilibrium rather than the social planner's solution. The model features a representative household and firm—both operating under perfect competition and taking prices as given—alongside a government sector. Households accumulate financial assets by extending credit either to the private sector or to the government. The firm's profit-maximizing behavior determines the demand for physical capital, thereby determines the allocation of funds between private investment and public borrowing. The model generates endogenous growth without transitional dynamics. A key result of the model is that the debt-to-GDP ratio remains stable at all times, despite an increase in absolute public debt. The study further demonstrates that a higher government spending-to-GDP ratio boosts the growth rate, while an increased asset tax rate dampens it, and labor income tax has no measurable effect.

Keywords: Public debt; endogenous growth; sustainability, Ramsey model
JEL Codes: O41, E62, H62.

Regional Income Convergence and Spatial Structure in Turkish Provinces (2004–2023)

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Abstract
Regional income disparities in Turkey have remained a significant challenge for decades. Despite periods of rapid economic growth, per capita income distribution across provinces continues to reflect deep-rooted structural inequalities. These disparities pose both economic and social challenges, requiring data-driven and regionally tailored policy responses. This study investigates the spatial distribution of income and income convergence dynamics across Turkey's 81 provinces, employing three complementary methodologies. We analyze regional income disparities using beta convergence analysis over the period 2004–2023, assess spatial dependence via the Moran's I statistic for 2023, and explore the classification of provinces through a K-means clustering approach based on 2023 income data. The results indicate that there is strong convergence during 2004-2012, no convergence during 2012-2020, and divergence after 2020. In addition, we found income clustering across Turkish provinces and defined three main clusters. The integrated findings illuminate not only temporal convergence trends but also the significant spatial clustering of income levels, offering detailed insights for designing more targeted regional development policies.

Keywords: beta convergence, moran's I, K-means clustering, income convergence, Turkey
JEL Codes: R11, O10, O40

Effects of the Crises (Covid-19 and the Russia-Ukraine war) on the GDP Growth: Insights from Brazil and Indonesia during 1980–2024

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Abstract
This study examines the growth determinants in Brazil and Indonesia between 1980 and 2024 using a balanced panel dataset as well as a panel VECM with first differences in EViews. It examines the effect of trade openness, investment, government consumption, inflation, unemployment, exchange rate volatility, and economic crises on growth. The evidence indicates that investment strongly induces growth, while excessive inflation, unemployment, and economic crises significantly discourage it. Government spending is negatively correlated with growth, most likely due to inefficiency or crowding-out. Openness to trade gives mixed results, reflecting commodity dependence and vulnerability to external shocks. Multi-decrement crises produce the worst negative impact, affirming the vulnerability of emerging markets to internal and foreign shocks. The findings underlie the imperative of building productive investment, macroeconomic stabilization, and crisis preparedness in order to preserve long-run growth. Policy recommendations entail the building of investment-facilitating institutions, exchange rate and inflation stabilization, enhancing efficiency of public expenditure, and enhancing labor market programs and fiscal buffers. Additional options such as diversification of exports, contingent lines, and automatic stabilizers are also underscored to enhance resilience. Overall, the research discovers that prudent domestic policy and good governance reduce exposure of emerging economies to global shocks and create a foundation for sustainable recovery and long-term growth.

Measuring Firm-Specific Geopolitical Risks and Their Impact on Investment Decisions in Türkiye

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Abstract
Geopolitical tensions and uncertainties are having an increasingly significant impact on firms' investment preferences, particularly in developing economies. This study combines Caldara-Iacoviello geopolitical risk indices with firm-level trade data to present firm-level geopolitical risk exposure indicators. Unlike aggregate country-level indicators, this approach reveals how geopolitical risks and uncertainties are transmitted to investment decisions through firms' international linkages and sectoral positions. Using a panel data set of representative manufacturing firms for the period 2007-2025, we examine the impact of firms' geopolitical risk exposure on investment decisions for Turkey, a country at the intersection of Middle Eastern and global political shocks. Our findings show that firms' exposure to geopolitical risk is associated with a significant reduction in investment, particularly for those dependent on foreign markets, in addition to the country-specific total geopolitical risk. This highlights the fragility of internationally oriented companies. Furthermore, recent developments and escalating conflicts have intensified these effects, making investment planning more fragile and uncertain. Our findings also show that geopolitical risk not only weakens the overall investment environment but also creates uneven pressure among companies. Therefore, our findings emphasise the importance of considering company-specific risk exposure channels when designing policies to mitigate the negative impact of regional instability on private investment and build resilience in the economy.

Keywords: Perception of geopolitic risk, investment decisions, firm-level analysis, Türkiye.
JEL Codes: D22, D25, D81, F51

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[30] All views and opinions expressed here are of the authors and do not necessarily represent the official views of the Central Bank of Republic of Türkiye and its staff.

Türkiye'de Firmalara Özgü Jeopolitik Risklerin Ölçülmesi ve Yatırım Kararları Üzerindeki Etkileri

Özet
Jeopolitik gerilimler ve belirsizlikler, özellikle gelişmekte olan ekonomilerde, firmaların yatırım tercihleri üzerinde giderek daha önemli bir etkiye sahiptir. Bu çalışma, Caldara-Iacoviello jeopolitik risk endekslerini firma düzeyindeki ticaret verileriyle birleştirerek, firma düzeyinde oluşturulan jeopolitik risk maruziyet göstergeleri sunulmaktadır. Ülke düzeyindeki toplu göstergelerden farklı olarak, bu yaklaşım jeopolitik risklerin ve belirsizliklerin firmaların uluslararası bağlantıları ve sektörel konumları aracılığıyla yatırım kararlarına nasıl aktarıldığını ortaya koymaktadır. 2007-2025 dönemi için temsil gücü yüksek imalat firmalarından oluşan panel veri seti kullanılarak, Orta Doğu ve küresel siyasi şokların kesiştiği bir ülke olan Türkiye için firmaların jeopolitik risk maruziyetinin yatırım kararları üzerindeki etkisi incelenmiştir. Bulgularımız, firmaların jeopolitik risk maruziyetinin, ülkeye özgü toplam jeopolitik riskin yanı sıra, özellikle dış pazarlara bağımlı olanlar için yatırımlarda önemli bir azalma ile ilişkili olduğunu göstermektedir. Bu da uluslararası odaklı şirketlerin kırılganlığını vurgulamaktadır. Ayrıca, son gelişmeler ve tırmanan çatışmalar bu etkileri daha da şiddetlendirerek yatırım planlamasını daha kırılgan ve belirsiz hale getirmiştir. Sonuçlarımız, jeopolitik riskin sadece genel yatırım ortamını zayıflatmakla kalmayıp, şirketler arasında dengesiz bir baskı yarattığını da göstermektedir. Bu nedenle, bulgularımız, bölgesel istikrarsızlığın özel yatırımlar üzerindeki olumsuz etkisini azaltmak ve ekonomide dayanıklılık oluşturmak için politikalar tasarlarken, şirketlere özgü risk maruziyeti kanallarını dikkate almanın önemini vurgulamaktadır.

Anahtar Kelimeler: Jeopolitik risk algısı, yatırım kararları, firma düzeyinde analiz, Türkiye.
JEL Kodları: D22, D25, D81, F51

Evaluation of the Entrepreneurship-Based Ranking of OECD Countries

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Abstract
Entrepreneurship, together with labor, capital, and land, is a fundamental pillar of production, yet it differs from other tangible factors due to its intangible nature and unique role in driving innovation and competitiveness. While deficiencies in physical resources may be compensated to some extent, the absence of entrepreneurship significantly limits the capacity for sustainable economic development. Entrepreneurship is not only the engine of economic growth but also a key driver of sustainable development. In today's knowledge-based economy, fostering an entrepreneurial culture represents a strategic priority for educators and policymakers alike. This study investigates the entrepreneurial potential of 38 OECD member countries by applying multi-criteria decision-making techniques, specifically CRITIC and MAUT, to five criteria representing entrepreneurship. The analysis produces a comprehensive ranking of countries, identifying Sweden, Korea, and Ireland as the leading performers in entrepreneurial capacity. To validate the results, the rankings were compared with the Global Entrepreneurship Index (GEI), and a Spearman rank correlation test was conducted. The findings reveal a statistically significant relationship between the constructed rankings and GEI scores, underscoring the robustness of the methodology. Overall, the study highlights the central role of entrepreneurship in shaping innovation, economic growth, employment creation, and social welfare, while also demonstrating the utility of multi-criteria approaches in assessing cross-country entrepreneurial performance.

Keywords: Entrepreneurship, OECD, MDCM, CRITIC, MAUT, Spearman Rank Correlation.
JEL Codes: C44, C61, C83

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On the Dynamic Effects of the EU Carbon Border Adjustment Mechanism and Potential Global Responses: An Intertemporal General Equilibrium Exploration

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Abstract
The European Union has recently embarked upon a Carbon Border Adjustment Mechanism (CBAM) to combat carbon leakage and align its ambitious climate goals with the patterns of global trade. Covering only 3% of the EU imports, the CBAM in isolation is argued to have little impact on the global patterns of trade. Yet, due to its potential threat of triggering retaliatory measures and reformation of distortionary trade clubs, it may have over lasting effects inhibiting the potential success of global efforts against climate change. Utilizing a multi-regional model that accommodate inter-temporal reallocation effects by forward-looking agents under infinite horizon and decentralized inter- temporal optimization, we study four policy scenarios: first, we invigorate the future pathway of the Emissions Trading System in EU with a projected cap on ETS sectorial emissions extending to 2050. Second, the CBAM is implemented, and its potential macroeconomic and social welfare effects are tabulated. We envisage two opposing responses from the non-EU global economy: (i) instrumentalization of a retaliation tariff rate across the trade partners, to maintain their individual (regional) social welfare against the EU CBAM; and (ii) a scenario of cooperation via full alignment with the EU's ETS carbon price, accepting the economic rationale of CBAM as a sanctioning instrument.

Keywords: European carbon border adjustment, emissions trading mechanism, carbon leakage, retaliation tariff, intertemporal general equilibrium model
JEL Codes: F18, Q56, Q58, C68

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Aid, Governance, and Entrepreneurship: Revisiting the Role of Development Assistance in Business Creation

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Abstract
Controlling for several entrepreneurship determinants, including foreign capital inflows, we assess the effect on business creation of a component of official development assistance (ODA) that incorporates aid directed towards enhancing overall infrastructure, improving productive capacity, and streamlining trade policies in aid recipients. We use a sample of 34 developing countries from 2002 to 2021, while accounting for cross-sectional dependence, non-stationarity, and endogeneity issues. We also investigate whether the relationship between governance quality and business creation is impacted by the amount of aid received. Our empirical analysis shows that i) a long-run relation prevails between aid and business creation, whereby aid positively affects the latter; ii) aid targeting infrastructure has the greatest impact on entrepreneurship among aid categories; and iii) the positive effect of governance quality on business creation decreases with the level of aid obtained. From a policy standpoint, a key implication of our findings is the need to adopt measures that reduce the erosive effect of aid on the effectiveness of good governance in stimulating entrepreneurship among aid recipients, particularly those with weak institutions.

Keywords: Official Development Assistance, Governance Quality, Foreign Aid, Aid Effectiveness, Business creation; Entrepreneurship

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Unequal Aftershocks: Heterogeneous Labor Market Adjustment Following an Earthquake

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Abstract
We study the labor market impact of a major earthquake using administrative employer–employee matched data linked to an extensive firm-level dataset. Daily wages remain largely unchanged, but employment, hours, and total earnings decline. Young workers are disproportionately affected, experiencing sharper losses in both employment and pay. The most pronounced divergence is by post-disaster location: workers who remain in the affected area ("stayers") see total earnings fall by about 10 percent and recover within two quarters, whereas workers who relocate to other cities ("movers") experience roughly a 30 percent earnings decline that persists for at least two years. Building on these results, we ask how disasters alter the functioning of the job ladder. Using an AKM framework, we find that a significant part of the persistent scarring arises from worsened worker–firm sorting, as movers are disproportionately reallocated to lower-paying firms, limiting upward mobility and amplifying inequality.

Keywords: Natural disasters, labor market adjustment, mobility and relocation
JEL Codes: J31,J63, Q54

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Does Age Bring Sustainability? Time Use and Carbon Emissions in an Ageing Türkiye

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Abstract
Individuals' daily time use habits significantly shape their carbon footprint. While greenhouse gas (GHG) emissions based on time use have been previously examined by gender, employment, and marital status in Türkiye, age-specific analyses remain scarce. Yet, Türkiye—like many countries—is undergoing demographic transformation, resulting in age-related shifts in household consumption and lifestyles. This study investigates how ageing influences household-level carbon emissions using a time-use perspective. Using 2014–2015 Time Use Survey microdata, aggregate daily GHG emissions by activity and age is estimated, applying activity-specific carbon intensity coefficients. Findings show a distinct age gradient: working-age adults (25–64) account for the highest emissions due to time- and carbon-intensive activities such as commuting, domestic labor, and shopping. In contrast, older adults (65+) contribute far less, as their routines center on low-carbon activities like rest, personal care, and home-based tasks. Notably, mobility-related emissions drop sharply with age. These results suggest that population ageing may reduce household carbon output over time. The study contributes to the "green ageing" literature and offers insights for designing age-sensitive low-carbon strategies.

Keywords: Carbon emissions, ageing, demographic transformation, environmental economics
JEL Codes: Q56, J14, D12

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Weekly Red Meat Prices in Turkey: A New Dataset and Volatility Evidence

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Abstract
Red meat price volatility is a persistent concern in Türkiye, shaping outcomes for producers, consumers, and policymakers. Earlier research has relied mainly on monthly data and standard GARCH models, offering limited insights into high-frequency market dynamics. This study introduces a novel weekly dataset compiled from the National Red Meat Council (Ulusal Kırmızı Et Konseyi) using a web-scraping. The dataset covers regional average beef and lamb prices, reported both with and without the Meat and Milk Board's (ESK) administered prices. Prices excluding intervention are on average 2 percent higher, and in some episodes the gap rises to nearly 10 percent, revealing the influence of state interventions. Building on this new data, the study applies EGARCH models to analyze beef price volatility. To capture external drivers, weekly EU meat prices are used as a proxy for imports, while key commodity prices account for feed costs. This approach extends previous studies by linking Turkish meat price volatility not only to macroeconomic shocks and exchange rates but also to international supply conditions and input costs. The results indicate significant volatility clustering, asymmetric adjustments to shocks, and a strong role of both external markets and domestic interventions. These findings provide new evidence for evaluating stabilization policies in Türkiye's red meat sector.

Keywords: Red meat prices, volatility, EGARCH, import prices, feed costs, Türkiye.
JEL Codes: Q11, Q13, C22

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An Econometric Analysis of the Turkish Art Market: Constructing Hedonic Price Indices

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Abstract
This study provides an econometric analysis of the Turkish art market using an extensive dataset of painting auction sales covering the period 1989–2020. The dataset contains detailed information on artists, auction houses, artwork types, and materials, allowing for an in-depth examination of long-term market dynamics and investment characteristics. First, the probability that an artwork is sold at auction is estimated using a probit model, enabling a joint analysis of price formation and sales behavior. Subsequently, hedonic price models controlling for artist fixed effects and key item and sales characteristics are applied to construct semiannual art price indices. Nominal and real returns are then calculated from these indices and compared with major financial assets in Turkey to evaluate the market's investment performance. The analysis extends the limited existing research on emerging art markets by providing new evidence on the potential role of Turkish art in portfolio diversification, its sensitivity to macroeconomic conditions, and long-term returns.

Keywords: Art markets; Hedonic pricing; Alternative investments; Portfolio diversification; Emerging markets
JEL Codes: Z11, C43, D44, G11

Türk Sanat Piyasasının Ekonometrik Analizi: Hedonik Fiyat Endekslerinin Oluşturulması

Özet
Bu çalışma, 1989–2020 döneminde Türkiye'deki resim müzayede satışlarından derlenen kapsamlı bir veri kümesini kullanarak satış ve fiyatlama dinamiklerine ilişkin bir ekonometrik analiz sunmaktadır. Veri seti, sanatçılar, müzayede evleri, eser türleri ve malzemeleri gibi detaylı bilgi içermekte olup, sanat piyasasının uzun dönemli gelişimini incelemeye olanak sağlamaktadır. İlk olarak, probit modelleri kullanılarak bir sanat eserinin müzayedede satılma olasılığını etkileyen faktörler incelenmiştir. Ardından, sanatçı sabit etkileri, müzayede evleri, eserlerin türü ve malzemeleri gibi birçok özelliği kontrol eden hedonik fiyat modelleri tahmin edilmiş ve yarıyıllık dönemler için sanat fiyat endeksleri oluşturulmuştur. Bu endeksler üzerinden nominal ve reel getiriler hesaplanmış ve başlıca finansal varlıklarla karşılaştırılarak sanat piyasasının yatırım performansı değerlendirilmiştir. Analiz, sanat eserlerinin portföy çeşitlendirmesindeki potansiyel rolü, makroekonomik koşullara duyarlılığı ve uzun vadeli getirileri konusunda yeni kanıtlar sunmaktadır. Uzun bir dönemi kapsaması ve hem fiyat hem de satış durumu modellemesini bir arada ele alması ile bu çalışma, Türk sanat piyasasına ilişkin sınırlı literatürü genişletmekte ve gelişmekte olan bir ekonomide sanatın alternatif bir yatırım aracı olarak rolüne ilişkin katkı sağlamaktadır.

Anahtar Kelimeler: Sanat piyasaları, hedonik fiyatlama, alternatif yatırımlar, gelişmekte olan piyasalar.
JEL Kodları: Z11, C43, D44, G11

Effects of Oil Price Oscillation and Exchange Rate Dynamics on the Changes in Economic Performance: Evidence from Emerging Oil-Exporting Economies

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Abstract

The study investigates the connection between exchange rate dynamics and changes in oil prices, as well as how these factors affect changes in economic performances of emerging countries using ARDL and N-ARDL frameworks. According to the findings, a rise in global oil prices significantly improves economic performance in Brazil. Even though there is a positive correlation between global oil price and economic performance in Nigeria, a rise in oil price does not explain changes in Nigeria's economic performance. This suggests decoupling oil price changes from the Nigeria's economic performance. The study also looks at the real effective exchange rate's volatility and finds that positive movement in past values of this indicator causes negative movements in the performances of both economies. Nonetheless, the study argues that governments of emerging economies can intentionally offset exchange rate pressure via diversification and decreasing over-reliance on oil earnings. This diversification would enable stabilization and affordability of oil prices, improve economic performance, and help these countries catch up with advanced nations.

Keywords: Dynamic Multiplier, Economic Performance, Global Oil Price
JEL Codes: E30, F31, Q43.

The long-run Market Power in the Liquid Milk Market of Türkiye

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Abstract
Milk is an essential food, providing high nutritional value and health support for individuals at every stage of life. Despite milk's critical role in human nutrition, consumers often claim that the retail price of milk is excessively high in Türkiye. This study attempts to measure the extent of market power over the long-run in the liquid milk market of Türkiye, by investigating the nature of price transmission process from the raw milk market to the retail liquid milk market. Using monthly data from January 2003 to April 2022, this study analyses the relationship between the raw milk and the retail milk price by developing and using a simple mark-up model with dual adjustment approach to measure the perceived mark-up rate and hence the market power. The findings reveal that dairy retailers in Türkiye have high and increasing market power, especially during the recent chronic inflationary episode since 2018.

Keywords: milk market, price transmission, market power, dual adjustment approach, inflation.
JEL Codes: C32, D43, Q13

The Impact of Post-2001 Disinflation on Foreign Direct Investment Inflows in Turkiye

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Abstract
In the aftermath of its 2001 financial crisis, Türkiye implemented strong macroeconomic reforms that significantly reduced inflation and stabilized the economy. This study examines how this post-2001 disinflation period influenced foreign direct investment (FDI) inflows into the country. An Autoregressive Distributed Lag (ARDL) model is applied to annual data from 2000–2024 to analyze both the short-run and long-run effects of key macroeconomic variables on FDI. In particular, the model includes inflation, GDP growth, exchange rate stability, and interest rates to capture the macroeconomic environment. The empirical results indicate that improved macroeconomic stability—reflected in lower inflation and a more stable exchange rate—has a significant positive impact on FDI inflows. The ARDL bounds tests confirm the existence of a stable long-run relationship between FDI and these variables. Additionally, robust GDP growth is associated with higher FDI, highlighting investor preference for a growing economy. These findings underscore the importance of maintaining macroeconomic stability for attracting foreign investment and, in turn, supporting sustainable economic development.

Keywords: Disinflation, foreign direct investment, macroeconomic stability, Türkiye, economic development.
JEL Codes: E31, F21, F41, O11

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Female Labor Force Participation and Infant Mortality: An Analysis of the Double Burden Hypothesis in Turkey

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Abstract
Female labor force participation is critically important for economic development and gender equality; however, its effects on health indicators remain debated. The double burden hypothesis suggests that women's simultaneous engagement in both paid work and domestic caregiving responsibilities may negatively affect child health. This study examines the relationship between female labor force participation and infant mortality in Turkey using data from the 2018 Turkey Demographic and Health Survey (TDHS). Within a logistic regression framework, infant mortality (death within 0–12 months) was treated as the dependent variable, while maternal employment status, education level, household wealth index, access to health services, and regional differences were included as key independent variables. To test the double burden hypothesis, an interaction term between maternal employment status and education level was also incorporated into the model. The expected findings indicate that the risk of infant mortality is relatively higher among low-educated working women, whereas it decreases among highly educated working women. This suggests that female labor force participation alone does not necessarily improve infant health and may, in the absence of supportive social policies and childcare services, confirm the double burden hypothesis.

Keywords: Female labor force participation, infant mortality, double burden hypothesis, logistic regression.
JEL Codes: J13, J16, I12, I15

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Kadınların İşgücüne Katılımı ve Bebek Ölümleri: Türkiye'de Çifte Yük Hipotezi Analizi

Özet
Kadınların işgücüne katılımı, ekonomik kalkınma ve toplumsal cinsiyet eşitliği açısından kritik öneme sahip olmakla birlikte, sağlık göstergeleri üzerindeki etkileri tartışmalıdır. Çifte yük hipotezi, kadınların hem ücretli işte hem de ev içi bakım sorumluluklarında aynı anda yoğunlaşmasının, çocuk sağlığını olumsuz etkileyebileceğini öne sürmektedir. Bu çalışma, Türkiye Nüfus ve Sağlık Araştırması (TNSA) 2018 verilerini kullanarak kadınların işgücüne katılımı ile bebek ölüm oranları arasındaki ilişkiyi incelemektedir.
Lojistik regresyon modeli çerçevesinde bebek ölümü (0–12 ay içinde ölüm) bağımlı değişken olarak ele alınmış; annenin çalışma durumu, eğitim düzeyi, hane refah endeksi, sağlık hizmetine erişim ve bölgesel farklılıklar temel bağımsız değişkenler olarak kullanılmıştır. Ayrıca çifte yük hipotezini test edebilmek için annenin çalışma durumu ile eğitim düzeyi arasındaki etkileşim terimi modele dâhil edilmiştir.
Beklenen bulgular, düşük eğitimli ve çalışan kadınlarda bebek ölüm riskinin görece daha yüksek olduğu; buna karşın yüksek eğitimli çalışan kadınlarda bebek ölüm riskinin azaldığı yönündedir. Bu durum, kadınların istihdama katılımının tek başına bebek sağlığını iyileştirmediğini, aksine sosyal politika ve bakım hizmetleriyle desteklenmediğinde çifte yük hipotezini doğrulayabileceğini ortaya koymaktadır.

Anahtar Kelimeler: Kadın işgücüne katılımı, bebek ölümü, çifte yük hipotezi, lojistik regresyon
JEL Kodları: J13, J16, I12, I15

The Complex Relationship Between Women's Employment and Violence: A Bayesian Network Analysis for Turkey

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Abstract
This study analyzes the multifaceted relationship between women's employment status and their experience of domestic violence in Turkey using Bayesian Network (BN) modeling. Based on micro-data from the Turkish Statistical Institute's 2014 Survey on Domestic Violence Against Women , the analysis was conducted on a final dataset of 5,843 complete cases. Following a comparison of multiple structure learning algorithms and model validation techniques, the most statistically and theoretically appropriate network structure was identified.
The study's most crucial finding is the absence of a direct and statistically significant relationship between being employed and the risk of physical or sexual violence. The model identifies "education level" as a fundamental root cause that influences employment and other socio-demographic variables. Policy simulations revealed that a scenario of full female employment would not alter violence rates (from 31.6% to 31.8%) but would dramatically increase women's control over their own income from 27.4% to 76.9%. These results suggest that employment policies, rather than directly reducing violence, may provide long-term, indirect protection by enhancing women's economic autonomy. To combat violence, holistic approaches that target education and economic empowerment together are needed, rather than policies focused solely on employment.

Keywords: Women's employment, violence against women, Bayesian networks, Turkey, economic empowerment, education.
JEL Codes: J16, I31, C11

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Kadın İstihdamı ve Şiddet Arasındaki Karmaşık İlişki: Türkiye İçin Bir Bayesyen Ağ Analizi

Özet
Bu çalışma, Türkiye'de kadınların istihdam durumu ile aile içi şiddete maruz kalma deneyimi arasındaki çok boyutlu ilişkiyi Bayesyen Ağ (BN) modellemesi kullanarak analiz etmektedir. Türkiye İstatistik Kurumu'nun 2014 Kadına Yönelik Aile İçi Şiddet Araştırması mikro verisinden yararlanılan analiz, 5.843 tam gözlem içeren bir nihai veri seti üzerinde yürütülmüştür. Çoklu yapı öğrenme algoritmaları ve model doğrulama teknikleri sonucunda, istatistiksel ve teorik olarak en uygun ağ yapısı belirlenmiştir.
Araştırmanın en temel bulgusu, istihdamda olmanın fiziksel veya cinsel şiddet riskiyle doğrudan ve istatistiksel olarak anlamlı bir ilişkisinin bulunmadığıdır. Model, "eğitim düzeyini" hem istihdamı hem de diğer sosyo-demografik değişkenleri etkileyen temel bir kök neden olarak tanımlamıştır. Politika simülasyonları, tüm kadınların istihdam edilmesinin şiddet oranlarını değiştirmeyeceğini (%31,6'dan %31,8'e), ancak kadınların kendi gelirleri üzerindeki kontrol oranını %27,4'ten %76,9'a çıkaracağını göstermiştir. Bu sonuçlar, istihdam politikalarının şiddeti doğrudan azaltmak yerine, kadının ekonomik özerkliğini artırarak uzun vadede dolaylı bir koruma sağlayabileceğine işaret etmektedir. Şiddetle mücadelede, tek başına istihdam odaklı politikalar yerine eğitim ve ekonomik güçlenmeyi bir arada hedefleyen bütüncül yaklaşımlara ihtiyaç duyulmaktadır.

Anahtar Kelimeler: Kadın istihdamı, kadına yönelik şiddet, Bayesyen ağlar, Türkiye, ekonomik güçlenme, eğitim.
JEL Kodları: J16, I31, C11

Heterogeneous Determinants of Gender Inequality within the Framework of Quantile Regression Analysis

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Abstract
This study examines the socioeconomic determinants of gender inequality by utilizing data from 123 countries over the period 2002–2020. The gender inequality index is employed as the dependent variable, while human development, globalization, natural resource rents, the misery index combining unemployment and inflation, and institutional quality are used as explanatory variables. Prior to the empirical analysis, the necessary pre-tests were conducted, and the quantile regression method was applied to investigate how the effects vary across different levels of the gender inequality index. The findings reveal that human development and institutional quality are strongly and negatively associated with gender inequality; however, the impact of institutional quality weakens at higher levels of inequality. Globalization is likewise negatively associated with gender inequality, but its effect varies depending on countries' levels of gender inequality. Natural resource rents are positively associated with gender inequality in countries with relatively low levels of inequality, but this effect loses its statistical significance in countries with higher inequality. The misery index, in turn, shows a positive and significant association with gender inequality, particularly at the middle and upper levels. Overall, the results demonstrate that gender inequality is closely related not only to the level of development but also to institutional structures, global integration, and macroeconomic vulnerabilities. The evidence indicates that policies aimed at reducing gender inequality should move beyond uniform approaches and instead address the differentiated needs of country groups.

Keywords: Gender inequality, quantile regression, institutional quality.
JEL Codes: C21, J16, O57

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Kantil Regresyon Analizi Çerçevesinde Cinsiyet Eşitsizliğinin Heterojen Belirleyicileri

Özet

Bu çalışma, 2002–2020 döneminde 123 ülkeye ait verilerden yararlanarak cinsiyet eşitsizliğinin sosyoekonomik belirleyicilerini incelemektedir. Analizde cinsiyet eşitsizliği endeksi bağımlı değişken olarak ele alınmış, insani gelişmişlik, küreselleşme, doğal kaynak rantları, işsizlik ve enflasyonun bileşik göstergesi şeklinde oluşturulan sefalet endeksi ve kurumsal kalite açıklayıcı değişkenler olarak kullanılmıştır. Ampirik analiz öncesinde gerekli ön testler gerçekleştirilmiş, cinsiyet eşitsizliği endeksinin farklı düzeylerinde etkilerin değişimini incelemek üzere kantil regresyon yöntemi uygulanmıştır. Bulgular, insani gelişmişlik ve kurumsal kalitenin cinsiyet eşitsizliği ile güçlü ve negatif ilişkili olduğunu; fakat kurumsal etkinin daha yüksek eşitsizlik düzeylerinde görece zayıfladığını ortaya koymaktadır. Bezer şekilde küreselleşme cinsiyet eşitsizliğiyle negatif ilişkili olmakla birlikte, etki ülkelerin cinsiyet eşitsizliği düzeylerine göre farklılaşmaktadır. Doğal kaynak rantları, cinsiyet eşitsizliğinin görece düşük olduğu ülkelerde pozitif ilişkili iken, eşitsizliğin yüksek olduğu ülkelerde bu etki istatistiksel olarak anlamını kaybetmektedir. Sefalet endeksi ise özellikle eşitsizliğin orta ve yüksek düzeylerinde cinsiyet eşitsizliğiyle pozitif ve anlamlı ilişki sergilemektedir. Sonuçlar, cinsiyet eşitsizliğinin yalnızca kalkınma düzeyiyle değil, aynı zamanda kurumsal yapı, küresel entegrasyon ve makroekonomik kırılganlıklarla da yakından ilişkili olduğunu göstermektedir. Elde edilen bulgular, cinsiyet eşitsizliğini azaltmaya yönelik politikaların tek tip olmaktan ziyade ülke gruplarının farklı ihtiyaçlarını gözetmesi gerektiğini göstermektedir.

Anahtar Kelimeler: Cinsiyet eşitsizliği, kantil regresyon, kurumsal kalite.
JEL Kodları: C21, J16, O57

The Spillover Effects of Oil Price Volatility on Food and Non-Food Inflation in Turkey

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Abstract
Fluctuations in oil prices exert significant influence on production costs, transportation expenses, and overall price levels, particularly for energy-importing economies. In Turkey, where energy dependence is notably high, the effects of such fluctuations on both food and non-food inflation are of critical importance for social welfare and price stability. Recent global shocks—most notably the COVID-19 pandemic (2020) and the Ukraine crisis (2022)—have further complicated the interlinkages among energy prices, exchange rates, and inflation. Against this backdrop, the present study aims to analyze the effects of oil price volatility on food and non-food inflation in Turkey by distinguishing between pre-crisis and post-crisis periods. From a methodological standpoint, the study is based on two complementary approaches. First, the volatility of oil prices will be estimated using models from the GARCH family (GARCH, IGARCH, APARCH, FIEGARCH), thereby uncovering the structure and dynamics of volatility. This allows for an assessment of the persistence and magnitude of shocks and their potential implications for the components of inflation in Turkey. Second, the Diebold and Yılmaz (2014) framework will be employed to examine spillover effects among variables. This approach makes it possible to capture the degree and direction of interconnectedness between oil price volatility and food versus non-food prices in both pre- and post-crisis periods.
The empirical analysis will utilize monthly data covering the period 2010–2025, focusing on Turkey with a comparative perspective across pre-COVID-19 and post-COVID-19 phases. This enables an evaluation of the role of oil price shocks in inflation dynamics not only in terms of their magnitude, but also with respect to asymmetric effects and temporal heterogeneity.The expected contribution of the study is threefold: (i) to be among the first works to investigate the transmission of oil price volatility to food and non-food inflation in Turkey from a period-specific perspective; (ii) to offer a methodological innovation by integrating GARCH-based volatility estimation with the Diebold–Yılmaz spillover framework; and (iii) to assess the implications of heightened global energy uncertainty in the post-COVID-19 era for the Turkish economy through the lens of inflation components. The findings are anticipated to provide valuable insights for policymakers, particularly with respect to inflation management and food security strategies in the face of energy price shocks.

Keywords: Oil price volatility, inflation, spillover effects
JEL Codes: E31, Q43, C58

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Petrol Fiyatı Oynaklığının Türkiye'de Gıda ve Gıda Dışı Enflasyona Yayılma Etkileri

Özet

Petrol fiyatlarındaki dalgalanmalar, enerji ithalatçısı ülkeler açısından üretim maliyetleri, taşımacılık giderleri ve genel fiyat seviyeleri üzerinde önemli etkiler göstermektedir. Türkiye'de, enerji bağımlılığının yüksek olması, bu dalgalanmaların hem gıda hem de gıda dışı enflasyon üzerindeki etkileri özellikle toplumsal refah ve fiyat istikrarı açısından büyük önem taşımaktadır. Son yıllarda yaşanan küresel şoklar – COVID-19 pandemisi (2020) ve Ukrayna krizi (2022) – enerji fiyatları, döviz kurları ve enflasyon arasındaki ilişkileri daha da karmaşık hale getirmiştir. Bu bağlamda çalışmanın amacı, petrol fiyatlarındaki oynaklığın Türkiye'de gıda ve gıda dışı enflasyon üzerindeki etkilerini kriz öncesi ve sonrası dönemler itibarıyla analiz etmektir. Metodolojik açıdan çalışma iki temel yaklaşıma dayanmaktadır. İlk olarak, petrol .petrol fiyatlarının volatilitesi GARCH ailesine ait modeller yardımıyla (GARCH, IGARCH, APARCH, FIEGARCH) tahmin edilerek oynaklığın yapısı ve dinamikleri ortaya konacaktır. Bu sayede şokların kalıcılığı ve büyüklüğü ölçülerek, Türkiye'nin enflasyon bileşenleri üzerindeki olası etkileri değerlendirilme imkânı bulunacaktır. İkinci olarak, Diebold ve Yılmaz (2014) tarafından geliştirilen yöntemle değişkenler arasındaki yayılma (spillover) etkileri incelenecektir. Bu yaklaşım, hem kriz öncesi hem de kriz sonrası dönemde petrol fiyatlarındaki oynaklığın gıda ve gıda dışı fiyatlar üzerindeki bağlantılılık düzeyini ve yönünü ortaya çıkarmayı mümkün kılacaktır.

Çalışma, 2010–2025 dönemi aylık verileri kullanarak Türkiye özelinde yürütülecek ve özellikle COVID-19 öncesi ve sonrası dönemler karşılaştırmalı olarak ele alınacaktır. Bu sayede petrol fiyat şoklarının enflasyon dinamiklerindeki rolü yalnızca büyüklük açısından değil, aynı zamanda asimetrik etkiler ve dönemsel farklılıklar bakımından da analiz edilecektir.Araştırmanın beklenen katkısı üç yönlüdür: (i) petrol fiyatı oynaklığının Türkiye'de gıda ve gıda dışı fiyatlara yansımasını dönemsel bir perspektifle inceleyen ilk çalışmalardan biri olması, (ii) GARCH modeli ile volatilite tahminini Diebold–Yılmaz yaklaşımıyla bütünleştirerek metodolojik bir yenilik sunması ve (iii) COVID-19 sonrası dönemde artan küresel enerji belirsizliğinin Türkiye ekonomisine etkilerini enflasyon bileşenleri üzerinden değerlendirmesi. Bu kapsamda elde edilecek bulguların, politika yapıcılar açısından enerji fiyat şoklarına karşı enflasyon yönetimi ve gıda güvenliği stratejileri bağlamında önemli çıkarımlar sunması beklenmektedir.

Anahtar Kelimeler: Petrol fiyatı oynaklığı, enflasyon, yayılma etkileri
JEL Kodları: E31, Q43, C58

Exchange Rate Pass-Through to Inflation in Turkey (2018–2025)

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Abstract
A period of high double-digit inflation emerged in Turkey, starting with an initial shock in June 2018, followed by two additional shocks in December 2021 and June 2023. While "currency attacks" were the primary triggering factor in the first two waves of rising inflation since 2018, the impact of expansionary monetary policy ahead of the general elections (May 2023) became evident in the third shock that occurred in June 2023. The Domestic Producer Price Index (Yİ-ÜFE), which had reached a historical record level (annual 157%) in November 2022, began to retreat rapidly as the war between Russia and Ukraine turned into an irregular conflict. This study examines the effect of exchange rate pass-through on high double-digit inflation in the Turkish economy during the 2018-2025 period. The analysis of exchange rate pass-through is conducted using a VAR model, taking into account factors such as the TRY/USD exchange rate, TRY/EUR exchange rate, changes in crude oil prices, and changes in the foreign trade deficit. The responses of the variables to one-unit shocks will be investigated using impulse-response analysis, and the explanatory power of the variables will be examined through variance decomposition. The results of the study will contribute to the discussion on the effectiveness of tools to combat inflation.

Keywords: Inflation, Monetary Policy, Foreign Exchange
JEL Codes: E31, E52, F31

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Türkiye'de Enflasyon İçinde Kur Geçişkenliği Etkisi: 2018 – 2025 Dönemi

Özet

2018 Haziran ayında ilk şok ve daha sonra 2021 Aralık ve Haziran 2023 aylarındaki diğer iki şok ile birlikte Türkiye'de yüksek çift haneli enflasyon dönemi ortaya çıkmıştır. 2018'den itibaren üç dalga halinde yükseliş gösteren enflasyon oranının ilk iki şokunda temel tetikleyici faktör olarak "kur atakları" öne çıkarken, 2023 Haziran'ında ortaya çıkan üçüncü şokta genel seçim (2023 Mayıs) öncesi genişlemeci para politikasının etkisi belirgin olmuştur. 2022 Kasım ayında tarihsel rekor düzeye erişen Yİ-ÜFE (yıllık yüzde 157) Rusya ile Ukrayna arasındaki savaşın düzensiz çatışmaya dönüşmesiyle birlikte hızla geri çekilmeye başlamıştır. Bu çalışmada Türkiye ekonomisinde 2018-2025 döneminde yaşanan yüksek çift haneli enflasyon üzerinde kur geçişkenliği etkisi incelenmektedir. Çalışmada kur geçişkenliği; TL/USD değişim oranı, TL/EUR değişim oranı, Ham Petrol Fiyatlarındaki değişim oranı, dış ticaret açığındaki değişim gibi faktörler dikkate alınarak VAR analizi ile incelenmektedir. Değişkenlerin bir birimlik şoklara verdikleri tepkiler etki-tepki analizi ile, değişkenlerin açıklayıcılıkları varyans ayrıştırması ile araştırılacaktır. Çalışma sonuçları enflasyonla mücadele araçlarının etkenliğinin tartışılmasına katkı sağlayacaktır.

Anahtar Kelimeler: Enflasyon, Para Politikası, Döviz
JEL Kodları: E31, E52, F31

Regional Dynamics of House Prices After the Kahramanmaraş Earthquake

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Abstract
This study examines the changes in housing prices in regions with high and low earthquake risk following the Kahramanmaraş earthquake of February 6, 2023, excluding the provinces directly affected by the disaster. The analysis is conducted using over 4 million appraisal data which are used for compiling official residential property price index for Türkiye. By applying the difference-in-differences method, the findings indicate that the price growth in high-risk regions diverged from that in low-risk regions after the earthquake. Specifically, in high-risk regions (provinces located in the 1st and 2nd earthquake zones), house prices increased less compared to those in low-risk areas. A similar pattern is also observed in rental market. This study sheds light on the impact of the Kahramanmaraş earthquake on the real estate market and highlights the differences between disaster risk and house price dynamics.

Keywords: house prices, rental values, earthquake risk.
JEL Codes: R31, Q54, C23

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Kahramanmaraş Depremi Sonrası Konut Fiyatlarının Bölgesel Dinamikleri

Özet
Bu çalışma, 6 Şubat 2023 Kahramanmaraş depreminden sonra deprem riski yüksek olan bölgeler ile düşük olan bölgelerdeki konut fiyatlarının değişimini, deprem bölgesindeki illeri hariç tutarak incelemektedir. Analiz, TCMB'nin konut fiyat endeksine girdi teşkil eden 4 milyonun üzerinde konut değerleme verisini kullanarak gerçekleştirilmiştir. Farkların farkı yöntemini uygulayarak deprem riski yüksek olan bölgeler ile düşük olan bölgelerdeki konut fiyat artışlarının Kahramanmaraş depreminden sonra ayrışmaya başladığı sonucuna ulaşılmaktadır. Buna göre, Kahramanmaraş depreminden sonra, deprem riski yüksek olan bölgelerde (1. ve 2. deprem bölgesinde bulunan iller) konut fiyatları, düşük olan bölgelere göre daha az artış göstermiştir. Kiralarda da benzer bir eğilimin olduğu sonucuna ulaşılmaktadır. Çalışma, Kahramanmaraş depreminin gayrimenkul piyasası üzerindeki etkilerini aydınlatmakta ve afet riski ile konut fiyat değişimleri arasındaki farkları ortaya koymaktadır.

Anahtar Kelimeler: konut fiyatları, kira değerleri, deprem riski.
JEL Kodları: R31, Q54, C23

Consumer Inflation in Türkiye and the TRNC: Comparative Time Series Models and Causality Analysis

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Abstract
In this study, we aim to model consumer inflation, reveal the relationship between consumer inflation and consumer inflation uncertainty and examine the causality relationships between consumer inflation and various macroeconomic variables using monthly time series data for the period 2003 (February) – 2025 (July) for Türkiye and the Turkish Republic of Northern Cyprus (TRNC). Firstly, we model the consumer inflation variables with ARMA models. The model estimation results for both countries show that the current period inflation values are affected by both the past period inflation values and the random shocks in the past periods. Secondly, we model the consumer inflation variable for the TRNC with symmetric (ARCH, ARCH-M, GARCH, GARCH-M) and asymmetric (TARCH, EGARCH, PARCH) conditional heteroscedasticity models. Among these models, we reveal that the consumer inflation variable is modelled best with the ARCH model according to the model selection criteria and we obtain the consumer inflation uncertainty variable through this model. We can not model the consumer inflation variable for Türkiye with conditional heteroscedasticity models due to the absence of the ARCH effect. Thirdly, we investigate both the causality relationships of the variables of consumer inflation (for Türkiye and the TRNC) and consumer inflation uncertainty (for the TRNC) among themselves and the causality relationships of these variables with the variables of global economic policy uncertainty index (GEPU), European Brent oil price and London ounce gold price, which are thought to affect these variables, using the Granger causality test. The findings reveal that there is a bilateral causality relationship between consumer inflation and consumer inflation uncertainty in the TRNC (the proof of the validity of the Friedman-Ball and Cukierman-Meltzer hypotheses). On the other hand, we find a similar bilateral causality relationship between consumer inflation in Türkiye and the TRNC. Finally, we observe that neither the consumer inflation (for Türkiye and the TRNC) nor the consumer inflation uncertainty (for the TRNC) variables have any causality relationships with the GEPU, Brent oil price and ounce gold price variables. All these findings indicate that both Türkiye and the TRNC should conduct monetary policies in cooperation to maintain price stability and that both countries should prioritize their own domestic dynamics over foreign factors in terms of predictable consumer inflation.

Keywords: Inflation, Time Series Models, Causality Analysis, Monetary Policy
JEL Codes: C22, E31, E44, E52

Türkiye ve KKTC'de Tüketici Enflasyonu: Karşılaştırmalı Zaman Serisi Modelleri ve Nedensellik Analizi

Özet
Bu çalışmada Türkiye ve Kuzey Kıbrıs Türk Cumhuriyeti (KKTC) için 2003 (Şubat) – 2025 (Temmuz) dönemine ait aylık zaman serisi verileri kullanılarak tüketici enflasyonunun modellenmesi, tüketici enflasyonunun tüketici enflasyonu belirsizliği ile olan ilişkisinin ortaya konulması ve tüketici enflasyonunun çeşitli makroekonomik değişkenler ile olan nedensellik ilişkilerinin incelenmesi amaçlanmıştır. İlk olarak, tüketici enflasyonu değişkenleri ARMA modelleri ile modellenmiştir. Her iki ülkeye ait model tahmin sonuçları cari dönem enflasyon değerlerinin hem geçmiş dönemlerdeki enflasyon değerlerinden hem de geçmiş dönemlerdeki rassal şoklardan etkilendiklerini göstermektedir. İkinci olarak, KKTC için tüketici enflasyonu değişkeni simetrik (ARCH, ARCH-M, GARCH, GARCH-M) ve asimetrik (TARCH, EGARCH, PARCH) koşullu değişen varyans modelleri ile modellenmiştir. Bu modeller içerisinden model seçim kriterlerine göre tüketici enflasyonu değişkeninin en iyi ARCH modeli ile modellendiği ortaya konulmuş olup tüketici enflasyonu belirsizliği değişkeni bu model üzerinden elde edilmiştir. Türkiye için tüketici enflasyonu değişkeni ARCH etkisinin olmaması nedeniyle koşullu değişen varyans modelleri ile modellenememiştir. Üçüncü olarak, tüketici enflasyonu (Türkiye ve KKTC için) ve tüketici enflasyonu belirsizliği (KKTC için) değişkenlerinin gerek kendi aralarındaki gerekse bu değişkenleri etkileyebileceği düşünülen küresel ekonomik politika belirsizliği endeksi (GEPU), Avrupa Brent petrol fiyatı ve Londra ons altın fiyatı değişkenleri ile olan nedensellik ilişkileri Granger nedensellik testi kullanılarak araştırılmıştır. Elde edilen bulgular KKTC'de tüketici enflasyonu ile tüketici enflasyonu belirsizliği arasında iki yönlü nedensellik ilişkisi olduğunu ortaya koymuştur (Friedman-Ball ve Cukierman-Meltzer hipotezlerinin geçerliliğinin ispatı). Bununla birlikte Türkiye ve KKTC tüketici enflasyonları arasında da benzer şekilde iki yönlü nedensellik bulgusuna erişilmiştir. Son olarak, ne tüketici enflasyonu (Türkiye ve KKTC için) ne de tüketici enflasyonu belirsizliği (KKTC için) değişkenlerinin GEPU, Brent petrol fiyatı ve ons altın fiyatı değişkenleri ile herhangi bir nedensellik ilişkilerinin olmadığı gözlemlenmiştir. Tüm bu bulgular fiyat istikrarının korunması hususunda hem Türkiye'nin hem de KKTC'nin işbirliği içerisinde para politikalarını yürütmesi ve tüketici enflasyonunun öngörülebilirliği hususunda ise her iki ülkenin kendi yurtiçi dinamiklerine yurt dışı kaynaklı etkenlerden daha fazla önem vermesi gerektiğine işaret etmektedir.

Anahtar Kelimeler: Enflasyon, Zaman Serisi Modelleri, Nedensellik Analizi, Para Politikası
JEL Kodları: C22, E31, E44, E52

Foreign Exchange Position Analysis of Real Sector Companies

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Abstract
Real sector companies' foreign currency borrowing is increasing due to credit cost advantages, significantly increasing their exchange rate risk. In the absence of effective hedging mechanisms against exchange rate risk, exchange rate volatility exacerbates companies' exchange rate losses, resulting in significant financial stability implications. This study analyzes the foreign exchange positions and currency risk protection levels of real sector companies using data collected from approximately 7,000 companies within the scope of the Systemic Risk Data Monitoring System (SRVTS). Furthermore, to measure firms' sensitivity to exchange rate risk, the ratios of FX position/assets and FX position/equity were calculated, and firms' vulnerability to exchange rate shocks was examined by sector, size, and foreign trade status. As of October 2024, 49% of firms held open foreign exchange positions across all maturities, and 34% held open foreign exchange positions in the near term. Only 19% of firms' total short-term foreign exchange exposure and 16% of the exposure across all maturities were under protection. Open positions are concentrated among net importers whose foreign exchange earnings do not cover their foreign exchange expenditures. The findings point to the inadequacy of currency hedging instruments. Therefore, closely monitoring the exchange rate risks of firms carrying open foreign exchange positions without foreign exchange earnings and effectively utilizing financial hedging instruments are critical to preventing macroeconomic vulnerabilities.

Keywords: Exchange rate risk, Currency mismatch, Real sector.
JEL Codes: D22, F31, G32

A Theory of Public Debt Convergence

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Abstract
This paper constructs a solid convergence equation for public debt using the competitive-market equilibrium of the Solow growth model. It incorporates three agents—households, firms, and the government. Households divide their income between consumption, tax payments, and savings, with savings held in either private or government bonds that pay the same return. Firms combine labour and physical capital to produce output in a perfectly competitive environment. The government raises revenue through taxes, services its debt obligations, and allocates spending on private goods. From this setup, two core equations emerge: one describing economic growth and the other governing the evolution of public debt. Once the steady-state values of all variables are determined, we log-linearize the growth and debt equations to solve them. This approach produces not only the long-run equilibrium but also the approximate transition paths for both debt and output, and in particular, the debt convergence equation. The paper makes three principal contributions: (i) it is the first to formally derive a debt-convergence equation, (ii) it demonstrates that the long-run levels of capital and GDP depend on the national saving rate rather than the private saving rate, (iii) it shows that a higher national saving rate speeds up the convergence of public debt, (iv) last but not the least, debt convergence cannot be analyzed by simply extending an income convergence equation, since it involves distinct features that must be formally derived.

Keywords: Solow model; competitive market solution; debt function; public debt; convergence.
JEL Codes:

Output Gap Estimation for Türkiye Economy: Unobserved Components Model and Evidence from the New GDP Series

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Abstract
The output gap, defined as the difference between the potential and the actual GDP, is not a directly observable variable, but is of critical interest to policy-makers as it provides essential information about the stage of the business cycle. Accurate estimation of this latent variable remains a significant methodological challenge in macroeconomic analysis. This study estimates the output gap for the Turkish economy using Turkey's GDP series revised in late 2016, while also reviewing recent developments in the output gap estimation literature. Employing the unobserved components model (UCM) methodology on quarterly data spanning 1998-2023, this analysis addresses the inherent pitfalls and complexities of output gap estimation techniques by comparing UCM performance against alternative methods including the Hodrick-Prescott filter, multivariate filters, and production function approaches. The study contributes to both the methodological literature on output gap estimation and the empirical understanding of Turkish business cycles by providing updated estimates based on the most recent national accounts revision.

Keywords: output gap, potential output, unobserved components model, Turkey
JEL codes : E32, C11, E31, C51

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Divergence or Alignment? A Financial Development Convergence Study of E7 and G7 countries

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Abstract
Financial development is a cornerstone of modern economies, linking savings to productive investments, fostering growth, and ensuring systemic stability. In its absence, nations remain reliant on volatile foreign funds and informal credit networks, constraining their long-term potential. To capture the multidimensional nature of financial systems, the International Monetary Fund (IMF) introduced the Financial Development Index (FDI), which integrates depth, access, and efficiency across both financial institutions (banks, pensions, insurance) and financial markets (equity, bonds, derivatives). This study investigates the intra-group convergence of financial development within the G7 (United States, Japan, Germany, United Kingdom, France, Italy, Canada) and E7 (Brazil, Mexico, Indonesia, India, Turkey, China, Russia) economies over the period 1984–2020, with an upcoming data extension to cover till 2023. Employing the Fourier Kruse Test (Güris, 2019), we find partial convergence patterns in both groups. Among the G7, convergence is observed in Germany, France, Italy, and the United Kingdom—countries bound by European monetary and regulatory frameworks—while Canada, Japan, and the United States diverge. For the E7, convergence emerges in Brazil, India, and Turkey, but heterogeneity in institutional depth, regulatory regimes, and financial structures leads to divergence in China, Russia, Indonesia and Mexico. The results highlight that regional integration and shared regulatory frameworks (e.g., the Eurozone) enhance convergence, whereas structural asymmetries and uneven institutional development hinder it. These findings contribute to the ongoing debate on whether global financial development is moving toward alignment or divergence across advanced and emerging economies. Overall, the evidence suggests that there remains a considerable distance to achieve meaningful and sustainable convergence in financial development.

Keywords: E7, G7, Financial Development Index, IMF, Convergence, Divergence
JEL Codes: B26, C58, G20, P34

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Macroeconomic Stability in the presence of Shocks to Risk Premium, Supply-Side Effects of Interest rates and Accommodative Monetary Policy

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Abstract
This study attempts to analyze the stability effects of shocks to risk premium in a small, open economy where the interest rates directly affect production costs and monetary policy is of accommodative nature. The economy which operates under flexible rates is assumed to produce a good which is an imperfect substitute of the foreign good that is used both for consumption and as input in production. Given these assumptions a model of the economy is specified whose steady-state solution for output, price level and the exchange rate are derived. Using a set of plausible values for the structural and policy parameters we simulate both the likely effects of a shock to risk premium on macro variables and the impact of adopting a more accommodative monetary policy on their steady-state variances. The results suggest that a positive shock to risk premium can lead to stagflation in the presence of supply-side effects of interest rates and imported inputs in production; output contracts, price level rises along with depreciation of the currency. Furthermore, a more accommodative monetary policy is likely to improve both output stability but only at the expense of worsened price and exchange rate stability.

Keywords: Open economy, risk premium, shock, stability, interest rate, accommodative, monetary policy
JEL Codes: E52, F41

Commercial Loan Supply Condition Structure and an Index

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Abstract
This study aims to determine and elaborate the contributions of prespecified categories, i.e., loan quality, capital strength, liquidity, and profitability, to representative public and private banks' commercial loan supply conditions, separately and subsequently construct an index for each bank type. In the study, we elaborate the loan supply structure by weighing first principal components of each category while minimizing the discrepancy of the weighted series with the monthly exchange rate adjusted commercial loan growth rate. The study covers the period between 2012M01 and 2025M03. As expected, the weight of profitability and capital strength category on average is higher for private banks. Optimal liquidity and asset quality weight on average is higher for public banks. Finally, two separate indices for loan supply conditions are constructed with the aid of average of optimal weights over some selected periods as well as the whole period. We conclude that last monetary phase succeeded at stabilizing the loan supply conditions.

Keywords: loan supply, principal component analysis, optimal weights
JEL Classification: E51, H81, G21

The Impact of Economic Instability on Financial Inclusion in BRICS and Türkiye

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Abstract
Macroeconomic instability is a common feature of many Emerging Markets. This study investigates its effects on financial inclusion (FI) in BRICS and Türkiye. In addition, the research assesses the individual characteristics that affect financial inclusion, benefiting from the updated Global Financial Inclusion Index, 2021. Probit estimations indicate that inflation reduces savings but does not affect bank account ownership or borrowing from formal institutions. Trade surpluses increase the likelihood of opening accounts but decrease formal borrowing. Budget deficits influence savings and borrowing but not account ownership: higher deficits reduce savings while increasing borrowing. Overall, FI is stronger in upper-middle-income countries than in lower-middle-income countries. Individual-level factors are also significant. Women are less likely than men to save or borrow, though account ownership shows no gender gap. Age exerts the strongest effect. Financial service use rises with age but tapers at later stages of life. Education and income enhance inclusion, as individuals with post-secondary education or higher incomes are more likely to hold accounts and save. Conversely, low-income groups are less likely to borrow from formal financial intermediaries. These findings highlight the dual importance of macroeconomic stability and socioeconomic characteristics in shaping financial inclusion outcomes.

Keywords: Financial Inclusion, Macroeconomic Instability, Individual Characteristics, BRICS, and Türkiye
JEL Codes: D14, E44, G21, G23

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Unravelling the Paradox of Financial Inclusion and Stability: A Dynamic Analysis from selected BRICS+ Economies

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Abstract
Financial inclusion has emerged as a pivotal driver of economic and financial development, yet its impact on financial stability remains a subject of intense debate. This study undertakes a comprehensive examination of the dynamic relationship between financial inclusion and financial stability in selected BRICS+ economies; namely Brazil, South Africa, India and Indonesia. Employing a novel approach that combines panel unit root testing and the Pooled Mean Group-Autoregressive Distributed Lag (PMG-ARDL) model, our analysis reveals a nuanced and heterogeneous effect of financial inclusion on financial stability. Specifically, we find that a 1% increase in ATMs per 100,000 adults reduces financial instability by 0.039%, while a 1% increase in bank deposits increases instability by 0.015%. These findings show that different channels of financial inclusion can either stabilize or destabilize the financial system. While greater ATM penetration eases liquidity constraints and expands regulated access to cash, rapid deposit growth may fuel instability by encouraging excessive credit lending, particularly in weakly regulated banking systems. Our results have significant implications for policymakers seeking to develop stability-enhancing financial policies, highlighting the need to carefully distinguish between inclusion proxies and tailor policies to the specific context of each emerging BRICS+ economy.

Keywords: Financial inclusion, Financial Stability, PMG-ARDL, BRICS+ Economies.
JEL Codes: G20, C33, O16

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Household Macroprudential Policies, Corporate Credit, and Macro Shocks

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Abstract
This paper studies the spillover effects of household macroprudential policies on corporate lending and firm real outcomes. We use detailed credit registry data from Turkey coupled with a significant change in macroprudential regime that targeted consumer credit without restricting commercial credit. Exploiting variation in banks' ex-ante exposure to the macroprudential policies, we show that more exposed banks reduce the growth rate of household loans more than other banks when macroprudential policies tighten. More exposed banks curtail household lending and increase commercial lending, with positive effects on the investment and employment of bank-dependent firms. Moreover, the reallocation from household lending to corporate lending does not increase non-performing loans ex post, even during a significant exchange rate depreciation shock, suggesting this reallocation occurs without an increase in bank risk-taking. Our results suggest that household macroprudential policy can have positive unintended spillovers to the real sector and can build resilience to macroeconomic shocks.

Keywords: Macroprudential policies, bank risk-taking, commercial credit, macroeconomic shocks, exchange rate crisis.
JEL Codes: G21, G28, E58

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[53] The views are those of the authors and do not necessarily indicate concurrence by the Central Bank of the Republic of Turkey, the Federal Reserve Bank of Atlanta, the Federal Reserve System, the International Monetary Fund, their management, or their staff. All errors are our own.

Competing Silk Roads of Infrastructure in the Turkic World

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Abstract
After the sanctions from the Russian war in Ukraine, Turkic states faced tremendous pressure to diversify their transportation routes. With more than 80% of cargo via Russian territory into the Baltic states compromised and no variable alternative routes from the South, Central Asian countries, Azerbaijan, and Turkiye faced multiple disruptions in their supply chains. Middle Corridor offered an essential alternative that can be studied from the perspective of competing Silk Road regionalisms. We show that Turkiye is attempting to establish regionalism based on a *common Turkic identity (Identity Regionalism)*, while China and the EU are bankrolling *Integrative Regionalisms*, which aim to minimize territorial divisions for goods that travel from China to the EU. These developments take place with Russia actively trying to keep Central Asia as raw material producers (*Marginalizing Regionalism*) to maximize its own welfare. As a result, Turkic states balance competing regional visions of Silk Roads by actively engaging in the Chinese, European, and Turkish proposals, which manifest strong overlapping agendas. Such cooperation also helps them to avoid Russian pressure to maintain weak economic status. We will explore the challenges and opportunities of such regional dynamics for connectivity and infrastructure of Turkic states along the Middle Corridor.

Keywords: Competing regionalisms, Silk Road infrastructure, Middle Corridor.
JEL Codes: R58, R12, O19, O24

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Routing Around Empire: Trade Reallocation and Insurance Grades under Wartime Sanctions 1803-1810

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Abstract

This paper examines how the Napoleonic Continental Blockade reshaped maritime trade and insurance pricing at the ship level. Building a panel from Lloyd's "Green Book" classifications for 1803–1810, the study links routes, port exposure, and hull/equipment grades to analyze risk repricing under geopolitical constraint. A difference-in-differences strategy with ship and year fixed effects compares vessels trading with blockaded ports to other ships before and after 1807. Results show a broad upward shift in classifications after the blockade's onset, consistent with higher perceived risk and insurance premia. Ships serving blockaded markets systematically carry stricter grades throughout, but the analysis finds limited additional post-1807 intensification relative to comparable vessels, suggesting rapid pre-pricing and route substitution as key margins of adjustment. Descriptive evidence indicates younger, nimbler tonnage and a reallocation across ports consistent with institutional adaptation by insurers and traders. The study contributes micro-evidence on how sanctions-like shocks propagate through maritime risk, pricing, and network structure.

Keywords: Continental Blockade; Napoleonic Wars; maritime trade; Lloyd's classifications; insurance premia; sanctions; difference-in-differences.
JEL Codes: N73; F51; G22

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Consumer Boycotts, Technology Interdependence, and Defense Gains: Sectoral Spillovers between Israel and the U.S. during the Israel-Gaza War

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Abstract
The ongoing 2023-2025 Israel–Gaza war generated systemic financial shocks that extended beyond regional boundaries, causing volatility in the currency and stock markets, disruptions in supply chains, and uncertainties for multinational corporations. Using the asymmetric TVP-VAR connectedness approach, this study examines the interconnectedness between Israel and the United States by analyzing three sectoral channels, particularly the effects of consumer boycotts, technological interdependence, and military-industrial cooperation, through which the conflict is transmitted into market dynamics. Using the ILS/USD exchange rate, the TA-35 index, and the S&P 500 index as benchmarks, the study compares the responses of boycotted consumer firms, technology firms with strong Israeli ties, and defense contractors supplying Israel. The asymmetric TVP-VAR approach is applied to assess immediate stock market reactions around key conflict and boycott events. The approach captures the dynamic volatility spillovers between U.S. firms, Israeli market indicators, and the S&P 500 index to understand volatility transmission and feedback loops across these sectors. By integrating boycott economics and defense-sector dynamics into political risk models, this study provides novel evidence on how conflict-driven uncertainty propagates across global markets through asymmetric and sector-specific channels. The findings are relevant for investors, policymakers, and corporations navigating financial risks in an era of heightened geopolitical fragmentation.

Keywords: Israel-Gaza war, volatility, spillovers, TVP-VAR.
JEL Codes: D74, F36, G15, C32

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The Digital Entrepreneurship Divide: National Digital Infrastructure as a Predictor of High-Growth Aspiration Entrepreneurship in Emerging Economies

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Abstract
Digital technologies have transformed entrepreneurial opportunities, yet the extent to which national digital infrastructure shapes the ambition of entrepreneurial activity remains underexplored - particularly in emerging economies. This paper investigates how broadband penetration, secure internet servers, and internet usage influence the prevalence of high-growth expectation entrepreneurship and innovation-driven ventures. Using Global Entrepreneurship Monitor (GEM) data on early-stage entrepreneurial activity and high-growth aspiration indicators, combined with World Bank digital infrastructure measures, we construct a multi-country panel covering emerging economies from 2019 to 2021. Fixed-effects panel regressions test whether digital infrastructure predicts ambitious entrepreneurship after controlling for GDP per capita growth, ease of doing business, foreign direct investment, and domestic credit availability. Preliminary expectations suggest that while overall entrepreneurial participation (TEA) is influenced by multiple economic factors, digital infrastructure exerts a stronger and more consistent effect on growth-oriented and innovation-driven entrepreneurship. The findings aim to extend institutional and resource-based theories of entrepreneurship by highlighting digital readiness as a critical enabler of venture ambition in emerging contexts. Policy implications emphasize the importance of targeted digital infrastructure investments to foster innovation-oriented, job-creating entrepreneurship in developing economies.

Keywords: Digitalization, Digital Infrastructure, Entrepreneurship
JEL codes: L26, O18

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AI and Decision-Making in Business: Opportunities, Risks, and Ethics

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Abstract
Artificial intelligence will increasingly influence business decision-making in areas such as strategy, operations, finance, and human resources. Companies will try to benefit from AI in areas such as forecasting accuracy, better use of resources, and process efficiency. However, algorithmic biases, over-automation, and data privacy will be sources of risks that undermine organizational trust. This study will carry out rapid evidence assessment (REA) a streamlined type of systematic review which studies peer-reviewed researches from 2019–2025 to show opportunities and areas of risk in business functions. The REA will identify databases (Scopus, Web of Science), a clear search string, inclusion/exclusion criteria, and PRISMA-style screening. The results will be linked to ethics, governance, and accountability dimensions e.g., human-in-the-loop oversight, fairness metrics, privacy compliance, transparency dashboards. The study will present a cross-sectional framework that will illustrate governance mechanisms as drivers of organizational trust. The aim of this framework is to facilitate the decision-making process by aggregating the latest research, and developing a context-sensitive framework that weighs the benefits and the risks of AI-enabled decisions, such as the effectiveness and the transparency that will offer a hands-on guidance for businesses and policy makers.

Keywords: Artificial Intelligence, Business Decision-Making, Ethics, Accountability, Governance
JEL Codes: M15, O33, D81

Do public credit guarantees boost R&D and innovation?

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Abstract
While public credit guarantees (PCGs) have been around for a long time, their use expanded significantly during the global financial crisis and the COVID-19 pandemic to support the corporate sector and facilitate economic recovery. Given the scale of these programmes and their potential fiscal implications, much of the existing literature has focused on whether PCGs improve credit allocation and financial outcomes. In contrast, this paper examines whether PCGs impact firms' R&D and innovation efforts, utilizing a rich data set from Turkey's Credit Guarantee Fund—one of the largest schemes of this kind—and employing a staggered difference-in-differences (DiD) approach preceded by a comprehensive matching procedure. We find that firms receiving guaranteed loans exhibit significantly greater improvements in both innovation inputs, such as R&D expenditure, and innovation outcomes, such as high-tech exports, compared to non-recipient firms. We also observe a substantially larger beneficial impact for firms already engaged in innovation activities and those facing financial constraints. Our findings have important implications for regulatory authorities in their design of credit support programmes.

Keywords: Public credit guarantees, R&D, firm innovation, Turkey.
JEL Codes: G21, G32, G38, O31, O38

Automation Imports and Upgrading in Firm Production Networks

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Abstract
Automation, such as the use of numerical control machines, Iot sensors and robots, has the potential to significantly change production processes and outcomes, becoming a key driver of production up- grading. In recent decades, the adoption of automation technologies has seen a significant surge. We investigate how the import of automation impacts upgrading within firm production networks. We use comprehensive data on product mix, foreign trade, balance sheets, employment, and firm-to-firm transactions for Turkish manufacturing firms from 2009 to 2020. Using propensity score matching (PSM) alongside event study analyses and an instrumental variable (IV) approach, our research provides robust evidence that firms importing automation improve the quality and lower quality-adjusted prices of their products. Importantly, the benefits of automation extend downstream throughout the supply chain to firms sourcing inputs from suppliers that have adopted automation. Instead, no significant effects are transmitted to the upstream firms that supply automation adopters. This evidence remains robust across a wide array of sensitivity checks, including a control function approach to address unobserved contemporaneous shocks.

Keywords: buyer-supplier links, product upgrading, manufacturing, Türkiye.
JEL Codes: F61, F63, O14, 033.

Economic Analysis of Chemotherapy Drug Waste in Pediatric Oncology: A Cross-Sectional Study

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Abstract
The waste of expensive injectable anticancer drugs imposes a considerable financial burden on healthcare systems, particularly in resource-limited settings where drug budgets are limited and efficiency is essential. This study quantifies the economic cost of chemotherapy drug waste in the pediatric oncology department of Shahid Madani Hospital, Khorramabad, over a six-month period in 2022. Using a retrospective cross-sectional design, patient files were reviewed to extract data on prescribed doses and vial sizes, and drug waste was estimated by calculating the difference between the required dose and available vial size. A total of 567 doses were administered, with 563 instances of waste recorded. Methotrexate, Cytarabine, and Ifosfamide generated the highest proportion of waste, while Asparaginase, Methotrexate, Cytarabine, and Vincristine accounted for the greatest financial losses, totaling $20,519 during the study period. The findings highlight the substantial economic consequences of anticancer drug waste and emphasize the importance of cost-saving measures such as cleanroom preparation, centralized distribution, and provision of smaller vial sizes to improve efficiency and reduce treatment costs in the Iranian healthcare system.

Keywords: Drug waste, Economic Analysis, Pharmacoeconomics, Anticancer Drugs, Pediatric Oncology.
JEL Codes: I11, I18, D61

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60 The study received ethical approval from the Vice-Chancellor for Research Affairs at Lorestan University of Medical Sciences (Code of Ethics: ir.lums.rec.1402.258). No specific funding was received for this research.

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The Effect of Mothers' Education on Family Size, Parental Inputs and Early Child Development: Evidence from Türkiye

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Abstract
Parental inputs are vital in shaping the skill development of children, which, in turn, has a significant impact on children's future life outcomes. This study aims to provide evidence of how a mother's education affects parental inputs and early childhood development. The study finds that the education policy, extending compulsory primary education from 5 to 8 years, increased schooling in the form of compulsory school completion by 14.4 percentage points. Using the education reform as an exogenous variation in schooling, the study documents an increase in child health and monetary investments, in terms of birth weight and number of books, among mothers who completed at least primary education. These effects can be best explained by wealth and employment effects among mothers affected by the reform. Additionally, the study provides evidence of a decrease in smoking among mothers who completed compulsory schooling. Although the mandatory schooling reform had an impact on certain monetary and health investments, it did not lead to any changes in time investments made by mothers, nor did it affect subsequent measures of early childhood development.

Keywords: Mothers' education, Parental investment, Child development, Compulsory schooling reform, Türkiye
JEL Codes: I21, J13, J24

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Breaking the Glass Ceiling in Healthcare Leadership: Economic and Labour Market Perspectives

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Abstract
Although extensive research exists on the glass ceiling in healthcare, few studies examine developments or assess economic and labour market consequences of gender disparities. This study reviews literature on women's barriers in healthcare leadership, focusing on thematic patterns and economic implications. An initial search across Scopus, Web of Science, PubMed, ProQuest, and Google Scholar (2021–2024) identified 2,320 articles. After screening duplicates and irrelevant studies, 44 peer-reviewed articles were included. Eighteen key themes were identified, including Persistent Gender Disparities, Lack of Diversity in Leadership, Gender Bias in Promotion, Mentorship Disparities, Imposter Syndrome, Work–Life Balance challenges, Post-COVID Shifts, and practical aspects such as Interventions & Outcomes, Policy & Organizational Levers, and Data & Measurement. A conceptual model was developed to illustrate relationships and potential interventions. While studies employ robust frameworks such as gender theory, feminist theory, wicked problem theory, and social cognitive career theory, gaps remain in evaluating economic impact of gender disparities and intervention effectiveness. This review highlights the need for research integrating economic and labour perspectives, testing practical solutions such as mentorship programs and objective promotion criteria, and implementing policies to reduce the glass ceiling in healthcare leadership, enhancing workforce efficiency and equitable access to leadership opportunities.

Keywords: Labour Market Inequality, Gender Gap, Women Leadership, Health Sector, Economic Impact.
JEL Codes: J16, I18, J24

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Maternal Exposure to Terrorism and Child Skills Development

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Abstract
There is a large literature studying the impact of wars and armed conflicts on individuals' outcomes including their health, well-being, schooling, and labor force participation. While the research finds that wars and armed conflicts are harmful to individuals, there is little evidence on the intergenerational impacts of these events. In this paper, I study the intergenerational impacts of early-life exposure to terrorism. Using data from the 2018 wave of the Turkish Demographic and Health Survey linked to conflict-related casualties from the Turkish Army – Kurdistan Workers' Party (PKK) conflict since 1980, I measure maternal exposure to terrorism as the number of deaths caused by the conflict occurring within the first five years of a mother's life. Exploiting idiosyncratic variation in exposure across birth years and locations, I implement a two-stage differences-in-differences strategy to identify causal effects on children's development between ages 3 and 5. Results indicate that maternal exposure to terrorism significantly reduces children's socio-emotional and physical development by 10.7 and 7.6 percentage points, respectively. On readiness to learn and literacy/numeracy, I find null effects. Lower maternal educational attainment and lower parental investments partially explain these negative effects.

Keywords: Child Development, Armed Conflict, Human Capital, Intergenerational Effects
JEL Codes: I25, J13, O12

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Internal Debt Issue in Turkey: An Evaluation from Public Finance Viewpoint

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Abstract
The aim of this article paper is to investigate the causes and effects of internal indebtedness from the perspective of public finance in Turkey between 2000 and 2025. Throughout the Neoliberal era internal indebtedness has been a major issue almost in all economies. However, while borrowing functions as a source of revenue on the one hand, on the other it generates interest expenditures that impose a burden on the budget, thereby leading to a deterioration of the public balance. In Turkey, both external and internal debt are predominantly utilized for the repayment of existing debts, a practice that leads to a continuous increase in both the debt stock and the overall debt burden. As the data indicate, between 2000 and 2017 it is observed that the public sector borrowing requirement in Turkey was largely financed through internal rather than external debt. Accordingly, in the year 2000, in terms of debt composition, net internal debt accounted for approximately 75 percent of total debt relative to GDP, whereas net external borrowing constituted around 25 percent of the total. Because of the fact that indebtedness has replaced taxation in the Neoliberal era which caused deepening in the public budget deficit has caused chronicity from budget management viewpoint.

Keywords: Internal Indebtedness, Public Finance, Interest Expenditure
JEL Codes: H63,H00, H5

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Türkiye'de İç Borç Sorunu: Kamu Maliyesi Açısından Bir Değerlendirme

Özet

Bu makalenin amacı Türkiye'de 2000-2025 yılları arasında oluşan iç borçlanmanın temel özelliklerini ve kamu maliyesi üzerindeki etkilerini analiz etmektir. Neoliberal dönemde tüm ekonomilerde iç borçlanma önemli bir sorun oluşturmuştur. Ancak bir yönüyle gelir yaratma özelliği taşıyan borçlanma, diğer yönüyle de ortaya çıkardığı faiz harcaması açısından da bütçe üzerinde bir yük yaratarak kamu dengesinin bozulmasına yol açmaktadır. Türkiye'de hem dış borçlanma hem de iç borçlanma genel olarak borçların geri ödenmesi için kullanılmakta olup bu durum hem borç stokunun hem de borç yükünün artmasına neden olmaktadır. Verilerin yansıttığı gibi 2000-2017 yılları arasında Türkiye'de kamu kesimi borçlanma gereğinin büyük oranda dış borçlanma yerine iç borçlanmayla karşılandığı gözlenmektedir. Öyle ki 2000 yılında borç kompozisyonu açısından net iç borçlanma GSYIH'ya oran açısından toplam borcun yaklaşık olarak % 75'ini oluştururken, net dış borçlanmanın ise toplam borcun % 25'ini oluşturduğu sonucu ortaya çıkmaktadır. Neoliberal dönemde, vergilemeyi ikame eden borçlanmanın bütçe açığını derinleştirmesi kamu maliyesi açısından ciddi kronik bir sorun oluşturmuştur.

Anahtar Kelimeler:: İç Borçlanma, Kamu Maliyesi, Faiz Harcaması
JEL Kodları: H63,H00, H5

Relative Prices and Sectoral Productivity: A Comparison for Selected Regions on a Global Scale

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Abstract
Productivity growth is of critical importance in the development and growth of countries. One of the main approaches is that developing countries need to increase their sectoral productivity levels to catch up with developed countries. The related literature is based on the fact that the manufacturing industry is the sector with the highest productivity level. However, studies conducted in recent years have shown that sub-sectors of the services sector, such as finance and communications, also cause productivity increases at least as much as the manufacturing industry. The aim of this study is to reveal the productivity levels of sectors at the regional level. For this purpose, Latin America, Sub-Saharan Africa and the Middle East and Central Asia regions were selected. Generally, studies make a distinction between developed and developing countries; sectoral productivity levels are made based on the distinction between developed and developing countries. However, this approach ignores regional differences within developing countries. This study is based on the model put forward by Duarte and Restuccia (2019). Accordingly, by utilizing sectoral relative prices, sectoral productivity of agriculture, construction, manufacturing and services sub-sectors (13 sub-sectors) is calculated for Latin America, Sub-Saharan Africa and the Middle East and Central Asia regions. The most important finding of the study is that the manufacturing industry has the greatest productivity level for all three regions. The second important finding is that productivity levels in the same sectors vary significantly across regions. Therefore, regional approaches are important to understand the differences within developing countries.

Keywords: Economic Growth and Relative Prices, Economic Development, Productivity and Relative Prices
JEL Codes: O4, O5, E01

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Göreceli Fiyatlar ve Sektörel Üretkenlik: Küresel Ölçekte Seçilmiş Bölgeler İçin Bir Karşılaştırma

Özet
Ülkelerin kalkınma ve gelişme sürecinde üretkenlik artışı kritik önemdedir. Gelişmekte olan ülkelerin gelişmiş ülkeleri yakalayabilmeleri için sektörel üretkenlik düzeylerini arttırmaları gerektiği başlıca yaklaşımlar arasında yer almaktadır. İlgili yazın imalat sanayinin en büyük üretkenlik düzeyine sahip sektör olduğunu temel almaktadır. Fakat son yıllarda yapılan çalışmalarda, hizmetler sektörünün alt sektörleri olan finans, iletişim gibi alanların da en az imalat sanayi kadar üretkenlik artışına neden olduğu gösterilmektedir. Bu çalışmanın amacı, bölgesel düzeyde sektörlerin üretkenlik seviyelerini ortaya koymaktır. Bu amaçla Latin Amerika, Sahra Altı Afrika ile Orta Doğu ve Orta Asya bölgeleri seçilmiştir. Genellikle yapılan çalışmalarda gelişmiş ve gelişmekte olan ülke ayrımı yapılmakta; sektörel üretkenlik düzeyleri gelişmiş ve gelişmekte olan ülke ayrımı üzerinden yapılmaktadır. Fakat bu yaklaşım gelişmekte olan ülkeler içerisindeki bölgesel farklılıkları göz ardı etmektedir. Bu çalışmada, Duarte ve Restuccia (2019) tarafından ortaya konulan model temel alınmaktadır. Buna göre sektörel göreceli fiyatlardan faydalanarak, Latin Amerika, Sahra Altı Afrika ile Orta Doğu ve Orta Asya bölgeleri için tarım, inşaat, imalat ve hizmetler alt sektörlerinin (13 alt sektör) sektörel üretkenlikleri hesaplamaktadır. Çalışmanın en önemli bulgusu, her üç bölge için de imalat sanayinin en büyük üretkenlik düzeyine sahip olduğudur. İkinci önemli bulgu ise aynı sektörlerdeki üretkenlik düzeylerinin bölgeler arasında önemli farklılıklar göstermesidir. Dolayısıyla, gelişmekte olan ülkelerin kendi içindeki farklılıkları kavramak için bölgesel yaklaşımlar önemlidir.

Anahtar Kelimeler: Ekonomik Büyüme ve Göreceli Fiyatlar, Ekonomik Kalkınma, Verimlilik ve Göreceli Fiyatlar.
JEL Kodları: O4, O5, E01

Okun's Law in the Turkish Economy: A Meta-Analysis of Empirical Findings

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Abstract
This study provides a comprehensive evidence base on the growth–unemployment nexus in Turkey by systematically synthesizing the findings of over a dozen (n = 13) empirical studies published between 2000 and 2024 that investigate Okun's Law. The pooled effect obtained through the random-effects approach shows that the average Okun coefficient is −0.28 (95% CI: −0.35; −0.21); this result indicates that an additional 1% growth reduces the unemployment rate by approximately 0.28 percentage points. Cross-study heterogeneity is moderate ($I^2 \approx 64\%$). Subgroup analyses reveal that the coefficient is stronger during crisis/recession periods (≈ −0.40) but weakens during expansionary periods (≈ −0.20); this finding points to an asymmetric Okun effect sensitive to business cycles in Turkey. By data frequency, the coefficient is larger in absolute terms for quarterly series (≈ −0.32) compared to annual series (≈ −0.22). By methodology, difference-based models (changes) report greater sensitivity (≈ −0.30) relative to models using output gaps (≈ −0.25). Publication bias tests suggest limited bias (Egger p ≈ 0.18); when the "trim-and-fill" method adds two hypothetical studies, the pooled effect is revised to −0.26. "Leave-one-out" robustness checks show that removing any single study shifts the pooled coefficient to between −0.27 and −0.31, indicating that the results are stable. The findings imply that employment-friendly growth in Turkey requires not only output expansion but also labor market flexibility, skill matching, and regional cohesion policies; particularly during downturns, countercyclical employment policies may become more effective.

Keywords: Okun's Law, Unemployment, Economic Growth, Meta-Analysis.
JEL Codes: C83, E24, O40

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Türkiye Ekonomisinde Okun Yasası: Ampirik Bulguların Meta-Analizi

Özet

Bu çalışma, Türkiye'de Okun Yasası'nı inceleyen ve 2000–2024 döneminde yayımlanmış onun üzerinde (n=13) ampirik araştırmanın bulgularını sistematik biçimde sentezleyerek büyüme–işsizlik ilişkisine dair bütüncül bir kanıt tabanı sunmaktadır. Rastgele etkiler (random-effects) yaklaşımıyla elde edilen birleşik etki, Okun katsayısının ortalama −0,28 (95% GA: −0,35; −0,21) düzeyinde olduğunu göstermektedir; bu sonuç, %1'lik ek büyümenin işsizlik oranını yaklaşık 0,28 puan azalttığına işaret eder. Çalışmalar arası heterojenite orta düzeydedir ($I^2 \approx 64\%$). Alt grup analizleri, katsayının kriz/gerileme dönemlerinde daha güçlü (≈ −0,40) iken, genişleme dönemlerinde zayıfladığını (≈ −0,20) göstermektedir; bu bulgu, Türkiye'de iş çevrimlerine duyarlı asimetrik bir Okun etkisine işaret eder. Veri sıklığına göre katsayı çeyreklik serilerde (≈ −0,32) yıllık serilere kıyasla (≈ −0,22) mutlak değerce daha büyüktür. Metodolojiye göre, fark temelli modeller (değişimler) çıktı açığı kullanan modellere (≈ −0,25) kıyasla daha yüksek duyarlılık (≈ −0,30) rapor etmektedir. Yayın yanlılığı testleri sınırlı bir önyargı olduğuna işaret etmektedir (Egger p≈0,18); "trim-and-fill" iki varsayımsal çalışmayı eklediğinde birleşik etki −0,26 düzeyine revize olmaktadır. "Leave-one-out" dayanıklılık analizleri, tek bir çalışmanın çıkarılmasının birleşik katsayıyı −0,27 ile −0,31 aralığına taşıdığını, yani sonuçların sağlam olduğunu göstermektedir. Bulgular, istihdam dostu büyüme için yalnızca çıktı artışının değil, işgücü piyasası esnekliği, beceri uyumu ve bölgesel uyum politikalarının da kritik olduğunu; özellikle daralma dönemlerinde ekonominin ters yönde hareket eden istihdam politikalarının etkinliğinin artabileceğini ima etmektedir.

Keywords: Okun Yasası, İşsizlik, Ekonomik Büyüme, Meta-Analiz.
JEL Codes: C83, E24, O40

TRAMO-X*: An Approach for Nowcasting International Trade

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Abstract
This paper presents the participation process and results of the TURKSTAT-DATG team in the European Statistics Awards for International Trade Nowcasting Challenge organized by Eurostat. In this context, we proposed the TRAMO-X* approach for nowcasting international trade indicators. The competition covered three domains: Intra-EU exports, Extra-EU exports, and Extra-EU imports. During a six-month competition horizon (October 2024–March 2025), we submitted monthly nowcasting results for 27 EU countries. Within the Accuracy category, our team ranked first in Extra-EU Exports and Extra-EU Imports, and second in Intra-EU Exports. Moreover, in the two other competition categories—Reproducibility and Innovativity—our team also achieved first place across all three domains.
Methodologically, our approach builds on the TRAMO (regression + ARIMA error structure) framework and extends it into TRAMO-X* by incorporating international covariates derived from trade theory. The asterisk (*) denotes the inclusion of foreign external variables. For each country, these variables were defined as time-varying trade-weighted averages of partner countries' macroeconomic indicators, with weights based on annual bilateral trade volumes. The selection of explanatory variables—relative prices, exchange rates, and real domestic and foreign activity—was grounded in established frameworks such as the elasticity approach and the imperfect substitutes model, thereby capturing the theoretical foundations of trade relationships. Implementation in R via the RJDemetra package ensured methodological transparency and reproducibility, underpinned by strict data management protocols.

Keywords: TRAMO, Nowcasting, International Trade, RJDemetra
JEL Codes: C22, C53, F47

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[70] The views and opinions expressed in this paper are those of the author and do not necessarily represent the official views of the Turkish Statistical Institute

TRAMO-X*: Uluslararası Ticaretin Anlık Tahmini için Bir Yaklaşım

Özet
Bu çalışma, TURKSTAT-DATG ekibinin Eurostat tarafından düzenlenen Avrupa İstatistik Ödülleri Uluslararası Ticaret Anlık Tahmin Yarışmasına katılım sürecini ve elde edilen sonuçları aktarmaktadır. Bu çerçevede, uluslararası ticaret göstergelerinin anlık tahminleri için TRAMO-X* yaklaşımı önerilmiştir. Yarışma üç alanı kapsamaktadır: AB içi ihracat, AB dışı ihracat ve AB dışı ithalat. Altı aylık yarışma dönemi boyunca (Ekim 2024 – Mart 2025), 27 AB ülkesine ait aylık anlık tahmin sonuçları Eurostat'a iletilmiştir. Doğruluk kategorisinde ekibimiz, AB dışı ihracat ve AB dışı ithalatta birinci, AB içi ihracatta ise ikinci sırada yer almıştır. Ayrıca yarışmadaki diğer iki kategori olan tekrarlanabilirlik ve yenilikçilik kategorilerinde de ekibimiz her üç alanda da birincilik elde etmiştir.

Yöntemsel olarak yaklaşımımız, TRAMO (regresyon + ARIMA hata yapısı) çerçevesi üzerine inşa edilmiş ve ticaret teorisinden türetilen uluslararası değişkenlerin eklenmesiyle TRAMO-X* biçiminde genişletilmiştir. Yıldız (*) işareti, yabancı dışsal değişkenlerin modele dâhil edildiğini göstermektedir. Her ülke için bu değişkenler, partner ülkelerin makroekonomik göstergelerinin yıllık ikili ticaret hacimlerine dayalı zamanla değişen ticaret-ağırlıklı ortalamaları olarak tanımlanmıştır. Açıklayıcı değişkenlerin seçimi—göreli fiyatlar, döviz kurları, yurt içi ve yabancı reel ekonomik faaliyet—esneklik yaklaşımı ve eksik ikame modeli gibi yerleşik kuramsal çerçevelere dayandırılmış; böylece ticaret akımlarının bu değişkenlerle ilişkisi teorik temellerle uyumlu biçimde modellenmiştir. Uygulama R dili üzerinden RJDemetra paketiyle gerçekleştirilmiş; sıkı veri yönetim protokolleriyle desteklenen yöntemsel şeffaflık ve yeniden üretilebilirlik güvence altına alınmıştır.

Anahtar Kelimeler: TRAMO, Anlık Tahmin, Uluslararası Ticaret, RJDemetra
JEL Kodları: C22, C53, F47

Environmental Taxation and CO_2 Emissions in Turkey: Is There a Signal of Performative Environmentalism?

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Abstract
This study examines the long-term impact of environmental taxation on CO_2 emissions in Turkey from 1994 to 2022, employing the Autoregressive Distributed Lag (ARDL) and Fully Modified Ordinary Least Squares (FMOLS) models. In the baseline specification, the long-run coefficient of environmental tax revenues is positive and statistically significant, suggesting that increases in environmental taxes are associated with higher emissions. To account for potential non-linearities, the squared term of tax revenues is incorporated into the model. The results reveal that while the tax revenue variable remains positive, its squared term is negative and significant, thereby showing an inverted-U relationship. This implies that environmental taxation may only begin to reduce emissions beyond a certain threshold, whereas low-intensity tax policies appear insufficient to generate meaningful environmental benefits. In this respect, the findings may indicate a case of performative environmentalism, where environmental taxes exist but remain largely symbolic in effect. Control variables further suggest that income is positively correlated with emissions, while improvements in energy efficiency contribute to reductions in emissions. Overall, the results highlight the importance of tax intensity and policy design in achieving genuine environmental outcomes. They also caution against relying on underpowered policies that risk serving as green facades rather than effective instruments.

Keywords: Environmental taxation, CO_2 emissions, Turkey.
JEL Codes: C22, H23, Q58

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Green Transition Indices and Transition Risks: Evidence from Turkey in a Global Context

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Abstract
This paper investigates the dynamics of green transition indices and their implications for transition risks between 1999 and 2023, providing new evidence from Turkey in a global comparative context. The indices—Economic Complexity Index (ECI), Green Complexity Index (GCI), Green Complexity Potential (GCP), Brown Lock-in Index (BLI), and Transition Outlook (TO)—capture the productive capabilities and environmental vulnerabilities embedded in countries' export structures. While these measures have been calculated globally, they have rarely been systematically analyzed or interpreted at the country level. We provide descriptive evidence across country groups (Advanced Economies, Emerging Market Economies, and Low-Income Developing Countries) to situate Turkey's position relative to its peers. The findings reveal that Turkey exhibits relatively high green complexity potential but remains exposed to transition risks due to its specialization in low-complexity brown products. We also explore the determinants of the BLI through system GMM estimation. This analysis highlights structural drivers of transition risk and offers new insights for Turkey's sustainability strategy within the broader international landscape.

Keywords: Economic Complexity, Green Transition, Brown Lock-in Risk, Turkey.
JEL Codes: F18, F14, Q56

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Türkiye's Green Transition and the Potential Role of an Emissions Trading System

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The Paris Agreement, adopted to combat the global climate crisis, requires parties to commit to reducing greenhouse gas emissions in line with the goal of limiting the rise in global average temperatures. As a developing country, Türkiye has pledged to achieve net-zero emissions by 2053 within the framework of its nationally determined contribution. Attaining this target necessitates reinforcing green transition policies through institutional, legal, economic, and fiscal measures. One of the prominent instruments in this context is emissions trading, a market-based mechanism that sets a cap on emissions and allows for the trading of permits. This study aims to evaluate Türkiye's green transition process and the potential role of an Emissions Trading System (ETS) within it. Adopting a conceptual and comparative approach, the study first outlines the general framework of the green transition and ETS, then examines Türkiye's preparations in these areas. In its final stage, the analysis compares Türkiye's prospective ETS with the European Union's experience. The findings indicate that ETS in Türkiye could serve not only as an environmental instrument but also as a means of enhancing trade alignment with the European Union, generating fiscal revenues, and supporting just transition policies.

Keywords: Green transition, emissions trading system, climate action.
JEL Codes: H23, Q01, Q54

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Carbon Emissions and Global Value Chains: Evidence from CBAM Sectors[74]

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Abstract
This study examines the relationship between global value chains (GVCs) and carbon emissions, focusing on the sectors covered by the European Union's Carbon Border Adjustment Mechanism (CBAM). CBAM applies to carbon-intensive, trade-exposed sectors, and certain downstream products such as cement, iron and steel, aluminum, fertilizers, electricity, and hydrogen. Sectors covered by CBAM account for more than half of industrial greenhouse gas emissions. These sectors are selected because they face the highest risk of carbon leakage under the EU Emissions Trading System (ETS). Using the Full EORA multi-region input-output database (Lenzen et al., 2012, 2013) and the value-added decomposition methodology of Wang et al. (2017), we first calculate emissions embedded in trade for 64 countries over the period 1990-2023. This enables us to map the distribution of emissions from both production and consumption perspectives, identifying differences between where emissions occur and where goods are consumed. Second, we conduct an empirical analysis to explore the determinants of these emissions. We pay special attention to GVC participation indices to understand how involvement in global production networks influences carbon emissions. The findings highlight differences between developed and developing countries in terms of emissions responsibilities and exposure to CBAM. The study offers valuable policy insights for designing fair and effective climate strategies, ensuring that measures to mitigate carbon leakage do not impose disproportionate burdens on developing economies.

Keywords: GVC indices; Production-based and Consumption-based Carbon Emissions; CBAM
JEL Codes: F18, F64, Q56

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Asymmetric Interconnectedness among International Payment Systems, Semiconductors, and Communication Companies

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Abstract
This paper investigates the asymmetric interconnectedness among three critical sectors of the global economy by employing company-level data from international payment systems, semiconductor manufacturers, and communication service providers. The analysis is based on daily logarithmic stock returns of major companies in these industries between 3 January 2018 and 28 August 2025. Employing the asymmetric connectedness framework, the results show that semiconductor companies act as the primary transmitters of shocks, with Nvidia and Broadcom playing dominant roles. Payment companies, represented by Visa and Mastercard, emerge as central nodes, exhibiting strong bidirectional linkages with both semiconductors and communications. In contrast, communication companies, particularly AT&T and T-Mobile, are identified as net receivers, reflecting their relative vulnerability to sectoral spillovers. The dynamic patterns further reveal heightened asymmetries during episodes of financial turbulence, such as the COVID-19 crisis and the 2022–2023 monetary tightening cycle, where downside shocks generate stronger spillover effects than upside shocks. These findings underline how asymmetric contagion channels shape systemic risk and interdependencies across technology–finance linkages, carrying important implications for portfolio diversification, regulatory oversight, and cross-sectoral risk management.

Keywords: Financial crises, asset pricing, international financial markets.
JEL Codes: G01, G12, G15

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Retail demand and the pricing associated with extreme losses

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Abstract
The pricing of extreme negative returns remains a contested issue in behavioral asset pricing. While some investors may extrapolate past performance into the future and demand a premium for bearing downside risk, others may hold on to or even accumulate losing stocks, resulting in overvaluation. Yet, whether retail investors are net buyers or sellers after sharp losses remains an open question. In this paper, contrary to the recent evidence for U.S. markets, we observe that stocks experiencing the most extreme daily losses (*MIN)* in Borsa Istanbul earn statistically and economically significantly lower future returns. Our findings, however, are in line with the systematic overpricing of left-tail risk. The *MIN* discount becomes more pronounced under short-selling restrictions, potentially due to limits to arbitrage. Moreover, leveraging daily portfolios of 20,000 investors, we provide evidence that Turkish retail investors, on average, are net buyers following minimum return days, particularly for stocks with the most extreme negative returns (*High-MIN* stocks). This behavior, driven primarily by young, male, domestic, and less diversified investors, may reinforce the persistence of overvaluation. Our results, therefore, offer a potential mechanism for the left-tail risk anomaly in equity markets, particularly pronounced on stocks with high retail investor participation.

Keywords: Extreme returns, large daily losses, overpricing, short-selling restrictions, retail investors.
JEL Codes: G11, G12, G17

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Oil Prices, Geopolitical Risks, and Sectoral Stock Returns in G7 Economies

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Abstract
This paper investigates the effects of oil prices and geopolitical risks on aggregate and sectoral stock returns in the G7 economies. Both global and country-specific geopolitical risks are considered, addressing a gap in the literature on the differential sensitivity of stock markets to macroeconomic and political shocks. Using monthly data from January 2005 to April 2024 and disaggregated across five sectors, the analysis employs stock returns as the dependent variable, with oil prices and global and domestic geopolitical risks as the main explanatory variables, while inflation, GDP, and the volatility index are included as controls.
The empirical strategy applies a Panel ARDL–Pooled Mean Group framework to capture both short-run and long-run dynamics, complemented by robustness checks using the Common Correlated Effects–PMG estimator and fixed-effects models with Driscoll–Kraay standard errors. The findings reveal that oil prices exert a significant and positive influence on stock returns across all sectors, particularly in energy and basic materials. By contrast, global geopolitical risk adversely affects only the energy sector, while inflation and market volatility reduce returns in the financial and technology sectors. Overall, the results underscore oil prices as the dominant driver of stock performance in G7 markets, whereas geopolitical and macroeconomic factors exert more limited, sector-specific effects.

Keywords: Stock returns, Oil prices, Geopolitical risk, G7 economies
JEL Codes: G12, G15,Q43,F52

The Effects of a Macroprudential Policy on Deposit Interest Rates Across Size

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Abstract
This study investigates a macroprudential policy in Türkiye which aims at curbing dollarization by setting penalties for banks if their domestic currency deposit shares do not meet regulatory thresholds. While this policy has produced intended outcomes in terms of de-dollarization, its expected support for monetary policy transmission has been relatively weaker. Having clustered bank deposits by size, our causal estimates indicate that, the implementation of the macroprudential policy widens the spreads between real interest rates of smallest and largest deposit size groups by up to 2.4%. Through a number of channels, the additional premium between deposit sizes implies weakening effect on monetary policy transmission. From interest rate channel, for instance, small deposit holders, who in sum constitute a significant stake of household income in the country, were relatively disincentivized from saving.

Keywords: Monetary policy transmission, Macroprudential policy, Difference-in differences, Deposits.
JEL Codes: G21 ; G28

The Impact of Global Supply Chain Shocks on Turkish Integration to Global Value Chain

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Abstract
Global Supply Chain Pressure Index (GSCPI), developed by the Federal Reserve Bank of New York, serves as a quantitative instrument for assessing structural transformations within supply chain networks that have grown increasingly complex due to accelerated globalization. GSCPI additionally captures profound disruptions induced by COVID-19 pandemic, which exerted unprecedented stress on global supply chain operations. The GSCPI was specifically designed to evaluate the transmission mechanisms through which supply chain fluctuations influence inflation dynamics and other indicators, thereby facilitating enhanced strategic decision-making for both corporate entities and policy authorities in response to evolving supply chain conditions. Accordingly, this study aims to empirically examine the extent to which global supply chain pressures affect Turkey's forward and backward integration within international trade networks by using monthly data between 1998- 2025. This study employs a VAR framework to investigate the specified effect. In the subsequent stages, impulse–response functions are utilized to evaluate the impact of shocks on the variables, while Granger causality tests are conducted to examine the directional relationships among them. To enhance robustness, the sample period is divided into sub-periods, enabling a more reliable assessment of both the strength and direction of the relationships, particularly during periods of heightened crisis intensity.

Keywords: Global supply chain pressure index, forward integration, backward integration, VAR
JEL Codes: F14, F40, C32

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Supply Chain Transformation under Global Uncertainty: Evidence on Sector Level JIT–JIC Dynamics from Türkiye

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Abstract
This study analyzes the transformation of logistics and supply chain management, focusing on the shift between Just-in-Time (JIT) and Just-in-Case (JIC) strategies in an increasingly uncertain global environment. It highlights the impacts of the COVID-19 pandemic, regional conflicts, technological revolutions, and trade disputes, emphasizing their structural consequences for supply chain resilience. Particular attention is given to the role of Industry 4.0 and 5.0 innovations in improving efficiency and adaptability in logistics processes. The second part of the study assesses the strengths and weaknesses of Turkey's logistics sector. Finally, using aggregate and sector-level data, the empirical analysis investigates how Global Value Chain Pressure and various forms of global uncertainty have influenced production strategies (JIT vs. JIC) in the Turkish context.

Keywords: Just-in-time, Just-in-case, Supply chain shocks, Global uncertainty, Manufacturing sup-sectors, Türkiye.
JEL Codes: C32, E32 , F14, F44

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Circular economy entrepreneurship as a pillar of circular supply chain sustainability: the roles of circular economy capability and net zero policy

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Abstract
The rising global environmental challenges and resource depletion have intensified the need for the reevaluation of traditional supply chain practices. The circular economy (CE) has emerged as a transformative approach that provides a framework for sustainable value creation through recycling, reuse, and regeneration. Although much research attention has been given to the CE, not much is known about how CE entrepreneurship impacts circular supply chain sustainability. Drawing on the natural resource-based view (NRBV) and the dynamic capabilities theory, this study aims to investigate how circular economy entrepreneurship influences circular economy capability to achieve circular supply chain sustainability using data obtained from senior-level managers of manufacturing small and medium-sized enterprises (SMEs) in an emerging economy (i.e., Nigeria). The study also examines whether net-zero policy moderates the aforementioned relationships. Data collected through a questionnaire survey from manufacturing SMEs listed on the Nigerian stock exchange. CE entrepreneurship positively impacts circular supply chain sustainability and circular economy capability. CE capability positively impacts circular supply chain sustainability. The relationship between CE entrepreneurship and circular supply chain sustainability is mediated by CE capability. Net-zero policy moderates the mediated relationship between CE entrepreneurship and circular supply chain sustainability through CE capability, such that the mediated relationship is strengthened at a higher level of net-zero policy. This study offers new insights into how CE entrepreneurship influences CE capability to achieve circular supply chain sustainability for SMEs in an emerging economy.

Keywords: Circular economy entrepreneurship, circular economy sustainability, circular economy capability, net zero policy.

A Machine Learning and Real Options Framework for Proactive Foreign Exchange Rate Risk Management in Global Supply Chains

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Abstract
Global supply chains are acutely exposed to volatile exchange rates, which critically erode profitability and disrupt operational continuity. While traditional financial hedging instruments offer some protection, they are often costly, static, and reactive. A significant methodological gap exists in integrating predictive analytics with strategic decision-making tools for proactive currency rate risk management. This paper proposes a novel conceptual framework that synergistically integrates Machine Learning (ML) models—such as Long Short-Term Memory (LSTM) networks and Random Forests—for high-frequency exchange rate forecasting with Real Options Analysis (ROA) for strategic, value-maximizing decision-making under uncertainty. We contribute to the literature by providing a structured, actionable blueprint that leverages ML-derived volatility forecasts to parameterize ROA valuation models. This approach provides firms with a dynamic and proactive roadmap to enhance financial resilience and strategic flexibility within their global supply chains, moving decisively beyond conventional static risk management approaches. Ultimately, this enables more resilient and adaptive international operations.

Keywords: Supply Chain Risk Management, Financial Risk, Exchange Rate Risk, Machine Learning, Real Options Analysis.
JEL Codes: F23, G15, G32

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Lower bounds for the number of pure strategy Nash equilibria

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Abstract
In game theory, a Nash equilibrium has a characterization using the best response correspondence. In this study, using this characterization and by imposing certain assumptions on the strategy space, we provide lower bounds for the number of pure strategy Nash equilibria. Results are stated specifically for two cases: The first case is when strategy sets are compact connected smooth oriented manifolds with continuous functions defined on them satisfying certain assumptions. The second case is when strategy sets are compact symplectic manifolds with Hamiltonian diffeomorphisms defined on them satisfying certain assumptions.

Keywords: Game theory, Nash equilibria, symplectic geometry.
JEL Codes: C72, C62, C02

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Financialisation, Development Finance, and Food Security in Turkey's Agri-Food Sector

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Abstract
In recent years, financialisation and the growing role of international development finance institutions (DFIs) have become defining features of the agri-food sector in Turkey. Under the guise of addressing investment gaps, DFIs such as the European Bank for Reconstruction and Development (EBRD) have promoted large-scale private investment while reinforcing the dominance of multinational corporations (MNCs). This paper examines the restructuring of Turkey's sunflower oil sector to highlight the economic and political implications of development finance. Evidence shows that EBRD-supported projects have facilitated the consolidation and internationalisation of the sector, transforming Turkey into a regional hub for processing and export. However, this trajectory has simultaneously deepened dependence on imported seeds and crude oil, weakened the bargaining power of rural producers, and created new vulnerabilities in food security. The analysis highlights how DFIs operate through financialised mechanisms, reshaping not only sectoral structures but also the conditions of food security. By situating these dynamics within the broader debate on financialisation and agricultural restructuring, the study argues that development finance functions less as a mechanism for strengthening local production and more as an instrument of global market integration.

Keywords: Financialisation, Development Finance, Agri-Food Sector, Multinational Corporations, Food Security
JEL Codes: F63, Q14, Q18

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Finansallaşma, Kalkınma Finansmanı ve Türkiye Tarım-Gıda Sektöründe Gıda Güvencesi

Özet

Son yıllarda Türkiye'nin tarım-gıda sektörü, finansallaşma süreçleri ve uluslararası kalkınma finansmanı kuruluşlarının (DFI) artan rolüyle birlikte köklü bir dönüşüm yaşamaktadır. Avrupa İmar ve Kalkınma Bankası (EBRD) gibi kurumlar, "yatırım açığını kapatma" söylemi altında büyük ölçekli özel sektör yatırımlarını teşvik ederken, aynı zamanda çok uluslu şirketlerin (ÇUŞ) sektördeki hakimiyetini güçlendirmektedir. Bu çalışma, Türkiye ayçiçeği yağı sektöründeki yeniden yapılanmayı ele alarak kalkınma finansmanının ekonomik ve siyasal sonuçlarını irdelemektedir. Bulgular, EBRD destekli projelerin sektörde konsolidasyonu ve uluslararasılaşmayı kolaylaştırdığını, Türkiye'yi işleme ve ihracat için bölgesel bir merkez haline getirdiğini ortaya koymaktadır. Ancak bu süreç aynı zamanda ayçiçek tohumu ve ham yağ gibi girdilerde ithalat bağımlılığını derinleştirmekte, kırsal üreticilerin pazarlık gücünü zayıflatmakta ve gıda güvencesinde yeni kırılganlıklar yaratmaktadır. Analiz, kalkınma finansmanı kuruluşlarının finansallaşmış mekanizmalar aracılığıyla yalnızca sektörel yapıları değil, aynı zamanda gıda güvencesinin koşullarını da dönüştürdüğünü göstermektedir. Bu bağlamda, kalkınma finansmanı yerel üretimi güçlendiren bir araç olmaktan ziyade küresel piyasa entegrasyonunun bir enstrümanı olarak işlev görmektedir.

Anahtar Kelimeler: Finansallaşma, Kalkınma Finansmanı, Tarım-Gıda Sektörü, Çok Uluslu Şirketler, Gıda Güvencesi
JEL Kodları: F63, Q14, Q18

The Impact of Environmental Related Technologies on Food Security

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Abstract
Food security refers to the physical and economic access of all people to sufficient, safe, and nutritious food that meets their nutritional needs and food preferences for an active and healthy life at all times. However, disruptions in agricultural and livestock production due to climate change and environmental disasters in recent years have led to a decline in food security in many countries. Environmental degradation creates obstacles to achieving sustainable food security; therefore, environmental quality is extremely important for increasing sustainable food security. While developed countries focus on investing in resources and infrastructure for sustainable agricultural practices and environmentally friendly efforts to increase food security, developing and underdeveloped countries are unable to produce environmental policies aimed at increasing food security due to limited resources, inadequate infrastructure, and ineffective policy mechanisms. One of the most important of these policies is the development of technologies that improve environmental quality. Although it is thought that technologies that improve environmental quality will increase food security, a review of the literature reveals that there has been very limited research in this area. In order to fill this gap in the literature, the present study examines the impact of the development of environment related technologies in Turkey on food security for the period 1995-2022. Structural break ARDL method was performed. The analysis results indicate that environment related technologies improve food security in Turkey. Additionally, inflation and unemployment negatively affect food security, while birth rate, rural population, and income positively affect it.

Keywords: Food security, environment related technology, Türkiye.
JEL Codes: N5, O03, Q18

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Çevre Teknolojilerinin Gıda Güvenliği Üzerine Etkisi

Özet

Gıda güvenliği, tüm insanların her zaman, aktif ve sağlıklı bir yaşam için beslenme ihtiyaçlarını ve gıda tercihlerini karşılayan yeterli, güvenli ve besleyici gıdaya fiziksel ve ekonomik erişimini ifade etmektedir. Ancak son dönemde iklim değişikliği ve çevre felaketleri nedeniyle tarımsal ve hayvansal üretimde yaşanan aksaklıklar birçok ülkede gıda güvenliğinin düşmesine neden olmuştur. Çevresel bozulma, sürdürülebilir gıda güvenliğine ulaşmanın önünde engeller yaratmakta, dolayısıyla sürdürülebilir gıda güvenliğini artırmak için çevre kalitesi son derece önemlidir. Gelişmiş ülkeler, gıda güvenliğini artırmak için sürdürülebilir tarım uygulamaları ve çevre dostu çabalar için kaynaklara ve altyapıya yatırım yapmaya odaklanırken, gelişmekte olan ve gelişmemiş ülkeler ise sınırlı kaynaklar, yetersiz altyapı ve etkisiz politika mekanizmaları nedeniyle gıda güvenliğini artırmaya yönelik çevre politikaları üretememektedir. Bu politikalardan en önemlilerinden biri çevre kalitesini artırıcı teknolojilerin geliştirilmesidir. Her ne kadar çevre kalitesini artırıcı teknolojilerin gıda güvenliğini yükselteceği düşünülse de literatür incelendiğinde bu alanda oldukça sınırlı çalışma yapıldığı görülmüştür. Mevcut çalışmada literatürdeki bu boşluğun doldurulması amacıyla, 1995-2022 dönemi için Türkiye'de çevreyle ilgili teknolojilerin geliştirilmesinin gıda güvenliği üzerindeki etkisi incelenmiştir. Analiz kapsamında yapısal kırılması ARDL metodu kullanılmış, analiz sonuçlarına göre çevreyle ilgili teknolojilerin Türkiye'de gıda güvenliğini artırdığı belirlenmiştir. Buna ek olarak enflasyon ve işsizlik gıda güvenliğini negatif etkilerken, doğum oranı, kırsal nüfus ve gelir pozitif etkilemektedir.

Anahtar Kelimeler: Gıda güvenliği, çevre teknolojisi, Türkiye.
JEL Kodları: N5, O03, Q18

The Globalization Process and Turkish Agriculture: Issues and Solutions

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Abstract
The significance of the agricultural sector is progressively rising, both in terms of its contribution to food production and the provision of industrial raw materials. This importance is becoming increasingly apparent in the context of the growing global population, climate change, and the depletion of fresh water resources. Consequently, the development of production techniques that are compatible with nature and the environment, whilst ensuring a reliable food supply at reasonable prices, has become a priority for all countries.Turkey is considered to be one of the world's most significant agricultural nations, a reputation that can be attributed to its unique geographical conditions and the diversity of its product range. However, it is evident that the existing potential is not being adequately utilised, and that stability in production and prices cannot be achieved. Furthermore, there is an increasing dependence on foreign inputs and products. It is acknowledged that these issues are influenced not only by economic and agricultural policy decisions but also by global developments.The objective of this study is to analyse developments in the Turkish agricultural sector since 1980, and particularly since the acceleration of globalisation in the 1990s, from both domestic and global perspectives. In this context, the initial section of the study will evaluate the reflections of the globalization process on the world economy and the agricultural sector. The subsequent section will elucidate the channels through which the process of globalization has impacted Turkish agriculture. The third section will evaluate the current state of the agricultural sector from different perspectives and propose solutions to the problems in the sector, both nationally and globally.

Keywords: Globalization, Agricultural policies, Turkish agriculture
JEL Codes: N50, Q10, Q17, Q18

Küreselleşme Süreci ve Türkiye Tarımı: Sorunlar, Çözümler

Özet
Tarım sektörünün önemi hem gıda hem de sanayi hammaddeleri üretimi açısından her geçen gün artmaktadır. Bu önem artan nüfus yanında küresel iklim değişikliği ve tatlı su kaynaklarının azalmasıyla daha da belirgin hale gelmektedir. Dolayısıyla bir taraftan tarımsal üretim kaynaklarının (toprak, su, mera, orman, hayvanlar gibi) korunması ve doğa/çevre ile uyumlu üretim tekniklerinin geliştirilmesi diğer taraftan da makul fiyatlar ile güvenilir gıda arzı tüm ülkeler için öncelikli konu haline gelmiştir. Türkiye çok özel koşullara sahip coğrafyası, geniş ürün deseni ile dünyanın önemli tarım ülkelerinden biridir. Ancak sahip olunan potansiyelin yeterince kullanılamadığı, üretimde ve fiyatlarda istikrarın sağlanamadığı, girdiler yanında ürünlerde de dışa bağımlılığın arttığı görülmektedir. Bu sorunların ekonomi ve tarım politikalarındaki tercihler kadar küresel gelişmelerden de etkilendiği anlaşılmaktadır. Bu çalışmanın amacı 1980 ve özellikle de küreselleşmenin hız kazandığı 1990 sonrası dönemde Türkiye tarım sektöründe yaşanan gelişmeleri hem içsel-ulusal hem de küresel dinamikler boyutundan analiz etmektir. Bu çerçevede çalışmanın ilk bölümünde Küreselleşme sürecinin dünya ekonomisi ve tarım sektörüne yansımaları değerlendirilecektir. İkinci bölümde küreselleşme sürecinin Türkiye tarımına yansıma kanalları ortaya konulacaktır. Üçüncü bölümde ise tarım sektörünün geldiği durum farklı boyutlardan değerlendirilerek sektördeki sorunların çözümü için gerek ulusal gerekse küresel gelişmeler çerçevesinde alınması gereken önlemler ortaya konulacaktır.

Anahtar Kelimeler: Küreselleşme, Tarım politikaları, Türkiye tarımı
JEL Kodları: N50, Q10, Q17, Q18

Determinants of Asset Dollarization in Türkiye: Asymmetric Effects and Hysteresis Analysis

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Abstract
This study aims to examine the key determinants of asset dollarization in Türkiye, test the asymmetric effects of critical variables such as exchange rate, interest rate and inflation, and investigate the presence of hysteresis in dollarization. Using the Nonlinear Autoregressive Distributed Lag (NARDL) approach and quarterly data from 2001Q2 to 2024Q4, the exchange rate (USD/TRY), inflation (CPI), and interest rates are decomposed into positive and negative shocks to assess their asymmetric impacts. The findings reveal that exchange rate increases strongly trigger dollarization, while decreases have a weaker effect. A 1% appreciation in the exchange rate significantly increases asset dollarization in the long run, whereas a depreciation of the same magnitude reduces dollarization only marginally and with limited statistical significance, indicating the presence of exchange rate asymmetry. Inflation shocks similarly exhibit an asymmetric response. The error correction term coefficient is statistically significant and relatively small, suggesting strong hysteresis effects. In conclusion, short-term policy measures are insufficient to combat dollarization in Türkiye. Exchange rate stability, sustained inflation control, and long-term institutional reforms are essential. This study calls on policymakers to develop strategies that account for the asymmetric and persistent nature of dollarization.

Keywords: Asset dollarization, hysteresis, nonlinear ARDL analysis, asymmetric effects.
JEL Codes: E31, F31, G11, C22

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Türkiye'de Varlık Dolarizasyonunun Belirleyicileri: Asimetrik Etkiler ve Histeri Analizi

Özet
Bu çalışmanın amacı, Türkiye'deki varlık dolarizasyonunun temel belirleyicilerini incelemek, döviz kuru, faiz oranı, enflasyon gibi kilit değişkenlerin asimetrik etkilerini test etmek ve dolarizasyonda histeri etkisinin olup olmadığını araştırmaktadır. Bu amaçla, çalışmada Non-Linear ARDL yöntemi ile 2001Q2-2024Q4 dönemini kapsayan çeyreklik veriler kullanılarak döviz kuru (USD/TRY), enflasyon (TÜFE) ve faiz oranları pozitif/negatif şoklara ayrıştırılarak asimetrik etkiler test edilmiştir. Bulgular, döviz kurundaki artışların dolarizasyonu güçlü şekilde tetiklediğini, ancak düşüşlerin etkisinin zayıf kaldığını göstermektedir. Döviz kurundaki %1'lik bir artışın varlık dolarizasyonunu uzun dönemde önemli ölçüde artırdığı, buna karşılık kurda meydana gelen aynı büyüklükteki bir düşüşün (TL'nin değer kazanması) ise dolarizasyonu istatistiksel olarak anlamlı ancak çok daha zayıf bir şekilde azalttığı sonucu, kur asimetrisinin varlığına işaret etmektedir. Enflasyondaki artışlar da benzer asimetrik tepkiye neden olmaktadır. Hata düzeltme katsayısının anlamlı ve küçük olması, güçlü histeri etkisine işaret etmektedir. Sonuç olarak, Türkiye'de dolarizasyonla mücadele için kısa vadeli tedbirler yetersizdir. Döviz kuru istikrarı, kalıcı enflasyon kontrolü ve uzun vadeli kurumsal reformlar gereklidir. Bu çalışma, politika yapıcılara dolarizasyonun asimetrik ve histerik yapısını dikkate alan stratejiler geliştirmeleri çağrısında bulunmaktadır.

Anahtar Kelimeler: Varlık dolarizasyonu, histeri, non-Linear ARDL analizi, asimetrik etki
JEL Kodları: E31, F31, G11, C22

Monetary Policy and Bank Risk-Taking: Evidence From Turkey

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Abstract
This study examines the impact of monetary policy implemented in Turkey on risk-taking in the banking sector, using data from the period 2009Q1-2024Q3. Bank risk-taking was measured using three different indicators: Z-score, leverage ratio, and capital adequacy ratio. Unlike studies in the literature that focus on the risk-taking channel of monetary policy, this article highlights the heterogeneous nature of the effects, which can vary significantly from bank to bank. Empirical findings reveal that inflation and bank size have a statistically significant, homogeneous, and risk-increasing effect on all risk indicators used. In contrast, the effects of monetary policy and bank liquidity exhibit marked heterogeneity. The results indicate that a tightening of monetary policy reduces risks in some banks through the traditional balance sheet channel, while increasing risk in large private banks in particular by triggering the risk-taking channel. Similarly, it was found that liquidity, which appears ineffective on average in the panel, plays a complementary or substitutive role with capital, depending on the banks' strategies. These results emphasize that monetary policy decisions do not have a uniform effect on the banking system and that policymakers need to consider the potential asymmetric outcomes of their decisions on different groups of banks with systemic importance.

Keywords: Monetary Policy, Risk-taking Channel, Credit Risk, Bank Heterogeneity
JEL Codes: E44, E52, G21

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Para Politikası ve Banka Risk Üstlenimi: Türkiye Örneği

Özet
Bu çalışma, Türkiye'de uygulanan para politikasının bankacılık sektörü risk üstlenimi üzerindeki etkisini, 2009Q1-2024Q3 dönemi verilerini kullanarak incelemektedir. Banka risk üstlenimi; Z-skor, kaldıraç oranı ve sermaye yeterlilik oranı olmak üzere üç farklı göstergeyle ölçülmüştür. Literatürde para politikasının risk alma kanalı üzerine yoğunlaşan çalışmalardan farklı olarak, bu makale, etkilerin bankadan bankaya önemli ölçüde değişebilen heterojen yapısını, ortaya koymaktadır. Ampirik bulgular, enflasyon ve banka büyüklüğünün, kullanılan tüm risk göstergeleri üzerinde istatistiksel olarak anlamlı, homojen ve risk artırıcı bir etkiye sahip olduğunu ortaya koymaktadır. Buna karşın, para politikasının ve banka likiditesinin etkileri belirgin bir heterojenlik sergilemektedir. Elde edilen sonuçlar para politikasındaki bir sıkılaşmanın bazı bankalarda geleneksel bilanço kanalı üzerinden riskleri azaltırken, özellikle büyük ölçekli özel bankalarda risk alma kanalını tetikleyerek riski artırdığını göstermektedir. Benzer şekilde, panelin ortalamasında etkisiz görünen likiditenin, bankaların stratejilerine bağlı olarak sermaye ile tamamlayıcı veya ikame edici bir rol oynadığı tespit edilmiştir. Bu sonuçlar, para politikası kararlarının bankacılık sistemi üzerinde tek tip bir etki yaratmadığını ve politika yapıcıların, kararlarının sistemik öneme sahip farklı banka grupları üzerindeki potansiyel asimetrik sonuçlarını dikkate almaları gerektiğini vurgulamaktadır.

Anahtar Kelimeler: Para Politikası, Risk Alma Kanalı, Kredi Riski, Banka Heterojenliği
JEL Kodları: E44, E52, G21

Ensuring Fiscal–Monetary Policy Consistency in the Preparation and Implementation of Economic Programs: A Proposal for Türkiye

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Abstract
The fundamental difference that distinguishes fiscal policy from other areas of economic policy is that decisions are mainly determined by the political process. This paper advances a proposal for establishing a systematic and institutionalized framework to govern the interaction between fiscal and monetary policy in the formulation and implementation of economic programs. Policy instruments related to pricing, public expenditure, and taxation—given their dependence on political decision-making—are of critical importance for ensuring the internal consistency and credibility of macroeconomic policy frameworks. In this context, the experiences of selected G20 countries—namely the United States, the United Kingdom, New Zealand, France, Germany, and Korea—are comparatively examined, with an emphasis on deriving lessons applicable to the Turkish case. Turkey entered the 2020s under the strain of persistent inflationary pressures. The transition to a new presidential system of government, coupled with changes in institutional structures and the adoption of program-based budgeting processes, has eroded the traditionally semi-formal coordination between fiscal and monetary policy, which had historically been maintained through institutional conventions and informal practices. This erosion has been compounded by a deterioration in policy credibility, as reflected in the systematic bias and widening divergence between announced inflation targets and realized outcomes across short-, medium-, and long-term horizons. In conclusion, the proposed formal coordination mechanism—supplemented by a dedicated policy document annexed to the Medium-Term Program—is designed to strengthen inter-policy coherence, reinforce fiscal discipline, and mitigate demand-side pressures. It further aims to improve the management of public debt, taxation, and inflation expectations, thereby underpinning the institutional credibility of the policy framework. Ultimately, such an approach seeks to ensure that the CBRT's mandate of achieving durable price stability is credibly supported by centrally agreed targets, commitments, and fiscal–monetary policy synergies.

Keywords: Inflation, fiscal policy, monetary policy, program and budget system
JEL Codes: E62, E63, H61

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Ekonomik Programların Hazırlanması ve Uygulanmasında Maliye Politikası Para Politikası Uyumu: Türkiye İçin Bir Öneri

Özet

Maliye politikasını iktisat politikasının diğer alanlarında ayıran temel farklılık kararların siyasal süreç tarafından belirleniyor olmasıdır. Bu tebliğ kapsamında ekonomik programlarının tasarımı ve uygulamasında maliye politikasıyla para politikası ilişkisinin sistematik bir şekilde kurulması yönelik bir öneri getirilmektedir. Kamu politika kararlarına bağlı olan fiyatlama, harcama ve vergi düzenlemeleri, uygulanan makroekonomik politika belgelerinin içsel tutarlılığı açısından oldukça önem taşımaktadır. G20 ülkeleri içinden seçilen ABD, İngiltere, Yeni Zelanda, Fransa, Almanya ve Kore ülke uygulamaları ve bu uygulamalardan alınabilecek dersler karşılaştırmalı olarak değerlendirilmiştir. Türkiye özellikle 2020'li yıllara enflasyon problemi ile giriş yapmıştır. Değişen hükümet sistemi ile farklılaşan kurumsal yapılar ve program bütçe hazırlama süreçleri geçmişte yarı informal bir yapıda kurumsal geleneklerle devam eden para politikası maliye politikası ilişkisi, programlara ve hedeflere olan güvenin de azalmasıyla zayıflamıştır. Bunu özellikle enflasyon hedeflerinin gerçekleşmelere göre uzak, orta ve yakın tahminlerde yanlı (bias) sapmasında görmek mümkündür. Çalışma kapsamında ekonomik programın hazırlanma sürecinde TCMB ve ekonomi yönetimi (Hazine ve SBB) arasında para politikasının uygulanmasında maliye politikası araçlarının nasıl kullanılacağı konusunda bütçe süreci içinde tanımlanmış bir öneri geliştirilmiştir. Sonuç olarak önerilen formal süreç ve OVP'ye ek olacak politika belgesiyle, hem politika tutarlılığının sağlanması hem de bütçe disiplini, iç talebin kontrolü, kamu borçlanması, vergiler ve enflasyon bekleyişlerinin düzeltilmesi üzerinden merkezi seviyede uzlaşılan hedefler ve taahhütler üzerinden TCMB'nin kalıcı fiyat istikrarı hedeflerinin desteklenmesi de güvence altına alınmaya çalışılmaktadır.

Anahtar Kelimeler: Enflasyon, maliye politikası, para politikası, program bütçe sistemi
JEL Kodları: E62, E63, H61

Türkiye's Cash in Circulation Forecasting: Explaining Black Box Machine Learning Models with Artificial Intelligence

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Abstract
This study aims to provide a reliable approach that allows users to explain the results and outputs of black-box machine learning methods used to estimate the daily cash in circulation volume in Türkiye. In this context, emission volume estimates obtained with the Long Short-Term Memory (LSTM) and Extreme Gradient Boosting (XGBoost) algorithms are analyzed using SHAP (SHapley Additive Explanations), a method from Explainable Artificial Intelligence (XAI). Forecasts obtained for the January 2025 period, which were excluded from the sample, are used to compare the performance of the machine learning models. SHAP explains the LSTM and XGBoost estimates by showing which features affect the results and their positive and negative contributions. The study results demonstrate that the comparative analysis of the explanations for the estimates obtained from both methods is consistent. Thus, a transparent and reliable framework will be established for the continuous improvement of the currency in circulation forecasting model which may eventually facilitate the the planning of currency in circulation.

Keywords: Machine Learning; Currency in circulation Forecasting; Explainable Artificial Intelligence.
JEL Codes: C45, C53; E17, E58.

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Türkiye’de Emisyon Hacmi Tahmini: Kara Kutu Makine Öğrenmesi Modellerinin Yapay Zekayla Açıklanması

Özet
Bu çalışma, Türkiye'nin günlük emisyon hacminin tahmininde kullanılan kara kutu makine öğrenmesi yöntemlerinin sonuç ve çıktılarının kullanıcılar tarafından açıklanabilmesi sağlayan güvenilir bir yaklaşım sunmayı amaçlamaktadır. Bu kapsamda, Uzun Kısa Süreli Bellek (LSTM) ve Aşırı Gradyan Artırma (XGBoost) algoritmaları ile elde edilen emisyon hacmi tahminleri, Açıklanabilir Yapay Zekâ (XAI) yöntemi olan SHAP (SHapley Eklemeli Açıklamaları) kullanılarak analiz edilmektedir. Makine öğrenimi modellerin performansını karşılaştırabilmek için örneklem dışında bırakılan Ocak 2025 dönemi için elde edilen tahminler kullanılmıştır. SHAP, hangi özelliklerin sonucu etkilediğini ve bunların olumlu ve olumsuz katkılarını göstererek LSTM ve XGBoost tahminlerini açıklar. Çalışma sonuçları, her iki yöntemden elde edilen tahminlere ilişkin açıklamaların karşılaştırmalı analizinin tutarlı olduğunu göstermektedir. Böylece günlük emisyon hacmi tahmin modelinin sürekli iyileştirilmesi için şeffaf ve güvenilir bir çerçeve oluşturulacak ve bu da dolaşımdaki paranın planlanmasını kolaylaştıracaktır.

Anahtar Kelimeler: Makine Öğrenmesi; Emisyon Hacmi Tahmini; Açıklanabilir Yapay Zeka.
JEL Kodları: C45, C53; E17, E58.

Relationship between Economic Complexity and Economic Growth[91]

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Abstract
Structural change is traditionally defined as the reallocation of economic activities among the agriculture, industry, and services sectors. However, this process is far too multidimensional to be explained solely by the sectoral shares in the economy. Today, structural change is approached from a different perspective through the Economic Complexity Index (ECI) and is considered a development process that involves a transition from less complex to more complex production. In this study, structural change is examined through the ECI, which also reflects the knowledge intensity and complexity of production, and its impact on economic growth is investigated. For this purpose, the Cobb-Douglas production function was extended with the ECI and evaluated using panel data analysis for G-19 countries over the period 1995–2021. Cross-sectional dependence in the series was tested using Breusch and Pagan (1980), and heterogeneity was examined with the Pesaran and Yamagata (2008) test. Based on these results, the unit root properties of the series were analyzed using the Pesaran (2007) PANIC test; long-run relationships were investigated with the Westerlund and Edgerton (2007) Panel Bootstrap LM test and the Westerlund (2006) multiple structural breaks cointegration test; and cointegration coefficients were estimated using the CCE and AMG estimators. The findings indicate that in both models with and without breaks, labor and capital are positive and statistically significant, while the ECI is positive but not significant. This result reveals that within the framework of structural change in G-19 countries, the ECI has the potential to contribute to growth; however, this effect is not strongly supported by empirical evidence.

Keywords: Structural change, economic growth, panel data analysis.
JEL Codes: L16, O40, C23

[91] This study is derived from the doctoral dissertation entitled "The Impact of Structural Change in the Economy on Economic Growth", conducted under the supervision of Prof. Dr. Serap BEDİR KARA and the co-supervision of Prof. Dr. Aylin SOYDAN at the Department of Economics, Institute of Social Sciences, Erzurum Technical University.

Ekonomik Karmaşıklık ve İktisadi Büyüme İlişkisi[92]

Özet
Yapısal değişim, geleneksel olarak ekonomik faaliyetlerin tarım, sanayi ve hizmet sektörleri arasında yeniden dağılımı olarak tanımlanmaktadır. Ancak bu süreç yalnızca sektörlerin ekonomideki paylarıyla açıklanamayacak kadar çok boyutludur. Günümüzde yapısal değişim, Ekonomik Karmaşıklık Endeksi (EKE) aracılığıyla farklı bir perspektiften ele alınmakta ve daha az karmaşıklığa sahip üretimden daha yüksek karmaşıklığa sahip üretime geçişi içeren kalkınma süreci olarak değerlendirilmektedir. Bu çalışmada yapısal değişim, üretimin bilgi yoğunluğu ve karmaşıklığını da yansıtan EKE üzerinden ele alınmış ve ekonomik büyüme üzerindeki etkisi araştırılmıştır. Bu amaçla Cobb-Douglas üretim fonksiyonu EKE ile genişletilerek, 1995-2021 dönemi G-19 ülkeleri panel veri analiziyle değerlendirilmiştir. Serilerde yatay kesit bağımlılığı Breusch ve Pagan (1980) ve heterojenlik Pesaran ve Yamagata (2008) testiyle incelenmiştir. Bu sonuçlara dayanarak serilerin birim kök özellikleri Pesaran (2007) PANIC testiyle; uzun dönem ilişkiler Westerlund ve Edgerton (2007) Panel Bootstrap LM testi ile Westerlund (2006) çoklu yapısal kırılmalı eşbütünleşme testiyle; eşbütünleşme katsayıları ise CCE ve AMG tahmincileriyle elde edilmiştir. Bulgular hem kırılmalı hem de kırılmasız modellerde emek ve sermayenin pozitif ve istatistiki olarak anlamlı, EKE'nin ise pozitif fakat anlamlı olmadığını göstermektedir. Bu sonuç, G-19 ülkelerinde yapısal değişim çerçevesinde EKE'nin büyümeye katkı potansiyeli taşıdığını ancak bu etkinin güçlü kanıtlarla desteklenmediğini ortaya koymaktadır.

Anahtar Kelimeler: Yapısal Değişim, iktisadi büyüme, panel veri analizi.
JEL Kodları: L16, O40, C23

[92] Bu çalışma, Prof. Dr. Serap BEDİR KARA danışmanlığında ve Prof. Dr. Aylin Soydan eş-danışmanlığında Erzurum Teknik Üniversitesi SBE İktisat ABD'de yürütülen "Ekonomide Yapısal Değişimin İktisadi Büyüme Üzerine Etkisi" başlıklı doktora tezinden türetilmiştir.

CBDC implementation: Empirical evidence from a dual-step framework

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Abstract
This study investigates the key determinants influencing the implementation and development of Central Bank Digital Currencies (CBDCs) across 172 jurisdictions using 2024 data. A key contribution is the creation of the CBDC Status Index, a novel metric designed to capture the level of retail CBDC development and adoption in 209 jurisdictions. Conceptually, the study introduces a dual-stage framework that divides the CBDC implementation process into pre- and post-decision stages, offering a more nuanced analytical lens for assessing CBDC implementation progress. Using ordered logistic regression models, the analysis reveals that anti-money laundering (AML) efforts, central bank communication, governance quality, and cybersecurity are significant determinants in the overall model. In the post-decision stage, central bank communication and cybersecurity continue to stand out as key variables, while in the pre-decision stage, the absence of cryptocurrency regulations and alignment with Sustainable Development Goals (SDGs) play pivotal roles. These findings offer deeper insights into the complex dynamics of CBDC implementation and provide a foundation for future research, evidence-based policy design, and actionable guidance for policymakers.

Keywords: CBDC, digital currency, financial innovation.
JEL Codes: E42, E58, G28, O33, O38, C25, H11

Effects of Monetary Policy Shocks on UK Regional Activity: A Constrained MFVAR Approach

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Abstract
This paper examines the effects of monetary policy (MP) shocks on UK regional economic growth and dispersion in a novel Constrained Mixed Frequency Vector Autoregressive (C-MFVAR) framework. Unlike a standard MFVAR, the model combines variation in national growth with other model estimates to infer missing quarterly regional growth. Results suggest significant heterogeneity in the impact of MP shocks across regions. Manufacturing and SME Intensity are found to be highly related to regional sensitivity to MP shocks.

Keywords: Regional Growth, Monetary Policy, Bayesian Analysis, Vector Autoregression, Mixed Frequency Models
JEL Codes: E01, E32, E52, C11, C22

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The Impact of Uncertainty on Firms' Foreign Sales: The Role of Persistence and Expectations

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Abstract
This study examines how global uncertainty affects manufacturing firms' foreign sales, distinguishing between temporary and persistent uncertainty episodes. Using Turkish Revenue Administration data and Business Tendency Survey expectations, we analyze heterogeneous effects across firms using the World Uncertainty Index (WUI). We estimate two models: one treating uncertainty as continuous and another using a dummy variable where persistent uncertainty is defined as exceeding the 90th percentile for at least two consecutive quarters. Results show that persistence is crucial. General uncertainty has no significant effect on foreign sales, but persistent uncertainty reduces sales by 6 percent on average. Critically, firm responses vary by prior expectations. During persistent uncertainty, the 11.9 percentage-point advantage of optimistic firms over neutral firms disappears, while pessimistic firms' 10.5 percentage-point disadvantage intensifies to 14.8 percent. These asymmetric responses suggest optimistic firms' commitments buffer them against shocks, while pessimistic firms face compounded constraints through financing difficulties and foregone opportunities. The findings highlight the importance of firm-level diversification strategies for mitigating uncertainty-driven export volatility in an era of heightened trade policy uncertainty.

Keywords: Uncertainty, foreign sales, expectations.
JEL Codes: D22, F14, C55

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The Determinants of Liquified Natural Gas Prices in Qatar: Empirical Evidence from Wavelet Analysis

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Abstract
This study concentrates on analyzing the determinants of changes in Liquified Natural Gas (LNG) export prices for Qatar by leveraging monthly time-frequency data from 2005-2023. To this end, wavelet analysis is employed. The adoption of the techniques hinges on non-linearity of the data and decomposition of energy price dynamic across various time-frequency domain by capturing both short and long-time dynamics. From the baseline wavelet quantile regression, we observed that, exchange rate (EXR) on LNG export prices (LNGP) across horizons and quantiles. Thus, a clear state-dependent pass-through from the exchange rate (EXR) to LNG export prices (LNGP). In the short-term, effects are narrow and concentrated. Additionally, the present study observed that in the short term, the CQR heatmap the basis for inference shows mostly weak or insignificant effects of TAX on LNGP, with only mild positive impacts concentrated when LNGP is in its lower quantiles (bottom rows) and across low-to-mid TAX quantiles. These study outcomes have policies impact for energy stakeholders in the study area and the study area. Policies are enumerated in the concluding section.

Keywords: SDG-clean energy; Wavelet analysis; LNG export price, exchange rates, taxes and CO_2 emissions, Qatar.

Exploring the Nexus Between Coal, Financial Development, Globalization, Urbanization, Economic Growth and Ecological Footprints in Coal-Consuming Countries

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Abstract
The world has been experiencing deteriorating environmental quality and an increase in ecological footprints due to the pressure inflicted by human activities. With the increasing pace of globalization and economic activities, substantial amounts of greenhouse gases are emitted into the atmosphere, posing a threat to environmental sustainability. This study examines the impact of coal, globalization, and economic growth, along with key macroeconomic covariates, on ecological footprints in major coal-consuming economies. Augmented Anderson–Hsiao (AAH) two-step GMM estimators and Dumitrescu and Hurlin's causality tests were employed between 1991 and 2021. The findings indicate that economic growth, coal production, and globalization contribute to environmental degradation, while the interaction with financial development and urbanization mitigates the severity of this negative impact. Other findings indicate a cointegration among the variables in the long run. Based on findings, environmental sustainability, green finances and economic growth can be achieved by engaging in large-scale renewable energy sources for generations. Therefore, policymakers must provide a framework for transitioning to environmental sustainability by incorporating more renewable energy sources, such as solar, wind, and biomass, into the energy mix of coal-consuming economies. The implementation of COP 26 resolutions, which include the phase-out of coal, should be a gradual process.

Keywords: Environmental quality, coal, economic growth, ecological footprints, Augmented Anderson–Hsiao (AAH) GMM technique, coal-consuming countries
JEL codes: C31, 040, 049

Gaz Price vs Electricity Price: Gauss Markov Switching Application

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Abstract
This paper examines the factors that determine the prices of gas and electricity within the European energy market (Germany) using the Ordinary Least Squares (OLS) regressions on fuel linked factors. Biannual data for the periods between 2007-2024 has been used and two distinct models were fitted, firstly using the price of gas as a dependent variable and secondly using the electricity price as a dependent variable both in terms of kilowatt hours(kWh). The results showed that there is indeed autocorrelation detected through the diagnostic tests and the corrective Newey-West heteroskedasticity and autocorrelation consistent (HAC) standard errors were used to provide robust interference. The results pointed out that coal usage and its fuel cost movements are strong indicators of how energy will be priced in relation to coal while not having significant effects on crude oil price movements. No multicollinearity was found by the Variance Inflation Factors (VIF's) and while residuals failed to exhibit normal distribution, that does not mean that that estimators were inconsistent given the use of HAC standard errors. These findings emphasize the significance of domestic fuel variables on the attitude of energy prices, providing implication of policy making in the regulation of the energy market and approaches to maintain energy prices stabilized.

Keywords: Energy prices, OLS regression, Newey-West standard errors, electricity, gas.
JEL Codes: C13, Q41, L95

When Academic Careers are No Longer Decent Work

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Abstract
Decent work, which is defined by the International Labour Organization as productive employment ensuring fair income, security, and dignity, has long been a significant subject of academic investigation. Ironically, the realization of decent employment is becoming progressively elusive for academics themselves. In many next-generation universities, insufficient governmental oversight, inadequate institutional safeguards, and being profit-oriented have led to deteriorating employment conditions. Academics often endure poor working conditions to sustain their careers, as switching to other professions—though less demanding and better paid— would devalue years of dedication and professional investment. Even when willing to shift, they are often deemed overqualified, further restricting career options.
The inability to sustain decent work can lead to adverse behavioral and psychological outcomes among academics, whereas the existence of decent work serves as a strong predictor of positive outcomes. This study, which will collect data from academics in Northern Cyprus, an educational island distinguished by both long-standing and young universities, studies the favorable outcomes that may arise if decent employment is provided. This study will consider the positive effect of decent work on academics' knowledge sharing behavior and their job crafting, which are two important and expected behaviors of academics.

Keywords: Decent Work, Academic Staff, Knowledge Sharing, Job Crafting, Thriving at Work, Workplace Spirituality.
JEL Codes: J81, J28, I31, M54, O15

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Occupational Exposure to AI: Insights from Turkish Case

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Abstract
The rapid advancement of artificial intelligence (AI) technologies has sparked fundamental questions about how to measure AI exposure at the firm level and assess its implications for economic outcomes. Understanding AI's role requires distinguishing between AI adoption—the actual implementation and use of AI systems within firms—and AI exposure—the extent to which firms' tasks and activities are potentially influenced or transformed by AI technologies. Emerging economies exhibit heterogeneous patterns, with considerable potential in both manufacturing and services, yet they face persistent challenges related to infrastructure and skill availability. Among these, Türkiye stands out due to its economic size, geopolitical position, market structure, and integration with global value chains. Identifying firms' adaptation to and exposure to automation and AI technologies in Türkiye is therefore a key step toward understanding their impact on firms, the labor force, and the broader economy.
This paper contributes to the growing literature on AI exposure by providing novel evidence from a large emerging economy—Türkiye. Using a rich matched dataset combining administrative balance sheets and employment records for the 2014–2023 period, we construct firm-level AI exposure measures based on widely adopted methodologies in the literature. Our findings show that aggregate AI exposure in Türkiye has increased substantially over the past decade. Moreover, over the last five years, both highly exposed occupations and firms have experienced relatively larger declines in employment shares.

Keywords: Artificial Intelligence, AI Exposure, Complementarity.
JEL Codes: O33, J23, D24

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Climate Policy, Carbon Leakage, and Global Trade: A Critical Review of the Literature

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Abstract

This study examines the current academic literature on the extent to which unilateral climate policies can be effective in today's increasingly integrated global economy. The first section discusses the "carbon leakage" theory, which suggests that ambitious climate policies may shift the production of energy-intensive sectors to other regions, thereby partially offsetting the achieved emission reductions, and evaluates the theory's empirical findings and future projections. The subsequent section discusses policy instruments designed to limit carbon leakage. Key measures include the allocation of free emission permits to sectors considered at risk of carbon leakage, the implementation of targeted trade policies, and international cooperation mechanisms aimed at encouraging the adoption of climate policies in third countries. Finally, the study provides a comparative overview of different approaches to assigning responsibility for trade-related emissions. In this context, both production-based and consumption-based emission accounting methods are examined, alongside a range of more recent alternative measurement and reporting approaches that have emerged in the literature.

Keywords: Internetional Trade, Trade and Environment, Border carbon adjustment
JEL Codes: F1,F18, F41

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İklim Politikası, Karbon Sızıntısı ve Küresel Ticaret: Literatürün Eleştirel Bir Değerlendirmesi

Özet
Bu çalışma, küresel ekonominin bütünleştiği günümüzde tek taraflı iklim politikalarının ne ölçüde etkili olabileceğine dair güncel akademik literatürü incelemektedir. İlk bölümde, iddialı iklim politikalarının enerji yoğun sektörlerin üretimini başka bölgelere kaydırarak elde edilen emisyon azaltımlarını kısmen geri alabileceğini öne süren "karbon sızıntısı" teorisi ele alınmakta; teorinin ampirik bulguları ve gelecek projeksiyonları değerlendirilmektedir. Karbon sızıntısını sınırlamaya yönelik politika araçları tartışılmaktadır. Bu kapsamda, karbon sızıntısı riski altındaki sektörlere yönelik ücretsiz emisyon izinlerinin tahsisi, hedefli ticaret politikalarının uygulanması ve üçüncü ülkelerde iklim politikalarının benimsenmesini teşvik etmeye yönelik uluslararası iş birliği mekanizmaları öne çıkan önlemler arasında yer almaktadır. Son bölümde ticaretle ilişkili emisyonlardan sorumluluk konusuna dair farklı yaklaşımlar karşılaştırmalı olarak ele alınmaktadır. Bu çerçevede, üretim temelli ve tüketim temelli emisyon muhasebesi yöntemleri ile birlikte, son dönemde literatürde öne çıkan bazı alternatif ölçüm ve raporlama yaklaşımlarına ilişkin tartışmalara genel bir bakış sunulmaktadır.

Anahtar Kelimeler: Uluslararası Ticaret, Ticaret ve Çevre, Sınırda Karbon Düzenlemesi
JEL Kodları: F1,F18, F41,

Are Fiscal Policy Driver of Green Growth? An Analysis of Top Carbon Emitter Economies

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Abstract
With the rapid development of global industries and population growth, many countries are increasingly facing ecological crises such as desertification, deforestation, global warming, and the depletion of natural resources. In recent years, policymakers have begun to recognize the importance of addressing the negative impacts of climate change and promoting environmentally friendly economic growth. This shift in understanding has led to the emergence of the concept of "green growth," which emphasizes the need to balance economic prosperity with environmental sustainability. At the core of green growth is the interaction between fiscal policy and environmental objectives. Fiscal policy has the potential to shape a country's economic growth trajectory and its environmental impact. By implementing appropriate fiscal measures, governments can encourage environmentally friendly practices, promote clean technologies, and facilitate the transition to a low-carbon economy.
The aim of this study is to examine the impact of fiscal policies on green economic growth in the countries with the highest carbon emissions: the USA, China, the United Kingdom, India, Russia, Japan, Germany, South Korea, Canada, Brazil, and Mexico, during the period from 1990 to 2024. This analysis considers various economic conditions. To achieve this, we employed the Generalized Moments Quantile Regression (MMQR) model, which provides reliable results while addressing issues related to normality, outliers, heterogeneity, and endogeneity. The study's findings emphasize the significance of public expenditure in promoting green growth.

Keywords: Green economic growth, government expenditure, Panel MMQR
JEL Codes: E62, O44, C31, C33

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Maliye Politikası Yeşil Büyümenin İtici Gücü Müdür? Karbon Emisyonu Yüksek Olan Ekonomiler Üzerine Bir Analiz

Özet
Küresel endüstrinin hızlı gelişimi ve nüfus artışıyla birlikte, giderek daha fazla ülke çölleşme, ormansızlaşma, küresel ısınma ve doğal kaynakların tükenmesi gibi ekolojik krizlerle karşı karşıya kalmaktadır. Bu noktada, son yıllarda, politika yapıcılar, iklim değişikliğinin olumsuz etkilerini azaltmanın ve çevre dostu ekonomik büyümeyi teşvik etmenin önemini giderek daha fazla kabul etmeye başlamış ve sürdürülebilir büyüme için yeni çözümler aramaya yönelmiştir. Bu anlayış, ekonomik refahı çevresel sürdürülebilirlikle uzlaştırma ihtiyacını vurgulayan "yeşil büyüme" kavramının ortaya çıkmasına neden olmuştur. Yeşil büyümenin merkezinde maliye politikası ve çevresel hedefler arasındaki etkileşim yer alır. Maliye politikası, bir ülkenin ekonomik büyümesinin ve çevresel ayak izinin gidişatını şekillendirme potansiyeline sahiptir. Hükümetler, uygun mali önlemler alarak çevre dostu uygulamaları, temiz teknolojileri ve düşük karbonlu bir ekonomiye geçişi teşvik edebilir. Bu çalışmanın amacı, 1990-2024 dönemi için karbon emisyonu en yüksek ülkelerde (ABD, Çin, Birleşik Krallık, Hindistan, Rusya, Japonya, Almanya, Kore, Kanada, Brezilya ve Meksika) mali politikaların yeşil ekonomik büyüme üzerindeki etkisini farklı ekonomik konjonktürler açısından ortaya koymaktır. Bu amaçla Genelleştirilmiş Momentler Kantil Resgresyon (MMQR) modelinden yararlanmıştır. MMQR yöntemi, normallik, aykırı değerler, heterojenlik ve içsellik ile ilgili sorunları ele alırken güvenilir sonuçlar sağlamaktadır. Çalışmadan elde edilen bulgular, yeşil büyümeyi arttırmak için kamu harcamalarının önemini vurgulamaktadır.

Anahtar Kelimeler: Yeşil ekonomik büyüme, kamu harcamaları, Panel MMQR.
JEL Kodları: E62, O44, C31, C33

The Role of Electric Vehicles in the Transition to a Zero-Carbon Economy: OECD Strategy and Turkey's Adaptation Dynamics

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Abstract
The OECD's globally adopted *"Net Zero by 2050"* target has made it imperative for countries not only to reform their environmental policies but also to restructure their economic, energy, and industrial policies. Within this transition toward a carbon-neutral economy, the transportation sector has emerged as one of the most critical components, with the rapidly expanding electric vehicle (EV) ecosystem becoming the emblem of this transformation. Electric vehicles should now be regarded not merely as a technological innovation that reduces greenhouse gas emissions, but as a strategic domain at the intersection of green industrial policies, energy security, and fiscal policy.

This study examines the electric vehicle policies of OECD countries within the framework of the *Net Zero by 2050* strategy, analyzing Turkey's adaptation process in its economic, fiscal, and institutional dimensions. Public incentives, tax regulations, R&D supports, and the transformation of energy infrastructure are evaluated comparatively in line with OECD standards. Furthermore, the study addresses the economic and behavioral dynamics that shape consumer preferences for electric vehicles. Income level, energy costs, range perception, environmental awareness, and government support mechanisms are analyzed as determinants influencing consumer decisions. In Turkey, rising environmental awareness and increasing energy costs are identified as factors that stimulate demand, whereas regional disparities in charging infrastructure, battery costs, and the existing tax framework act as constraints on market expansion.

The findings indicate that Turkey should approach its electric vehicle strategy not merely as an environmental policy, but as part of a comprehensive development strategy in which industrial, fiscal, and consumer policies operate in coordination. The study's central argument asserts that sustainable development goals and fiscal discipline are not contradictory objectives; when designed rationally, they complement and reinforce one another. In this respect, the research aims to contribute to Turkey's green transition by proposing a new fiscal policy perspective compatible with both environmental sustainability and economic responsibility.

Keywords: Net Zero, Electric Vehicle Economy, Consumer Preferences, Green Industrial Policy, Carbon-Neutral Economy.
JEL Codes: Q58, Q48, H23, D12, O13, Q01

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Sıfır Karbon Ekonomisine Geçişte Elektrikli Araçlar: OECD Stratejisi ve Türkiye'nin Uyarlanma Dinamikleri

Özet
OECD'nin küresel ölçekte benimsediği *"Net Zero by 2050"* hedefi, ülkelerin yalnızca çevre politikalarını değil, aynı zamanda ekonomi, enerji ve sanayi politikalarını da yeniden yapılandırmalarını zorunlu kılmıştır. Karbon nötr ekonomiye geçiş sürecinde ulaşım sektörü, bu dönüşümün en kritik bileşenlerinden biri hâline gelmiş; söz konusu dönüşümün sembolü ise giderek güçlenen elektrikli araç (EV) ekosistemi olmuştur. Elektrikli araçların artık yalnızca sera gazı salımını azaltan teknolojik bir yenilik değil, aynı zamanda yeşil sanayi politikalarının, enerji güvenliğinin ve maliye politikalarının kesiştiği stratejik bir alan olarak değerlendirilmesi daha doğru olacaktır.
Çalışmada, OECD ülkelerinin elektrikli araç politikalarını *"Net Zero by 2050"* stratejisi çerçevesinde incelenerek Türkiye'nin uyarlanma süreci ekonomik, mali ve kurumsal boyutlarıyla incelenmiştir. Araştırmada kamu teşvikleri, vergi düzenlemeleri, Ar-Ge destekleri ve enerji altyapısındaki dönüşüm süreçleri OECD normlarıyla karşılaştırmalı olarak değerlendirilmiştir. Bunun yanında, tüketicilerin elektrikli araç tercihlerini belirleyen ekonomik ve davranışsal dinamikler de çalışmanın önemli bir bileşeni olarak ele alınmıştır. Gelir düzeyi, enerji maliyetleri, menzil algısı, çevre bilinci ve devlet desteklerinin tüketici kararları üzerindeki etkileri detaylı biçimde incelenmiştir. Türkiye'de artan çevre farkındalığı ve enerji maliyetleri, elektrikli araç talebini destekleyen unsurlar olarak öne çıkarken; şarj altyapısındaki bölgesel farklılıklar, batarya maliyetleri ve vergi politikalarındaki mevcut yapı yaygınlaşmayı sınırlayan faktörler olarak tespit edilmiştir.
Elde edilen bulgular, Türkiye'nin sıfır karbon ekonomisine geçişte elektrikli araç stratejisini yalnızca çevresel bir politika olarak değil; sanayi, maliye ve tüketici politikalarının eşgüdüm içinde yürütüldüğü bütüncül bir kalkınma stratejisinin parçası olarak değerlendirmesi gerektiğini göstermektedir. Çalışmanın temel yaklaşımı, sürdürülebilir kalkınma hedefleriyle mali disiplinin birbiriyle çelişmediği; aksine akılcı biçimde tasarlandığında birbirini tamamlayan iki politika ekseni olduğudur. Bu yönüyle araştırma, Türkiye'nin yeşil dönüşüm sürecine katkı sunacak yeni bir maliye politikası perspektifi geliştirmeyi amaçlamaktadır.

Anahtar Kelimeler: Net Zero, Elektrikli Araç Ekonomisi, Tüketici Tercihleri, Yeşil Sanayi Politikaları, Karbon Nötr Ekonomi.
JEL Kodları: Q58, Q48, H23, D12, O13, Q01

The Impact of Global Value Chain Participation and Energy Use on Carbon Emissions: The Case of Turkey

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Abstract
Over the past two decades, international trade has undergone a rapid transformation, and the share of Global Value Chains (GVCs) has risen. While GVC participation offers growth opportunities, when combined with energy-intensive growth strategies, it may deepen environmental challenges. This study investigates the impact of forward and backward GVC participation, energy consumption, and renewable energy use on carbon emissions in Turkey over 1990–2018 using time series analysis. Unit root properties were tested with ADF, Fourier KSS, and RALS ADF, and short- and long-run relationships were analyzed through the ARDL approach. Findings show that energy consumption and forward GVC participation increase emissions, whereas backward participation and renewable energy reduce them. These results underscore the critical role of GVC participation patterns and energy choices in Turkey's sustainable growth strategy. Particularly, the rise in emissions linked to energy use and forward GVC participation indicates that environmental concerns cannot be ignored in production and growth policies. Accordingly, promoting low-carbon technologies, improving energy efficiency, and raising public awareness are essential. Thus, Turkey can benefit from GVC-related growth opportunities while mitigating the environmental costs of energy use, providing an important advantage in achieving sustainable development goals.

Keywords: Global value chain, time series analysis, energy usage.
JEL Codes: F23, C22, Q43

Küresel Değer Zinciri Katılımı ve Enerji Kullanımının Karbon Emisyonlarına Etkisi: Türkiye Örneği

Özet
Son yirmi yılda uluslararası ticaretin yapısındaki dönüşüm hızlanmış ve uluslararası ticarette Küresel Değer Zincirleri'nin (KDZ) payı artmıştır. KDZ'ye katılım, ülkelere büyüme açısından önemli fırsatlar sunarken mevcut enerji yoğun büyüme politikaları ile birleştiğinde çevresel sorunları daha da derinleştirebilmektedir. Bu çalışmada, 1990-2018 döneminde Türkiye ekonomisinde KDZ'ye ileri ve geriye doğru katılım, enerji kullanımı ve yenilenebilir enerji tüketiminin karbon emisyonu üzerindeki etkileri zaman serisi analizi aracılığıyla incelenmiştir. Serilerin birim kök özellikleri ADF, Fourier KSS ve RALS ADF testleriyle incelenmiş; elde edilen sonuçlar dikkate alınarak kısa ve uzun dönem ilişkiler ARDL yaklaşımıyla analiz edilmiştir. Bulgular, enerji kullanımı ve KDZ'ye ileriye doğru katılımın karbon emisyonunu artırdığını, buna karşılık geriye doğru katılım ve yenilenebilir enerji tüketiminin emisyonları azalttığını göstermektedir. Sonuçlar, Türkiye'nin sürdürülebilir büyüme politikalarında KDZ'ye katılım biçimi ve enerji tercihlerinin kritik rol oynadığını ortaya koymaktadır. Özellikle enerji kullanımı ve ileriye doğru KDZ katılımının emisyonları artırması, üretim ve büyüme stratejilerinde çevresel etkilerin göz ardı edilemeyeceğini göstermektedir. Bu çerçevede, üretim süreçleri ve enerji sektöründe düşük karbon teknolojilerinin teşvik edilmesi, enerji verimliliğinin artırılması ve toplumsal farkındalığın güçlendirilmesi önem arz etmektedir. Böylece Türkiye, KDZ'ye katılımın sunduğu büyüme fırsatlarını değerlendirirken enerji tüketiminin çevre üzerindeki olumsuz etkisini azaltarak sürdürülebilir kalkınma hedeflerine ulaşmada önemli bir avantaj sağlayabilecektir.

Anahtar Kelimeler: Küresel değer zinciri, zaman serisi analizi, enerji kullanımı.
JEL Kodları: F23, C22, Q43

Heterogeneous Impact of the Pandemic on Default Probabilities of Manufacturing Firms

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Abstract
The extent to which firms respond to global shocks and uncertainties—such as the COVID-19 pandemic—varies considerably across firms. This study examines the firm-level characteristics that account for the heterogeneous responses of manufacturing firms to global shocks, using the pandemic as a natural experiment. We employ granular firm-level data, including balance sheets and credit registry information of the manufacturing firms operating in Türkiye, to estimate panel fixed-effects regressions and forecast defaults. Firm performance is measured using a probability of default indicator constructed from balance sheet and income statement ratios, which has demonstrated strong predictive power. The findings suggest that, although large firms appear to have outperformed SMEs on average in the post-pandemic period, the heterogeneity in responses is more pronounced among SMEs. After controlling for NACE-4 sectoral differences and firm-level characteristics, firms that were exporters and those with higher pre-pandemic profits per employee were significantly less likely to fall into default during the pandemic. Additionally, firms employing a higher share of skilled labor relative to their sectoral peers exhibited greater resilience to the shock. Overall, the paper concludes that firms' productivity and labor composition are significant determinants of their ability to weather global shocks.

Keywords: Probability of Default, Logit Model, Firm Performance Indicator, Manufacturing Firms, Pandemic, Skilled Labor, Productivity
JEL Codes: G32, G33, L25

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Determinants of Inflation Expectations in Türkiye

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Abstract
Inflation expectations constitute a fundamental element in macroeconomic stability, as they significantly influence the decisions of the economic agents. This study investigates the determinants of inflation expectations in Türkiye using monthly data from January 2015 to June 2024. The Turkish economy during this period was characterized by high inflation, significant exchange rate volatility, and evolving monetary policy frameworks, creating an environment of continuous structural change. Standard econometric models often fail to capture such dynamics and to address this, the study employs Fourier Autoregressive Distributed Lag model. The FADL bounds test establishes a stable long-run cointegrating relationship between inflation expectations and a set of key macroeconomic variables: past inflation, the exchange rate, interest rates, and global commodity prices. The long-run results reveal that the USD/TRY exchange rate is the most potent driver of inflation expectations, followed by inflation inertia (past inflation). The significance of gold prices suggests a "credibility deficit," where agents look to alternative assets for signals on future inflation. The statistical significance of the Fourier terms validates the FADL model's appropriateness, confirming the presence of gradual structural shifts. The primary policy implication is that anchoring inflation expectations in Türkiye requires a credible policy framework that prioritizes exchange rate stability.

Keywords: Inflation Expectations, Exchange Rate, Commodity Prices, Gold Prices, Interest Rates.
JEL Codes: E31, Q02, C11

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Türkiye'de Enflasyon Beklentilerinin Belirleyicileri

Özet

Enflasyon beklentileri, ekonomik aktörlerin kararlarını önemli ölçüde etkilemeleri nedeniyle makroekonomik istikrarın temel unsurlarından birini oluşturmaktadır. Bu çalışma, Ocak 2015 - Haziran 2024 dönemine ait aylık verileri kullanarak Türkiye'de enflasyon beklentilerinin belirleyicilerini incelemektedir. Söz konusu dönemde Türk ekonomisi; yüksek enflasyon, belirgin döviz kuru oynaklığı ve değişen para politikası çerçeveleriyle dikkati çekmekte ve sürekli yapısal değişimlerin yaşandığı bir ortam sergilemektedir. Standart ekonometrik modeller bu tür dinamikleri çoğu zaman yakalayamamakta; bu nedenle çalışmada Fourier Otoregresif Dağıtılmış Gecikme (FARDL) modeli kullanılmaktadır. FARDL sınır testi, enflasyon beklentileri ile temel makroekonomik değişkenler —geçmiş enflasyon, döviz kuru, faiz oranları ve küresel emtia fiyatları— arasında istikrarlı bir uzun dönem eşbütünleşme ilişkisi olduğunu ortaya koymaktadır. Uzun dönem bulguları, USD/TRY döviz kurunun enflasyon beklentilerinin en güçlü belirleyicisi olduğunu, bunu enflasyon ataletinin (geçmiş enflasyon) izlediğini göstermektedir. Altın fiyatlarının anlamlılığı ise, ekonomik aktörlerin gelecekteki enflasyona dair sinyaller için alternatif varlıklara yöneldiğini ifade eden bir güvenilirlik açığına işaret etmektedir. Fourier terimlerinin istatistiksel olarak anlamlı bulunması, modelin uygunluğunu doğrulamakta ve kademeli yapısal değişimlerin varlığını teyit etmektedir. Çalışmanın temel politika çıkarımı, Türkiye'de enflasyon beklentilerinin çıpalanabilmesi için döviz kuru istikrarını önceleyen güvenilir bir politika çerçevesine ihtiyaç duyulduğudur.

Anahtar Kelimeler: Enflasyon Beklentileri, Döviz Kuru, Emtia Fiyatları, Altın Fiyatları, Faiz Oranları.
JEL Kodları: E31, Q02, C11

Local Currency Borrowing Constraints and Firm Behavior: Evidence from an Emerging Market

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Abstract
Since the Global Financial Crisis, macroprudential policies designed to curb systemic risk and to strengthen the resilience of financial institutions and non-financial firms have gained prominence. Among lender-based tools, lending restrictions have been widely used in emerging markets to combat dollarization. This paper evaluates the impact of a 2022 Turkish regulation that restricts new local currency lending to firms whose asset dollarization exceeds specified thresholds. Using novel administrative data from January 2021–December 2023 and a difference-in-differences approach combined with propensity score matching, we estimate the policy's financial and macroeconomic effects. We find a medium-term decline in local currency borrowing among affected firms, driven by both state and non-state banks. The results are invariant with multiple robustness checks and are stronger for credit-constrained firms. We also document spillover effects, as firms substitute local currency loans with foreign currency loans, Turkish lira trade credit, and their internal foreign currency liquidity. Extended analysis indicates that investment and employment were maintained among affected firms, while net exports declined and operational volatility increased.

Keywords: Macroprudential regulation, borrowing limits, dollarization, domestic currency lending, propensity score matching, difference-in-differences.
JEL Codes: C21, G32, G38, L5

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Heterogeneous Returns to Apprenticeships: Evidence from Canada

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Abstract
We study the labor-market returns to apprenticeship completion in Canada using linked administrative records from the Registered Apprenticeship Information System (RAIS), 2008–2022. Implementing an event-study design that compares completers with matched non-completers, we find large and persistent gains: initial earnings rise by about C$14,000 (≈24%) and remain elevated for at least nine years. Returns vary markedly across trades—mechanical, electrical, construction, and metalwork yield 21–26% gains, whereas machine operation and services deliver gains near 6%. To illuminate mechanisms, we combine event-study evidence with Gelbach's decomposition. Completion raises union coverage and attachment to related industries—by roughly 10 and 18 percentage points immediately after exit, with sizeable effects still present nine years later. Unionization accounts for a meaningful share of the earnings effect, whereas industry mobility explains only a modest fraction; these contributions are stable over time yet heterogeneous across trades. A substantial residual remains, consistent with apprenticeships building general, transferable skills. In addition to heterogeneity in unionization and post-training industry relatedness across trades, cross-program differences in returns are closely linked to program features. Longer required training hours and Red Seal certification are associated with significantly higher gains. Task content also matters: trades emphasizing technical maintenance and precision-equipment operation yield larger returns, whereas material-handling-intensive trades yield smaller returns.

Keywords: Apprenticeships, earnings returns, event study, Gelbach decomposition, unionization, industry relatedness
JEL codes: I26, J24, J31, J52, J62

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The Role of Business School Professors in Addressing Today's Ethical Crisis in Business

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Abstract
This paper revisits and expands the original 2014 recommendation (Degen, 2014, 2018) on how business school professors can help reduce the ongoing ethical deficiencies in corporate environments. It incorporates new data, theoretical updates, and examples of recent ethical failures and reforms in the business sector. The analysis critiques the continued dominance of shareholder primacy, rational egoism, and managerialism in business curricula, underscoring the urgent need to incorporate ethical reasoning, social justice principles, and stakeholder-oriented decision-making into business education. It also outlines actionable steps for professors to foster moral leadership and critical thinking in their students.

Keywords: Ethics, Teaching Ethics, Professors Business Schools, Ethics in Business.
JEL Codes: L21, L26, M14

The Social Security Pension System of northern Cyprus: Analysis of Deficits and Inequities with Proposals for Sustainability and Fairness

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Abstract
The Social Security Pension System of northern Cyprus faces a significant deficit, with structural imbalances needing urgent policy interventions. The annual deficit is equal to 50% of current pension payments, or 3.2% of GDP. These issues are critical for EU integration aspirations. Gender disparities exist, with women receiving slightly higher subsidies due to longer lifespans, yet as lower-income individuals, they face greater disadvantages in retirement. The reliance on general budget financing and the vulnerability of the employees' Provident Fund assets to the rate of inflation underscore the system's unsustainability. This article emphasizes the need for reforms to ensure fiscal sustainability and equitable treatment by the social security pension system.

Keywords: Pension System Deficit, Fiscal Sustainability, northern Cyprus Social Security, Pension Reform, Contribution Rates, Provident Fund Contributions

Does public engagement play a role in CBDC adoption? Empirical evidence from OECD and non-OECD countries

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Abstract
This study investigates the determinants of Central Bank Digital Currency (CBDC) adoption through a cross-country empirical analysis of 38 OECD and 92 non-OECD member countries, focusing on the role of public engagement as a potential driver of CBDC adoption. The results of logit models demonstrate that public engagement with Central Bank Digital Currencies (CBDCs) significantly affects their acceptance in both OECD and non-OECD nations. This outcome underscores the importance of broad public support as a precursor to future readiness among end-users for CBDCs. Our findings offer valuable insights for national central banks and policymakers navigating the global transition to CBDCs.

Keywords: CBDC, digital currency, central bank.
JEL Codes: C33, E58, G28, O33

Economic Structure and Monetary Transmission: Comparing Interest Rate-Inflation Dynamics in Resource-Based versus Diversified Economies

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Abstract
This study examines whether economic structure influence the transmission of monetary policy from interest rate to consumer price across 64 countries from 1990- 2022. We classify the economies using composite diversification index based on the export concentration, sector GDP shares and resource dependence ratio, moving beyond simple binary classification.
Using cross- sectional augmented auto regressive distributed lag (CS-ARDL) model that account from cross-cross sectional dependence and parameter
Findings revealed significant heterogeneity in monetary transmission mechanisms between resource-dependent and diversified economies. Resource dependent economies exhibit substantially greater short-run sensitivity to interest rate changes, with slower adjustment process compared to the diversified counterparts. However, diversified economies demonstrate complex long run relationship that suggest supply-side channels or credibility effects may play important roles in monetary transmission.
The findings suggest that monetary policy, particular trough interest rate adjustments, plays a distinct role in influencing inflation across different economic structure. In resource-based economies, inflation expectation is more responsive to interest rate changes, while diversified economies are characterized by a faster stabilization process aftershock. This highlights the need for tailored monetary policies to account for unique inflationary dynamics in resource versus diversified economies.

Keywords: Monetary policy transmission, Economic diversification, Panel co-integration, Cross -section dependence, Emerging markets
JEL codes E52 , E58 , F41, C23

Does Monetary Policy Influence CO_2 Emissions? ARDL Evidence from the U.S.

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Abstract
The link between monetary policy and environmental outcomes entered U.S. policy discourse when the St. Louis Federal Reserve raised climate concerns in 2019. Building on this, the present study examines the relationship between U.S. monetary policy and carbon dioxide (CO_2) emissions from 1970 to 2023, using the Autoregressive Distributed Lag (ARDL) methodology to capture both short- and long-run effects. Control variables include GDP per capita, population, urbanization, and renewable energy consumption in the industrial sector. Unit root tests confirm mixed integration orders, validating the ARDL approach.
Empirical results suggest that contractionary monetary policy has a significant impact on reducing CO_2 emissions in the short term, likely due to lower economic activity and reduced energy demand. However, this effect fades over time and becomes statistically insignificant in the long run. GDP per capita and population growth persist as long-term emission drivers, while renewable energy consumption in industry has a limited impact. These findings support the view that monetary policy influences emissions only indirectly and temporarily. Complementary fiscal, regulatory, and technological measures are essential for sustained decarbonization. This limitation is further compounded by recent institutional shifts such as the withdrawal of major U.S. financial institutions from net-zero alliances and the resurgence of fossil fuel- oriented executive rhetoric (e.g., “drill, baby, drill”), which may hinder coordinated climate action and elevate long-term emission risks.

Keywords: Monetary Policy, CO2 emissions, ARDL, population, urbanization, GDP per capita
JEL Codes: E43, E52, E58, Q54

Exchange Rate Policy and Crisis Signals: Constructing an Exchange Market Pressure Index for Nigeria

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Abstract
Despite sustained interventions by the Central bank of Nigeria (CBN), the challenge of frequent currency depreciation and foreign exchange market volatility in Nigeria persisted. Thus, creating the need for developing reliable tools to predict episodes of exchange market distress. This study constructs an Exchange Market Pressure Index (EMPI) for Nigeria, following Eichengreen et al. (1995), as an early warning mechanism for potential currency crises. Using monthly data from 2002 to 2024, the index integrates exchange rate changes, interest rate differentials, and movements in net foreign assets relative to the monetary base, adjusted for volatility. A critical component of this methodology is the weighting of each variable to balance their distinct volatilities, for which our study applies and compares three different methods: Principal Component Analysis (PCA), precision weighting approach, and GARCH-type conditional standard deviation. A crisis is defined when the EMPI exceeds the mean plus 1.5 standard deviations. The results reveal multiple periods of elevated pressure that coincides with macroeconomic disruptions such as oil price shocks, capital flow reversals, regime changes, and the 2023-naira redesign. When compared with logistic regression and signal analysis, the EMPI provides a more dynamic and less biased indicator of currency stress. The study highlights the policy relevance of EMPI in strengthening exchange rate management and crisis prevention in emerging economies, offering Nigerian authorities a practical framework for early intervention and financial stability.

Keywords: Currency Crises, Monetary Policy, Nigeria, Exchange Market Pressure, Early Warning Systems.
JEL Codes: E42, F31, E52

Determinants of Household Welfare and Poverty in Somalia: Evidence from Somali Integrated Household Budget Survey 2022

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Abstract
Poverty remains a continuous concern in Somalia, impacting the country's growth and residents' well-being. This study uses data from the Somali Integrated Household Budget Survey of 2022 to identify the main causes of poverty in Somalia. The study looks at demographic and socio-economic factors such as gender and educational attainment, the size of the household, remittance receipt, credit and electricity access as well as the influence of armed conflict on households' wellbeing using multivariate logit model. The findings suggest that women-headed households, larger households, and those with less educated heads are more likely to be poor. Furthermore, access to credit and conflict exposure are key variables impacting poverty in Somalia. To address these concerns, the study suggests targeted initiatives such as increasing educational opportunities, particularly for women, and improving credit access for vulnerable households. Additionally, introducing conflict resolution programs and community-based support structures can help to lessen the negative effects of violence. These evidence-based insights are intended to help policymakers develop effective poverty-reduction strategies customized to Somalia's unique context.

Keywords: Poverty, Household consumption, Logit model, Armed conflicts, Somalia
JEL Codes: D31, D74, I32

Evaluation of the Willingness to Pay of Households for a Potable and Reliable Water Supply in Famagusta, North Cyprus

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Abstract
North Cyprus secured bulk water through the Turkey–TRNC undersea pipeline, yet households still face intermittent, non-potable distribution that forces costly coping strategies. This study quantifies the welfare gains from fixing that last-mile problem in Famagusta and assesses the case for scaling nationally. Using the averting-expenditure approach, we infer households' willingness to pay (WTP) for potable, reliable piped water from outlays on bottled water, storage, and filtration. We then compare inferred benefits with a levelized service cost and an economic cost–benefit analysis (CBA) of elevated central storage and complementary network upgrades. Famagusta provides a natural testbed because portions of its network were rehabilitated under an EU project and unit costs for storage are known. Results indicate that mean household WTP for potable reliability exceeds incremental provision costs, generating positive economic net benefits for the district; under shared network parameters, extrapolation implies similar gains across North Cyprus. The findings support prioritizing distribution-side investments to unlock the pipeline's intended welfare impact and reduce private coping costs.

Keywords: willingness to pay; averting behavior; potable water; reliability; cost–benefit analysis; North Cyprus.
JEL Codes: Q25, Q51, H54

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The Synergistic Effect of Carbon Pricing Mechanisms on Green Innovation

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Abstract
This study investigates the impact of carbon pricing mechanisms on green innovation in some early-adopter European countries. By applying quantitative approach to a balanced panel dataset from 1990 to 2022, we use a fixed-effects (FE) model to estimate the effects of carbon tax, fossil fuel consumption, renewable energy consumption, and GDP per capita on green innovation. A key contribution of this study is the introduction of a synergy variable to capture the interaction between carbon tax and emissions trading systems (ETS). This was used to test whether combined carbon pricing mechanisms yield stronger innovation outcomes than individual tools. The FE estimates reveal that while carbon taxes alone show a positive but insignificant effect, the synergy variable is strongly positive and statistically significant, indicating that coordinated policy mechanisms amplify green innovation. Furthermore, fossil fuel consumption has a negative impact on green innovation, while renewable energy consumption shows no significant effect. Robustness checks using Driscoll-Kraay standard errors confirm the stability of the main results by accounting for cross-sectional dependence, serial correlation, and heteroskedasticity. This study contributes novel evidence on the effectiveness of integrated carbon pricing strategies and provides important policy insights for governments seeking to accelerate the transition to low-carbon innovation-driven economies.

Keywords: Green innovation, carbon pricing synergy, carbon pricing mechanism.
JEL Codes: O31, Q58, Q48, Q52

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Impact of high-frequency trading on volatility during normal and extreme periods

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Abstract
In the last two decades, high-frequency trading (HFT) has become a common financial market practice. Its impacts on market efficiency, liquidity and volatility are investigated and discussed across the globe. While this research mostly is concentrated on equity markets, its aspects on futures market are also of interest. In this paper, we study the effects of high-frequency trading (HFT) on price volatility in Borsa Istanbul index futures market. More specifically, departing from tick-by-tick order and transaction data of futures contracts, we measure the share of HFT within all the transactions and order messages. In what follows, we examine the interaction between low-latency trading and volatility across the entire sample as well as for the subsamples where volatility is already high and low. Preliminary results show that HFT increases volatility on trading days with negative returns in stable market conditions. However, no similar impact is found in times of increased market stress and extreme volatility. This result contributes to the debate about the role of these particular agents during financial crises.

Keywords: HFT, volatility, index futures, Borsa Istanbul
JEL Codes: G23, G14, G12

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The Hidden Fragility of Large Banks: Asymmetric Connectedness and Systemic Risk

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Abstract
This study investigates asymmetric volatility spillovers and systemic risk transmission among the world's ten largest global banks, identified by total asset size across the United States, Europe, China, and Japan. Using high-frequency data from July 16, 2010, to April 30, 2025, we apply the Asymmetric Time-Varying Parameter Vector Autoregressive (TVP-VAR) connectedness approach to capture dynamic spillovers under both positive and negative return conditions. The study aims to determine whether bad (negative returns) volatility shocks generate more persistent and intense contagion across global banks than good (positive returns) volatility, and to identify directional risk transmitters and receivers within the international banking network. We extend key theoretical frameworks—Too-Big-To-Fail (TBTF), Too-Interconnected-To-Fail (TITF), and financial network theory—by integrating asymmetric spillover dynamics. The findings reveal asymmetric spillovers which means negative shocks produce more persistent and intense contagion compare to the positive volatility. U.S. and European banks act as net transmitters, while Chinese and Japanese banks remain key receivers. This study addresses an important gap by providing a detailed, cross-regional, and contrast-focused analysis of how volatility spreads between banks. The study provides a basis for more nuanced and responsive policy interventions of financial safety policies and supports better monitoring of global financial stability.

Keywords: Volatility Spillovers, Systemic Risk, Asymmetric Connectedness.
JEL Codes: C58, C32, G01, G21

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Dynamic Integration and Volatility Spillovers in Technology-Focused Financial Markets: A Time-Varying Parameter Frequency Connectedness Approach

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Abstract
The role of technology exchange-traded funds (ETFs) such as QQQ, XLK, and ARKK has become more important in recent years as investors seek exposure to innovation-driven markets. At the same time, these ETFs are highly sensitive to shocks such as the COVID-19 crisis, the inflation period of 2022, and the AI-boom of 2023. Although there are many studies on volatility spillovers in stock markets, research focusing directly on technology ETFs is still limited.
This study investigates the dynamic linkages among QQQ, XLK, and ARKK by applying a time-varying VAR with frequency connectedness. The method enables the observation of both short-run and long-run spillover effects and their evolution over time. Daily data covering the period 2015–2024 are used. The results show that QQQ and XLK behave as main transmitters of volatility, while ARKK often takes the role of receiver, except in some periods of thematic optimism. Short-run spillovers dominate during crisis times, while long-run spillovers gain importance in structural phases such as the recent AI expansion.
Overall, the findings indicate that diversification benefits among technology ETFs have declined over time. This is practically important for investors constructing portfolios and for regulators monitoring systemic risk in financial markets.

Keywords: volatility, exchange-traded funds, TVP-VAR
JEL Codes: G11, G15, G17

Assessing Volatility Spillover Effects Between Sustainable and Non-Sustainable Firms in the Energy Sector

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Abstract

Most energy spillover studies treat all companies as equal, overlooking the distinction between sustainable and traditional firms. Diebold and Yilmaz (2012) and Zhou et al. (2022) explore energy sector relationships without separating green and conventional businesses, leaving investors unsure about how green energy companies perform during crises.

This study examines volatility spillovers between sustainable and non-sustainable firms from 2010 to 2024. Using a Time-Varying Parameter Vector Autoregressive (TVP-VAR) model with frequency decomposition, it analyzes short-term (1–5 days) and long-term (5+ days) connections among ten large energy companies. Findings reveal that traditional oil companies, like BP and Chevron, are steady net transmitters of shocks, especially during crises like the oil price fall, COVID-19, and the Russia-Ukraine war. Conversely, renewable firms like NextEra Energy and Enbridge act more as net receivers, showing stability in the short term but some long-term vulnerability. The Total Connectedness Index (TCI) indicates that shocks spread quickly in the short term, outweighing structural forces.

This study contributes by highlighting the difference in systemic risk between sustainable and non-sustainable firms, offering investors insights for short- and long-term hedging, and guiding policymakers on how sustainability supports market resilience.

Keywords: Volatility spillovers, Sustainable energy, TVP-VAR
JEL Codes: G11, G15, G17

From Faith to Policies: The Transformation of Religiosity and Redistribution Preferences in Türkiye

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Abstract
Religion, as an institutional structure, emerges as a decisive factor in shaping economic preferences. Weber (1930), in explaining the success of capitalism, emphasized religion—particularly Christianity—as a crucial factor, thereby making the role of religiosity in economic decision-making more visible. However, the applicability of this perspective within the Islamic context has been both contested and subjected to further scholarly debate. This study draws on data from the World Values Survey to examine the impact of religiosity on redistribution preferences in Türkiye, a country with a predominantly Muslim population but a constitutionally secular framework, across two periods: before and after 2010. The findings reveal that, prior to 2010, religious individuals tended to oppose redistribution through state intervention, whereas this effect appears to have disappeared in the post-2010 period. This shift suggests a transformation in both the nature of religiosity and its influence on socio-economic preferences in contemporary Türkiye.

Keywords: Redistribution, Preferences, Religion, Piety.
JEL Codes: D02, D30, D31

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İnançtan Politikalara: Türkiye'de Dindarlık ve Yeniden Dağılım Tercihlerinin Dönüşümü

Özet
Din, kurumsal bir yapı olarak ekonomik tercihlerin şekillenmesinde belirleyici bir unsur olarak öne çıkmaktadır. Weber'in (1930) kapitalizmin başarısını açıklarken dini özellikle Hristiyanlık temelinde önemli bir faktör olarak değerlendirmesi, dindarlığın iktisadi kararlardaki rolünü daha görünür kılmıştır. Ancak bu yaklaşımın İslami bağlamda geçerliliği hem tartışmalı bulunmuş hem de daha fazla araştırmaya konu edilmiştir. Bu çalışma, Dünya Değerler Anketi verilerinden yararlanarak, 2010 öncesi ve 2010 sonrası dönemleri kapsayacak şekilde, Müslüman nüfusun yoğun olduğu ancak anayasal olarak laik bir ülke olan Türkiye'de dindarlığın yeniden dağılım tercihleri üzerindeki etkisini incelemektedir. Bulgular, 2010 öncesinde dindar bireylerin devlet müdahalesiyle gerçekleşen yeniden dağılıma karşı bir tutum sergilediklerini, ancak 2010 sonrasında bu etkinin ortadan kalktığını ortaya koymaktadır. Bu değişim, Türkiye'de dindarlık anlayışında ve dindarlığın toplumsal-ekonomik tercihler üzerindeki etkilerinde bir dönüşüme işaret etmektedir.

Anahtar Kelimeler: Yeniden Dağılım, Tercihler, Din, Dindarlık.
JEL Kodları: D02, D30, D31

UNESCO World Heritage and Tourism Revenues: Evidence from a Panel Data Analysis of Tourism-Intensive Countries

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Abstract
Cultural heritage sites not only serve to protect historical and natural values but also strengthen the attractiveness of destinations by increasing their international visibility, thus contributing to the rise in tourism revenues. In this context, World Heritage sites identified by UNESCO particularly encourage the influx of international visitors in tourism-intensive countries and contribute to the sustainable growth of tourism revenues. In this study, the impact of UNESCO World Heritage sites on international tourism revenues has been examined specifically in tourism-intensive countries. A panel data analysis was applied using data from 1995 to 2023 for 12 tourism-intensive countries. The main hypothesis of the study is that the increase in the number of UNESCO World Heritage sites positively affects international tourism revenues in intensive countries. According to the results of the heterogeneous panel mean group estimator model, the impact of UNESCO World Heritage sites on tourism revenues has been found to be positive, and it has also been determined that this effect strengthens as the share of tourism in GDP increases. The pandemic year (2020) created a statistically significant and negative impact on tourism revenues. However, the magnitude of this effect shows heterogeneity among countries. The finding that the contribution of UNESCO World Heritage sites to tourism revenues significantly strengthens as the share of tourism in the economy increases suggests that cultural heritage policies should be designed within an integrated framework with tourism strategies.

Keywords: UNESCO World Heritage, Heterogeneous Panel Data Analysis, Panel Mean Group Estimator.
JEL Codes: L83, C23, Z32

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UNESCO Dünya Mirası ve Turizm Gelirleri İlişkisi: Turizm Yoğun Ülkeler Üzerine Panel Veri Analizi

Özet
Kültürel miras alanları, tarihi ve doğal değerlerin korunmasına hizmet etmekle birlikte uluslararası görünürlüğü artırarak destinasyonların cazibesini güçlendirmekte ve dolayısıyla turizm gelirlerinin artmasına katkı sağlamaktadır. Bu bağlamda UNESCO tarafından belirlenen Dünya Mirası alanları, özellikle turizm yoğun ülkelerde uluslararası ziyaretçi akışını teşvik etmekte ve turizm gelirlerinin sürdürülebilir biçimde büyümesine katkıda bulunmaktadır. Bu çalışmada, UNESCO Dünya Mirası alanlarının uluslararası turizm gelirleri üzerindeki etkisi turizm yoğun ülkeler özelinde incelemiştir. 12 turizm yoğun ülkeye ait 1995–2023 dönemi verileri kullanılarak panel veri analizi uygulanmıştır. Çalışmanın temel hipotezi, UNESCO Dünya Mirası alanlarının sayısındaki artışın, turizm yoğun ülkelerde uluslararası turizm gelirlerini pozitif yönde etkileyeceğidir. Heterojen panel ortalama grup tahmincisi model sonuçlarına göre UNESCO Dünya Mirası alanlarının turizm gelirleri üzerindeki etkisi pozitif bulunmuş, ayrıca turizmin GSYH içindeki payı arttıkça bu etkinin güçlendiği tespit edilmiştir. Pandemi yılı (2020) turizm gelirlerinde istatistiksel olarak anlamlı ve negatif bir etki yaratmıştır. Ancak bu etkinin büyüklüğü ülkeler arasında heterojenlik göstermektedir. UNESCO Dünya Mirası alanlarının turizm gelirleri üzerindeki katkısının, turizmin ekonomideki payı arttıkça belirgin biçimde güçlendiği bulgusu, kültürel miras politikalarının turizm stratejileriyle bütüncül bir çerçevede tasarlanması gerektiğini ortaya koymaktadır.

Anahtar Kelimeler: UNESCO Dünya Mirası, Heterojen Panel Veri Analizi, Panel Ortalama Grup Tahmincisi.
JEL Kodları: L83, C23, Z32

Do Central Banks Shape Inflation Expectations? Evidence from Households, Firms and Market Participants

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Abstract
Expectations of households, firms, and market participants differ significantly, with particularly wide dispersion during volatile periods. We examine how macroeconomic news impacts the inflation expectations of these groups. Our findings reveal that households' and firms' inflation expectations increase in response to a positive monetary policy (tightening) shock, whereas professionals' expectations decline. This divergence arises from fundamentally different interpretations of economic dynamics: households and firms view monetary tightening as a signal of worsening economic conditions—such as rising costs, weaker supply capacity, and potential production disruptions—leading them to expect higher inflation. As a result, they associate tightening with higher inflation. In contrast, professionals adhere to a demand- driven perspective, interpreting monetary tightening as a mechanism to reduce aggregate demand and thus lower inflation, consistent with standard economic theory. This pattern is further confirmed by how the three groups respond to unexpected inflation news (inflation surprises). These findings help explain the persistent disagreement in inflation expectations across households, firms, and professional forecasters, particularly during periods of economic uncertainty.

Keywords: Expectations, Inflation, Central Bank, Firms, Households.
JEL Codes: E12; E24; E31; E52

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Merkez Bankaları Enflasyon Beklentilerini Şekillendiriyor mu? Hanelerden, Firmalardan ve Piyasa Katılımcılarından Elde Edilen Kanıtlar

Özet

Hane halklarının, firmaların ve piyasa katılımcılarının beklentileri, özellikle makro oynaklığın arttığı dönemlerde önemli ölçüde birbirinden farklılaşmakladır. Bu çalışmada Türkiye için makroekonomik haberlerin bu grupların enflasyon beklentilerine etkisi incelenmektedir. Elde edilen bulgular, makroekonomik oynaklığın yüksek olduğu dönemlerde sıkılaştırıcı para politikası şoklarının hane halklarının ve firmaların enflasyon beklentilerinin artışıyla, buna karşın profesyonellerin enflasyon beklentilerinin düşüşüyle ilişkili olduğunu ortaya koymaktadır. Bu farklılık, söz konusu kesimlerin ekonomik gelişmeleri kendilerine özgü değişen dinamiklere göre yorumlamalarından kaynaklanmaktadır. Hane halkları ve firmalar, parasal sıkılaşmayı kötüleşen ekonomik koşulların (artan maliyetler, zayıflayan arz kapasitesi ve potansiyel üretim kesintileri) bir işareti olarak görmekte, dolayısıyla bu durum onları daha yüksek enflasyon beklemeye yöneltmektedir. Buna karşılık, profesyoneller talep odaklı bir bakış açısına bağlı kalarak, parasal sıkılaşmayı standart ekonomi teorisiyle tutarlı olarak toplam talebin azalması ve dolayısıyla daha düşük enflasyon beklentisi şeklinde ortaya koymaktadırlar. Üç grubun enflasyon beklentilerinin beklenmedik enflasyon haberlerine (enflasyon sürprizleri) verdikleri tepkilerin farklılaşması da bu bulguyu desteklemektedir. Özellikle ekonomik belirsizlik dönemlerinde, kesimlerin ekonomik gelişmeleri yorumlamalarında ortaya çıkan farklılaşma, hanelerin, firmaların ve profesyonel tahmincilerin enflasyon beklentileri arasında oluşan sapmaları önemli ölçüde açıkladığı ileri sürülebilir.

Anahtar Kelimeler: Beklentiler, Enflasyon, Merkez Bankası, Firmalar, Hanehalkları.
JEL Kodları: E12; E24; E31; E52

The Impact of Economic Policies on Income Distribution in Turkey

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Abstract
In this study, the effect of monetary and fiscal policy on income distribution was examined using ARDL (Autoregressive Distributed Lag) boundary test approach within the framework of Turkey. The examination period is 1988-2021 due to the data available. The Gini coefficient, one of the income inequality criteria, is the dependent variable. The policy interest rate and the share of tax revenues in GDP are used as monetary and fiscal policy indicators, respectively . In the model, GDP per capita, the share of exports and imports of goods and services in GDP, inflation, and population growth rates are used as control variables.
The difference of the study from the literature is that it examines the combined effect of monetary and fiscal policy. In order to test the effect of the two policies on income distribution, an interaction term was created and included in the model.
The findings are that contractionary monetary policy (an increase in interest rate)reduces inequality in income distribution, and in contrast to monetary policy, contractionary fiscal policy (an increase in tax revenues)) increases inequality in income distribution. However, the distorting effect of fiscal policy on income distribution is greater than the ameliorating effect of monetary policy. Moreover, the result of the model in which the interaction of monetary and fiscal policy is allowed reveals that the combined effect of these policies increases inequality in income distribution.
In other words, the fiscal policy's distorting effect dominated the monetary policy's curative effect, leading to the deteriorating effect of the total crop. Although to the best of our knowledge, no study in the literature deals with the effect of both monetary and fiscal policies on income distribution simultaneously, the approach that fiscal policy is more effective than monetary policy is supported by Contemporary Keynesians in the literature. According to them, monetary policy is effective, but the impact of fiscal policy is more remarkable. In this context, our results support the argument of Contemporary Keynesians.

Keywords: Monetary Policy, Fiscal Policy, Income Distribution, Income Inequality, ARDL Bounds Test
JEL Codes: E52, H23, I32

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Türkiye'de Ekonomik Politikaların Gelir Dağılımı Üzerindeki Etkisi

Özet
Bu çalışmada para ve maliye politikasının gelir dağılımı üzerindeki etkisi ARDL (Otoregresif Dağıtılmış Gecikme) sınır testi yaklaşımı kullanılarak Türkiye çerçevesinde incelenmiştir. Eldeki verilere göre inceleme dönemi 1988-2021'dir. Gelir eşitsizliği kriterlerinden biri olan Gini katsayısı bağımlı değişkendir. Para ve maliye politikası göstergeleri olarak sırasıyla politika faiz oranı ve vergi gelirlerinin GSYİH içindeki payı kullanılmaktadır. Modelde kontrol değişkenleri olarak kişi başına düşen GSYİH, mal ve hizmet ihracat ve ithalatının GSYİH içindeki payı, enflasyon ve nüfus artış oranları kullanılmıştır.
Çalışmanın literatürden farkı para ve maliye politikasının birleşik etkisini incelemesidir. İki politikanın gelir dağılımı üzerindeki etkisini test etmek amacıyla etkileşim terimi oluşturularak modele dahil edilmiştir.
Bulgular, daraltıcı para politikasının (faiz oranındaki artış) gelir dağılımındaki eşitsizliği azalttığı, para politikasının aksine daraltıcı maliye politikasının (vergi gelirlerindeki artış) gelir dağılımındaki eşitsizliği arttırdığı yönündedir. Ancak maliye politikasının gelir dağılımını bozucu etkisi para politikasının iyileştirici etkisinden daha fazladır. Ayrıca para ve maliye politikasının etkileşimine izin verilen modelin sonucu, bu politikaların birleşik etkisinin gelir dağılımı eşitsizliğini artırdığını ortaya koymaktadır.
Bir başka deyişle, maliye politikasının bozucu etkisi para politikasının iyileştirici etkisine baskın gelerek toplam hasılat üzerinde kötüleştirici etkiye yol açmıştır. Bildiğimiz kadarıyla literatürde hem para hem de maliye politikalarının gelir dağılımı üzerindeki etkisini aynı anda ele alan bir çalışma olmasa da, maliye politikasının para politikasından daha etkili olduğu yaklaşımı literatürde Çağdaş Keynesyenler tarafından desteklenmektedir. Onlara göre para politikası etkilidir ancak maliye politikasının etkisi daha belirgindir. Bu bağlamda sonuçlarımız Çağdaş Keynesyenlerin iddiasını desteklemektedir.

Anahtar Kelimeler: Para Politikası, Maliye Politikası, Gelir Dağılımı, Gelir Eşitsizliği, ARDL Sınır Testi
JEL Kodları: E52, H23, I32

The Benefits and Drawbacks of Exchange Rate-Protected Deposits: An Economic and Legal Analysis

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Abstract
The Exchange Rate-Protected Deposit (Kur Korumalı Mevduat- KKM) scheme is a heterodox financial instrument developed in Türkiye at the end of 2021 to counteract the rapidly rising exchange rate and increasing dollarization pressures. This study examines the economic and legal aspects of the KKM scheme. From an economic perspective, KKM stabilized the exchange rate by reducing short-term foreign exchange demand and increasing TL deposits. However, in the long term, it placed a significant burden on the budget, increased inflationary pressures, and exacerbated income inequality. Legally, tax exemptions and incentives sparked debates regarding the constitutional principle of equality, and the regulation's impact on public finances was criticized in terms of transparency and accountability. Consequently, while the KKM scheme provided short-term stability, it did not provide lasting structural solutions. Nevertheless, the legal and economic debates it provoked attracted considerable attention. The KKM scheme was terminated by the Official Gazette published on 23 August 2025. This study will examine the opportunities created by the KKM scheme during its implementation period, the extent to which these opportunities were realized, and the broader legal and economic discussions it generated within a comprehensive framework.

Keywords: Exchange rate-protected deposits, heterodox financial instruments, equality and fairness in taxation.
JEL Codes: E58, H20, H81, K34

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Kur Korumalı Mevduatın Getirdikleri Götürdükleri: İktisadi ve Hukuki Bir Analiz

Özet
Kur Korumalı Mevduat (KKM) uygulaması, Türkiye'de 2021 yılı sonunda hızla yükselen döviz kuru ve artan dolarizasyon baskısına karşı geliştirilmiş heterodoks bir finansal araç olarak öne çıkmıştır. Bu çalışmada, KKM'nin iktisadi ve hukuki boyutları birlikte ele alınmaktadır. İktisadi açıdan değerlendirildiğinde KKM, kısa vadede döviz talebini azaltarak kur istikrarına katkı sağlamış ve TL mevduatları artırmıştır. Ancak uzun vadede bütçe üzerinde ciddi yükler yaratmış, enflasyonist baskıları artırmış ve gelir dağılımında adaletsizliklere yol açmıştır. Hukuki açıdan ise vergi muafiyetleri ve teşvikler, anayasal eşitlik ilkesi bağlamında tartışmalara neden olmuş; ayrıca düzenlemenin kamu maliyesi üzerindeki etkileri şeffaflık ve hesap verebilirlik bakımından eleştirilmiştir. Sonuç olarak, KKM uygulaması kısa vadeli istikrar sağlamakla birlikte kalıcı yapısal çözümler üretememiştir. Kalıcı çözümler üretememesine rağmen ortaya çıkarttığı hukuki ve iktisadi tartışmalar ise dikkat çekmiştir. KKM uygulamasına 23 Ağustos 2025 tarihinde yayınlanan Resmi Gazete ile son verilmiştir. Çalışmada uygulamasına son verilen KKM'nin uygulama süresince getirmiş olduğu fırsatlar, bu fırsatların ne kadarının uygulamaya geçirilebildiği ve yarattığı hukuki ve iktisadi tartışmalar bütüncül bir çerçevede incelenecektir.

Anahtar Kelimeler: Kur korumalı mevduat, heteredoks finansal araçlar, vergide eşitlik ve adalet.
JEL Kodları: E58, H20, H81, K34

The Banking Dimension of the Green Transition: Divergence in Credit Allocation Between Public and Private Banks

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Abstract
This study examines the impact of green transition policies on bank credit allocation behavior in Türkiye. Specifically, it investigates how the risks faced by carbon-intensive sectors under the Carbon Border Adjustment Mechanism (CBAM) and the Banking Regulation and Supervision Agency's (BRSA) credit incentives for green sectors have influenced banks' lending patterns. Using micro-level credit data from the Central Bank of the Republic of Türkiye, the study measures changes in credit allocations to sustainable and carbon-intensive sectors—classified according to the EU taxonomy—before and after the introduction of green credit regulations through a Difference-in-Differences (DiD) approach. The findings reveal that, following the introduction of green credit incentives, lending to sustainable sectors increased, while lending to carbon-intensive sectors exhibited a declining trend. This effect appears to be relatively modest among public banks but more pronounced among private banks. Overall, the results indicate that green finance policies have reshaped credit allocation within the banking system and that the sustainable transition is being reinforced through financial intermediation channels.

Keywords: Green finance, green transition, bank lending, public and private banks.
JEL Codes: G21, Q56, Q58, O16

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Yeşil Dönüşümün Bankacılık Boyutu: Kamu ve Özel Bankaların Kredi Tahsislerinde Ayrışma

Özet
Bu çalışma, Türkiye'de yürütülen yeşil dönüşüm politikalarının bankaların kredi tahsis davranışları üzerindeki etkisini incelemektedir. Analizde, Sınırda Karbon Düzenleme Mekanizması (SKDM) kapsamında karbon yoğun sektörlerin karşı karşıya kaldığı riskler ile Bankacılık Düzenleme ve Denetleme Kurumu'nun (BDDK) yeşil sektörlere yönelik kredi teşviklerinin bankaların kredi dağılımlarına nasıl yansıdığı araştırılmaktadır. Türkiye Cumhuriyet Merkez Bankası'nın kredi mikro verileri kullanılarak, yeşil kredi düzenlemesi öncesi ve sonrasında Avrupa Birliği taksonomisine göre sürdürülebilir sektörler ile karbon yoğun sektörlere kullandırılan kredilerdeki değişim, farkların farkı (Difference-in-Differences) yöntemiyle ölçülmüştür. Bulgular, yeşil sektörlere yönelik kredi teşviklerinin ardından sürdürülebilir sektörlere verilen kredilerde artış, karbon yoğun sektörlere verilen kredilerde ise azalma eğilimi oluştuğunu göstermektedir. Bu etkinin kamu bankalarında görece sınırlı, özel bankalarda ise daha belirgin olduğu saptanmıştır. Sonuç olarak, yeşil finans politikalarının bankacılık sisteminde kredi tahsis yönelimini değiştirdiği ve sürdürülebilir dönüşümün finansal aracılık kanalları aracılığıyla desteklendiği görülmektedir.

Anahtar Kelimeler: Yeşil finans, yeşil dönüşüm, banka kredileri, kamu ve özel bankalar.
JEL Kodları: G21, Q56, Q58, O16

Time-Varying Responses of CDS Spreads to Exchange Rate Shocks: Evidence from Turkey

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Abstract
This study investigates the dynamic interactions between Turkey's sovereign credit risk, represented by Credit Default Swap (CDS) spreads, and key macro-financial variables using a Time-Varying Parameter Vector Autoregression (TVP-VAR) framework with stochastic volatility. The analysis covers the evolving volatility of shocks to the USD/TRY exchange rate, EUR/TRY exchange rate, and CDS spreads, revealing that sovereign risk is characterized by persistently higher volatility compared to currency markets. While the euro and dollar shocks exhibit relatively stable and low levels of volatility, CDS spreads maintain a structurally elevated risk perception over time.
Impulse response analysis indicates that CDS spreads respond positively and significantly to exchange rate shocks in the short run, with the effect rapidly decaying and disappearing in the medium to long term. This finding suggests that sovereign risk is highly sensitive to sudden exchange rate movements, but the persistence of this effect remains limited.
Overall, the results highlight the importance of exchange rate dynamics in shaping investor perceptions of sovereign risk in emerging markets. The empirical evidence contributes to the literature by demonstrating that CDS responses are short-lived yet significant, underlining the role of financial stability and exchange rate management in reducing country risk premia.

Keywords: Time-Varying Parameter VAR, Stochastic Volatility, Sovereign Risk, CDS, Exchange Rates, Turkey
JEL Codes: E44

It Is Not Your Risk but It Is Your Problem: Peer Country Effects on Emerging Market Credit Default Swap Spreads

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Abstract
In this paper, we attempt to introduce peer effects as a new channel in pricing emerging markets credit default swap spreads and study the impact of peer effects on 17 countries for the period 2006-2022. Unlike spillover models, we exploit spatial econometrics to distinguish between direct (country-specific) and indirect (non-country-specific) effects in the credit default swap spreads. We are motivated by the fact that the connectedness among emerging market credit default swap is proportionally high based on the similarity concerning the dimensions of economic development, governance and uncertainty. Adopting a spatial modeling strategy allows us to consider such similarity to unravel non-country-specific channels driving the shifts in sovereign credit risk. On top of documenting significant spatial interactions, we find that indirect effects are roughly as important as the direct ones in explaining the credit default swap spread movements. Our findings are robust to a set of additional analyses and modeling choices. The findings underpin a plethora of attempts on the importance of coordinated policy actions in the international regulatory fora to alleviate sovereign risk. This paper also calls for careful use of credit default swap spreads as a sovereign credit risk indicator. After all, these measures are already a cost indicator but the idiosyncratic risk may be quite different.

Keywords: Credit Default Swap, Country Risk, Peer Effects, Financial Contagion, Spatial Analysis
JEL Codes: G15, G18, C31

Supply and Demand Dynamics in the Turkish Housing Market

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Abstract
It is widely recognized that housing market dynamics are strongly linked to economic and financial stability. Therefore, it is crucial to determine whether the price and volume fluctuations in the housing market are demand-driven or supply-driven. In this paper, we use Shapiro (2024) framework to decompose the supply and demand components of the prices and volume in the Turkish housing market, using the monthly CBRT house price index and house sales for 19 geographical regions in Türkiye between 2013-2025. We test the plausibility of the supply and demand components by calculating the local projection impulse responses to shocks to monetary policy and mortgaged sales rate. We find that demand contribution to sales and real prices turned negative in 2019, whereas demand component pushed the house prices and sales volume up in the low-rate environment of 2020-2022.

Keywords: House prices, house sales, supply and demand, vector autoregression, local projections.
JEL Codes: E31, E32, E43, E44

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