TRANSFORMING ECONOMIES: ENERGY TRANSITION, GEOPOLITICS IN INTERNATIONAL FINANCE, AND SUSTAINABLE GROWTH

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ABSTRACT BOOK

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Preface

The global economy is undergoing a profound transformation shaped by the accelerating energy transition and increasingly complex geopolitical dynamics. These forces are fundamentally reshaping international finance, altering capital flows, investment strategies, and the governance of global economic relations. In this evolving context, questions surrounding sustainability, resilience, and inclusiveness have moved to the forefront of economic research and policy debates.

The Middle East and North Africa (MENA) region occupies a pivotal position in this transformation. Its long-standing role in global energy markets, combined with its strategic geopolitical significance and ongoing efforts toward economic diversification, places the region at the heart of debates on energy security, financial stability, and sustainable development. At the same time, MENA economies face pressing structural challenges, including climate change, water scarcity, demographic pressures, and persistent social inequalities. Addressing these interconnected issues requires multidisciplinary perspectives and rigorous analytical approaches.

Against this backdrop, the theme of the 21st International Conference of the Middle East Economic Association (MEEA), *"Transforming Economies: Energy Transition, Geopolitics in International Finance, and Sustainable Growth"*, aims to provide a comprehensive platform for scholarly exchange. The conference brings together researchers, policymakers, and practitioners to examine the economic implications of global and regional transformations, with a particular focus on the MENA region within the broader international system.

This Abstract Book presents a diverse collection of research contributions reflecting the breadth and depth of the conference theme. The abstracts highlight current theoretical, empirical, and policy-oriented work on energy economics, international finance, geopolitical risk, sustainable growth, and development challenges. Together, they offer valuable insights into the evolving dynamics of transforming economies and underscore the importance of informed, evidence-based dialogue.

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ABSTRACTS

THE IMPACT OF JOB INSECURITY ON INCOME INEQUALITY: AN ECONOMETRIC

ANALYSIS ON OECD COUNTRIES

Ali Ari[1], Raif Cergibozan[2]

This study examines whether rising job insecurity contributes to growing income inequality in advanced economies. We compile a panel dataset of 28 OECD countries from 1990–2019, drawing on OECD, World Bank and ILO sources for income-distribution and labor-market variables. Job insecurity is measured by the share of workers on temporary and precarious contracts (and alternative indicators such as labor market flexibility), while inequality is captured by the Gini coefficient and income quintile ratios. Using country-fixed-effects and instrumental-variable regressions, we find that higher job insecurity predicts significantly higher income inequality. The baseline panel estimates imply that a one-percentage-point increase in the share of temporary employment raises the Gini index by roughly 0.1–0.2 points, holding other factors constant. Results are robust across model specifications, time-period subsamples, and alternative inequality measures. These findings suggest that labor-market policies affecting job security have important distributional effects. Policy simulations indicate that strengthening protections for vulnerable workers or expanding unemployment insurance can help mitigate inequality, underscoring the need to balance labor flexibility with social safeguards.

Keywords: Income inequality, Job insecurity, Pooled OLS, System GMM
JEL Codes: C33, D31, D63,

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DOES FINTECH FINANCING AFFECT BANK LENDING ACTIVITIES? EMERGING VERSUS ADVANCED ECONOMIES

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This paper investigates the impact of fintech financing on bank lending activities. The fintech financing may either attract new borrowers, who were not captured by traditional banks, or/and compete with banks for existing customers. Depending on which effect dominates, the fintech may either complement or substitute bank lending. We argue that the nature of this relationship differs between emerging and advanced economies. In emerging economies, fintech reaches new borrowers and forces banks to lower interest rates to keep their customers from switching. In advanced economies, where banking penetration is already high, the growth of fintech occurs mainly at the cost of bank lending. Furthermore, fintech attracts more creditworthy customers in advanced economies and thus reducing bank asset quality and increasing bank lending spread. Using bank-level panel data of 25 emerging and 22 advanced economies for 2011-2020, we find solid evidence for our conjectures. Our empirical results further indicate that compared with P2P lending, the balance sheet lending underscores its substantial impact on bank lending activities. Finally, certain bank characteristics such as age and efficiency tend to have an impact on the results.

Keywords: Fintech financing, Bank lending activities, Emerging economies, Advanced economies
JEL Codes: G21, G23, G28

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REGIONAL DIFFERENCES OF MIGRATION PATTERNS DURING THE COLONIAL ERA

Arhan S. Ertan[1], Mehmet Burak Akren[2]

This study examines the global dynamics of human migration during the Colonial Era using both unilateral and bilateral datasets. First, a country-level dataset is used to trace broad patterns in the shares of migrant descendants across world regions. Second, a bilateral dataset enables the application of a gravity model framework, estimating how source-country, destination-country, and dyadic factors jointly influenced migration flows. To capture both voluntary and forced movements, the study introduces three original dependent variables: the European Share, the Sub-Saharan Share, and the bilateral Descendant Share (DS2). These indicators are derived from the World Migration Matrix (Putterman & Weil, 2010) and extended with weighted methods that reflect historical settlement intensity.

The empirical analysis starts with Fractional Outcome Regression for unilateral data, followed by the PPML method for the bilateral data. Results distinguish between two migration regimes. Voluntary European migration was shaped by favorable environmental conditions, institutional ties such as formal colonial relationships, and lower state history. These factors consistently affected the share of European descendants in host populations. In contrast, forced African migration was driven primarily by labor demand in colonies, often located in regions with high malaria exposure and strong climate divergence. These drivers were mostly unrelated to weak precolonial institutions. In sum, interestingly, the same variables that encouraged European migration had either limited or adverse effects on Sub-Saharan flows, underscoring the role of coercion in shaping these movements.

Overall, the findings suggest that migration during the colonial era was shaped by a combination of institutional and environmental forces, rather than geography or resource availability alone. These forces interacted in complex ways to channel voluntary and coerced movements into distinct regional patterns. Robustness checks – using new model specifications, interaction terms, inclusion of alternative variables – confirm the consistency and reliability of our results.

Keywords: Historical migration, Voluntary and forced migration, Precolonial institutions, Gravity model, Colonial era, Bilateral data

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THE IMPACT OF GREEN BOND ISSUANCES ON SUSTAINABILITY: EVIDENCE FROM ADVANCED AND EMERGING ECONOMIES

Ayşen Sivrikaya[1], Ayşe Damla Turan[2]

This study investigates the effectiveness of green bond issuances in promoting sustainability by examining their impact on renewable energy generation. Utilizing panel data from 63 countries spanning 2014–2023, the analysis employs a two-step system Generalized Method of Moments (GMM) approach. The findings reveal that green bond issuances significantly enhance renewable energy production across both advanced and emerging economies, highlighting their role as a critical tool for financing the green transition. Additional results indicate that while energy consumption positively affects renewable energy generation in all country groups, GDP per capita, trade openness, and corruption perceptions exhibit heterogeneous effects depending on the level of economic development. These insights support the need for policy frameworks that strengthen green bond markets, establish unified global standards, and integrate green bonds into central banks' green monetary strategies. The study contributes to the limited macro-level empirical literature on green finance and provides actionable recommendations to align financial instruments with climate and sustainability goals.

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THE ROLE OF GULF NATURAL GAS MARKETS IN THE GLOBAL ENERGY TRANSITION: A MULTIDIMENSIONAL PANEL DATA AND GEOPOLITICAL ANALYSIS

Bagul Mommyyeva[1]

This study investigates the pivotal role of natural gas markets in the Gulf Cooperation Council (GCC) countries within the context of the global energy transition, employing a comprehensive multidimensional panel data analysis combined with a geopolitical framework. The research utilizes annual data from 2000 to 2024 encompassing natural gas production, export volumes, and key economic growth indicators of the Gulf states. Advanced panel econometric methods are applied to assess how natural gas production and exports influence sustainable economic development and energy security on a global scale. Furthermore, the analysis integrates geopolitical risk factors—including regional conflicts, diplomatic relations, and energy security concerns—to evaluate their moderating effects on market behavior and investment flows. The empirical findings demonstrate that Gulf natural gas markets significantly contribute to global decarbonization efforts and sustainable growth, reinforcing their strategic importance in the evolving energy landscape. However, geopolitical uncertainties emerge as critical challenges that impact supply reliability and foreign direct investment in the sector. The study concludes that cohesive policies integrating economic, environmental, and geopolitical dimensions are essential to maximize the Gulf region's potential in supporting a resilient and sustainable global energy system. This study is important as it provides critical insights into how natural gas markets in the Gulf region, influenced by geopolitical risks, can support global sustainable development and energy security in the context of the energy transition.

Keywords: Gulf natural gas, Energy transition, Geopolitical risks

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ENERGY IMPORTS, ECONOMIC GROWTH, AND THE CURRENT ACCOUNT DEFICIT IN TÜRKİYE: EVIDENCE FROM 1974–2023

Banu Erkök[1]

Understanding the macroeconomic consequences of energy dependence is increasingly critical for developing economies facing structural trade imbalances. This study explores the dynamic relationship between energy imports, economic growth, and the current account deficit in Türkiye from 1974 to 2023. As an economy heavily dependent on energy imports, Türkiye has consistently faced current account imbalances, which raise concerns about the long-term sustainability of financing trade deficits and fulfilling external obligations without accumulating excessive foreign debt or reducing its international reserves. Using annual time series data, the analysis employs the Augmented Dickey-Fuller (ADF), Phillips-Perron (PP), and Lee-Strazicich (LS) unit root tests to evaluate the stationarity of the variables. Additionally, symmetric and time-varying causality tests developed by Hacker and Hatemi-J are used to investigate both stable and evolving causal relationships among the variables. The findings highlight that rising production levels are accompanied by increased energy imports, increasing the economic outflow associated with growing energy demand. This dynamic poses a considerable risk to the sustainable growth of the Turkish economy. Therefore, it is essential to enhance current policies to boost domestic energy production to support long-term development objectives and mitigate Türkiye's persistent current account deficit.

Keywords: Energy import, Current account deficit, Economic growth

JEL Codes: F10, F32, Q43, O50

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ECONOMIC ANALYSES OF UTILIZATION OF BIOMETHANE IN TURKEY

Batuhan Gürler[1] , Shihomi Ara Aksoy[2]

Biomethane is a globally flourishing, renewable, and sustainable fuel with strong potential in waste management, carbon reduction, and cost competitiveness. This study evaluates the economic feasibility and carbon reduction potential of a prospective biomethane facility in Turkey. Since biomethane is derived from biogas, the analysis begins by identifying key cost determinants in biogas-based electricity production. Based on data obtained from a survey we conducted with 17 operational biogas firms in Turkey, the study highlights repair and maintenance, labor, and raw material costs as the primary drivers of total operating expenses. A hypothetical biogas production cost is calculated as an input for biomethane production. The feasibility analysis compares various biomethane production technologies at different scales, concluding that the Pressurized Water Scrubbing method is the only economically viable option. Additionally, spatial analysis identifies Çorum and Kars as optimal locations for a biomethane facility based on biogas potential from layer chicken manure and cattle manure. The proposed facility is estimated to generate 81,952 tons of net annual carbon savings, equivalent to $15,161,094 in yearly social benefits. These findings highlight biomethane's viability as a sustainable energy source and its potential to enhance energy security, support decarbonization efforts, and promote sustainable development in Turkey.

Keywords: Sustainability, Waste management, Renewable energy, Biomethane, Feasible technology, Carbon-Neutral

JEL Codes: Q16, D61, Q21

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ENERGY TRANSITION: CONCEPT AND CURRENT SITUATION IN ALGERIA

Benabbou Senouci[1], Abderrezak Benhabib[2], & M. Ibtissem Belkhadem[3]

The energy transition (ET) is on the agenda of almost every country in the world. We believe that each country can set its own energy transition objectives, based on several parameters, including its energy resource endowment. We therefore believe that the definition of the energy transition must be situated within each country's specific context. Thus, the ET is, above all, the transition from the current consumption model to one that uses fewer and fewer fossil fuels and more and more renewable energies, while combining energy efficiency and energy conservation (B. Senouci, University of Sétif, 2015). Our presentation will be divided into three parts: The first will focus on the genesis of the concept of the energy transition; the second will address the current situation in Algeria, through energy balances and economic fundamentals, in this case, the growth in demand and the drying up of supply. The final part leads to the question: what steps should be taken?

Keywords: Energy transition, Energy balance, Economic agents, Energy efficiency, Renewable energies

JEL Codes: F02, H56, Q48

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THE TIME-VARYING EFFECTS OF REGIME STABILITY AND DEMOCRATIC DYNAMICS ON FOREIGN DIRECT INVESTMENT IN TURKIYE

Bige Küçükefe [1]

FDI is not merely a flow of financial capital; it also plays a strategic role for developing countries in terms of technology transfer, job creation, institutional transformation, and integration into the global economy. Therefore, the question of under which conditions FDI can be attracted is a subject of inquiry at both theoretical and empirical levels. In this study we investigate the time-varying relationship between regime stability, democratic quality, and foreign direct investment (FDI) in Turkey over the period 1984–2023. While previous literature predominantly focuses on the static effects of regime type on FDI, this paper adopts a dynamic perspective by employing a Bayesian Time-Varying Parameter Vector Autoregression (TVP-VAR) model. The model includes FDI inflows (% of GDP), democracy scores (Polity or V-Dem), a regime stability index (measured via the 5-year moving variance of democracy scores), political stability indicators (from the World Governance Indicators), economic growth, and trade openness.

The empirical strategy enables the identification of structural changes in the effects of democratic and institutional variables on FDI over time. Findings reveal that regime stability has a more consistent and significant influence on FDI decisions, particularly during periods of political transition or uncertainty. The Turkish case provides a compelling context for such an analysis due to its repeated institutional shifts, including military interventions, constitutional amendments, and changes in executive power structure. By capturing evolving investor sensitivities and policy uncertainty, this research contributes to the growing literature on political institutions and international investment. The results aim to inform both theoretical debates and practical policy design in emerging markets.

Keywords: Foreign direct investment, Democracy scores, Political stability, Türkiye

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UNCERTAINTY, ENERGY TRANSITION, AND SUSTAINABLE DEVELOPMENT: A DCC-ARDL ANALYSIS FOR SELECTED MENA COUNTRIES

Bilge Çağatay[1], Özge Demirkale[2]

This study investigates the impact of multidimensional uncertainty indicators—such as Climate Policy Uncertainty (CPU), Economic Policy Uncertainty (EPU), Energy Uncertainty Index (EUI), and the Geopolitical Risk Index (GPR)—on Sustainable Development Goals SDG 7 (Affordable and Clean Energy) and SDG 13 (Climate Action) in selected MENA countries. The primary aim of the research is to reveal the dynamic interrelationships between these uncertainty indicators and sustainability targets within the context of the energy transition process. The empirical analysis focuses on five MENA countries—Egypt, Algeria, Morocco, the United Arab Emirates, and Saudi Arabia—covering the period from 2000 to 2022. The ARDL model is employed to reveal short- and long-term relationships on a country-specific basis. In addition, the DCC-GARCH model is applied to examine the time-varying co-movement structure between the uncertainty indicators and SDG performances. This allows for an analysis of the evolution in dependency levels in the face of geopolitical and economic shocks. The results of the ARDL analysis indicate that economic and climate policy uncertainties have long-term adverse effects on SDG 13, particularly in countries with high fossil fuel dependence. The effects on SDG 7 vary depending on the diversity of energy sources in each country. The DCC analysis reveals that the correlations between uncertainty indicators and SDG performances are not constant, showing significant fluctuations during periods of geopolitical tensions and instability in energy markets. Countries such as Morocco and the UAE exhibit relatively resilient trends in their energy transition processes despite increasing uncertainties. By integrating ARDL and DCC models, this study presents an innovative approach to examining the impact of policy- and energy-based uncertainties on sustainable development goals. The application of this framework specifically to the MENA region provides both methodological and regional contributions to the literature, offering valuable insights for policymakers in managing energy transitions and developing sustainable development strategies under uncertainty.

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REGIONAL ANALYSIS OF OVEREDUCATION IN TÜRKIYE

Bilge Eriş Dereli[1], Narod Erkol[2]

Since the early 2000s, Türkiye has witnessed a substantial rise in educational attainment; however, the demand for highly educated labor has not kept pace, leading to widespread overeducation. This mismatch results in the underutilization of human capital, reduced economic efficiency, and increased labor market dissatisfaction. Despite significant regional disparities in economic indicators, educational attainment, and labor market dynamics, regional studies on overeducation in Türkiye remain limited. This study examines overeducation in Türkiye at the NUTS2 level, addressing two key research questions: (i) whether significant regional disparities exist in overeducation rates and (ii) what regional factors contribute to these differences. Using cross-sectional Household Labor Surveys from 2014 to 2023, separate fractional logit models are estimated for females and males. The findings indicate persistent regional disparities in overeducation. Urban areas experience labor market mismatches, while underdeveloped regions face emerging challenges. Female overeducation is more volatile due to oversupply and limited opportunities, whereas male overeducation remains relatively stable but persistent. These insights highlight the need for region-specific policies to address educational mismatches and enhance labor market efficiency.

Keywords: Overeducation, Regional disparities, Fractional logit
JEL Codes: C25, J24, R23

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HOW DOES MORTGAGE DEBT AFFECT HOUSEHOLD CONSUMPTION? MICRO EVIDENCE FROM TÜRKİYE

Z. Bilgen Susanlı[1]

This paper aims to provide micro-level evidence on how mortgage debt influences household consumption behavior in Türkiye. By drawing on data covering the Household Budget Surveys 2022, this study aims to answer the following question: Does the non-housing consumption spending of Turkish households differ between mortgage holders and non-holders? This is especially important for the case of Türkiye due to the continuous decline in homeownership rates from 61.1 percent in 2014 to 56.1percent in 2023 as well as the sharp drop in the share of mortgaged home sales, which fell from 39.8 percent in 2013 to 17 percent in 2024. Theoretically, there are two opposite effects of a mortgage loan on household consumption. On one hand, having a mortgage loan reduces the uncertainty about how much one needs to save toward a future down payment when one finds a house to buy. This reduced uncertainty would lower the need for households to save more. On the other hand, monthly payment out of a fixed household budget may require the households to cut back or postpone their spending. Hence, the net effect is ambiguous. Addressing the potential endogeneity of having a mortgage, preliminary findings indicate that households with a mortgage tend to consume more compared to those without a mortgage. This supports the idea that having a mortgage reduces the uncertainty households face about how much to save each month and thereby allowing them to increase their consumption expenditure.

Keywords: Household consumption, Türkiye, Mortgage loans, Home ownership

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HOUSEHOLD INCOME, CONSUMPTION PATTERNS, AND CARBON EMISSIONS:
EVIDENCE FROM TURKISH HOUSEHOLDS

Bingül Satıoğlu[1]

There is a growing body of interest investigating the relevance of household socio-economic characteristics such as income level, lifestyle, and consumption habits on patterns of household emissions. The ongoing literature provides an evidence-based framework for addressing the justice dimension of climate change mitigation policies. This study contributes to this research agenda from Türkiye via analysis of the relationship between household disposable income, consumption expenditure patterns, and associated CO_2 emissions between 2015 and 2022. It combines micro-level data from the Household Budget Survey (HBS) provided by the Turkish Statistical Institute (TurkStat) with product-level emission intensity data from the environmentally extended multi-regional input-output (EE-MRIO) database EXIOBASE3. Using a consumption-based emission accounting approach, household expenditures are matched with corresponding emission intensities to estimate CO_2 emissions. Inequalities in income, consumption, and emissions are assessed using the Gini coefficient, and emissions are analyzed by income deciles across key consumption categories such as housing, food, and transport. The findings indicate a rising trend in inequality over the sample period, with Gini coefficients for income (0.37), consumption (0.40), and emissions (0.34) all reaching their peak in 2022. My results also indicate that while the top income decile accounts for approximately 20% of total household emissions, the bottom income decile is responsible for only 5%. Moreover, about 85% of emissions in the lowest income group stem from housing and food expenditures, compared to roughly 56% in the highest income group. The share of transport-related emissions in the top income group is nearly three times that of the bottom group. As the first comprehensive study on trends in household emissions in Türkiye, this study highlights the critical importance of designing climate policies that are not only effective in reducing emissions but also socially equitable and income sensitive.

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HOW DOES COVID-19 AFFECT THE STUDENTS' EXPERIENCES AND EXPECTATIONS? DOES PANDEMIC REALLY MATTER?

Deniz Karaoğlan Yurtseven[1], Burcu Düzgün Öncel[2]

This study examines the factors which possibly affect the probability of change in students' future education and occupation plans after the COVID-19 pandemic in Türkiye by using 2022 wave of Child Research Survey, prepared by Turkish Statistical Institute (TURKSTAT). In this study, we focus on the respondents between 13-17 years old who are enrolled in education. We also investigate the association between the obstacles the students face during pandemic and parents' socio-economic status, as well as household characteristics, together with the children success at school. Bivariate probit estimation results suggest that changing future plans and having difficulties during pandemic are highly correlated. We find suggestive evidence that children with more-educated mothers are less likely to have these difficulties. Moreover, the prevalence of these difficulties significantly decreases as household income level rises and children from more crowded families are more likely to have difficulties during the pandemic. Regarding the child's change in future plans, bivariate probit results suggest that father's completed education level plays no significant role about students' expectations, whereas mother's education level does. We also find suggestive evidence that as household income level rises, probability of changing plans about the future decreases. Interestingly, if the student reports that he/she is usually unhappy or he/she has poor health status; the probability of both changing future plans and having difficulties during pandemic significantly increase, controlling for all other factors. The same interesting result is valid when we control for child's success at school: The more successful is the student, the less problems she/he faces during the pandemic. Therefore, we conclude that the students' current mood and current success at school are also essential factors that explain the variation in future plans.

Keywords: COVID-19, High School Students, Expectations, Household Characteristics, Türkiye

JEL Codes: I10, I20

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RELIGIOUS ADHERENCE AND FEMALE LABOR FORCE PARTICIPATION: EVIDENCE BASED ON FAMILY STRUCTURE IN TÜRKIYE

Burcu Düzgün Öncel[1], Sinem Sefil Tansever[2]

We examine the relationship between religious adherence and female labor force participation in Türkiye, with a focus on the mediating role of family structure. We use Family Structure Survey (2021) by Turkish Statistical Institute (Turkstat). Key indicators of religious adherence such as participation in religious marriage ceremonies, voting behavior influenced by religious beliefs, and the strength of religious practices are examined in relation to female labor force participation. The analysis also considers how household size and the educational level of the household head correlate these relationships. The findings reveal that religious practices and beliefs are significantly correlated with labor market decisions of females, and these effects are moderated by family structure characteristics. We believe that this study may provide a detailed understanding of the interaction between religious and socio-economic factors in influencing labor market conditions especially for females in Türkiye, offering valuable insights for designing specific social and economic policies

Keywords: Religious adherence, Family structure, Female labor

JEL Codes: C21, J12, J19

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UNEVEN TERRITORIES: SPATIAL PERSPECTIVES ON MULTIDIMENSIONAL POVERTY IN TURKEY[1]

Burhan Can Karahasan[2], Bilge Eriş Dereli[3], Burcu Düzgün Öncel[4], Tolga Aksoy[5]

Poverty has been extensively analyzed on monetary grounds. However, neglecting non-monetary dimensions of poverty measurement can result in under-estimation of the actual poverty problem. Human capital, living standards, housing conditions and environmental concerns are the primary candidates to describe non-monetary dimensions of poverty measurement. In this research, we focus on the non-monetary aspects of poverty and construct a regional multidimensional poverty measure for the Turkish regions. Following the methodological developments, we build a unified multidimensional poverty index (MPI) by using the Survey on Income and Living Conditions (SILC). Our objective is threefold: We aim (i) to spatially visualize MPI for different segments of the population (e.g., socio-economic, demographic differences etc.), (ii) to question the driving factors behind MPI's distribution (e.g., regional growth, structure of regional growth etc.) and (iii) to question the spatial varying impact of regional factors on the variation of MPI (e.g., geographical and economic heterogeneities etc.). Our preliminary results on the spatio-temporal evolution of MPI confirm the very well-known west-east duality in Turkey. More remarkably, our decomposition analyses give clues on the deprivation differences of population as different segments of the population suffer differently from the non-monetary poverty problem. Next, our spatial modelling exercises show that regional growth is not sufficient by itself to balance the regional MPI differences. Moreover, we find-out that spatiality matters as there are visible spatial networks for the regional variation in MPI figures. Finally, our heterogeneity analyses validate the existence of spatial heterogeneity, as impact of regional factors are not spatially stable considering geographical and economic differences.

Keywords: Decomposition, Heterogeneity, MPI, Spatial, Turkey
JEL Codes: I32, R11, R12

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POLITICAL RISK AND INVESTMENT PERFORMANCE – A CHANGING LANDSCAPE?

Camilla Jensen[1], Canan Yıldırım[2], Semih Emre Çekin[3]

In this paper we investigate the impact of political and geopolitical risk for investment performance in the largest Turkish firms. The data is published by the Istanbul Chamber of Commerce and is assembled as a longitudinal panel potentially following individual firms over the full period of study: 1997-2024.

During this period both the Turkish macroeconomy and the global economy have undergone significant structural changes. We argue and test our main hypotheses (1) that both our constructs of risk (political and geopolitical) are detrimental to the investment performance of all firms; (2) that 'ordinary' political risk is a greater liability for foreign relative to domestic held firms; and (3) that the balance between traditional political risk (i.e. identified as the largest liability of foreign investors) and geopolitical risk (a general liability for exporting firms) has shifted towards that of the latter after the Global Financial Crisis. Yet the period preceding it (2001-2008) was an unusual period in Turkish politics resulting potentially in perceptions of low risk and high investment performance among all firms.

Econometrically the main challenge is to disentangle the impact of our risk indicators from the general time trend adopted in the GMM modelling framework. Several robustness checks are therefore conducted towards testing the above hypotheses, including a structural break analysis and a substitution of a general time trend with a variety of other macroeconomic indicators.

Preliminary results demonstrate that political risk is more detrimental to the investment performance of firms in a large open economy such as the Turkish and relative to geopolitical risk. Wholly owned subsidiaries are always more susceptible to poor investment performance owing to any source of political risk and over time. Our preliminary results also suggest that foreign capital participated firms (aka joint ventures) outperform other ownership constellations under high or rising geopolitical risk.

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WHY ARE TURKISH CONSUMERS ALWAYS RELATIVELY OPTIMISTIC ABOUT THE ECONOMIC CONDITIONS IN THE NEAR FUTURE

Cem Başlevent[1], Nebile Korucu-Gumusoglu[2]

The Consumer Tendency Survey (CTS) is a monthly survey carried out with the cooperation of the Turkish Statistical Institute (TurkStat) and the Central Bank of the Republic of Turkey. According to TurkStat documentation, the survey aims to measure the present situation assessments and the near future expectations of consumers regarding the economic/financial situation of their households and the Turkish economy in general. In addition, the survey aims to determine the consumers' expenditure and saving tendencies for the year ahead. The CTS is conducted in compliance with the Joint Harmonised European Union Programme of Business and Consumer Surveys, and the survey data is shared with the European Commission Directorate-General for Economic and Financial Affairs. Currently, close to 5000 individuals aged 16 and over are surveyed in the implementation of the survey, and 18 different indices are calculated from the CTS micro data. The time series data set that contains all of these indices is publicly available with observations going back to October 2012. While the CTS provides valuable information to policy makers, the Central Bank, market researchers, and academia, it also provides the input used for the calculation of the well-known Consumer Confidence Index (CCI). The observation that it serves as a pretty good indicator of voter preferences in Turkey has made the CCI more popular in the past few years. In some periods, however, it is more difficult to make sense of the fact that the CCI remains at reasonable levels despite the occurrence of political developments and judicial processes that lead to volatility in financial markets.

The aim of this study is to discuss the observed link between the CCI and major events such as the COVID-19 pandemic and the 2023 elections that have impacted the economic perceptions of the Turkish society, and to take a closer look at the questionnaire of the CTS in an effort to better understand the apparent optimism of the Turkish people in the sense that their expectations for the year ahead are almost always more positive than their assessments of the current financial situation of their households and the state of the Turkish economy. Using the above-mentioned monthly data set, we make use of graphs, descriptive statistics, and the correlations between different indices and economic indicators to gain insights into the formation of the economic perceptions of individuals. Our preliminary assessment of the observed patterns is that the optimism of Turkish consumers is primarily a reflection of their belief that the worst is behind them.

Keywords: Consumer tendencies, Consumer confidence, Turkey
JEL Codes: D12

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EXPORT SURVIVAL DYNAMICS IN TÜRKİYE: A FIRM-LEVEL ANALYSIS[1]

Cemre Küçük Pekmezci[2]

The dynamics of export participation, particularly the impact of sunk cost, have been subjects of discussion for a long time. The studies conducted on various countries have shown that both entry costs and firm characteristics significantly influence the decision to engage in exporting. Despite the extensive research in this field, studies focusing on the sustainability and duration of trade following entry from the perspective of survival are relatively limited. To enhance export performance of the countries, in addition to establishing new relations, maintaining existing trade networks is also essential. Thus, it is highly beneficial to identify the characteristics of firms, destinations and products that can sustain longer periods of export.

The purpose of this study is to investigate the key determinants of export survival at the firm-destination-product level for Turkish manufacturing firms. This paper uses firm-level data from 2009 to 2019, combining TURKSTAT's Annual Industry and Services Statistics, Foreign Trade Statistics, and Annual Business Registers Framework. It employs discrete time complementary log-log model to test possible determinants of the survival. The results show that both firm, destination and product level attributes are important for duration. Although the firm-destination-product level relationships are short-lived for firms, the firms that are larger in size, those that also import to survive longer. It is also observed that the export duration is longer when the relation is established with countries that are closer, have a higher GDP, and have a trade agreement. In addition, the technological intensity of products and product diversification emerges as a significant factor influencing survival.

Keywords: International Trade, Export Duration, Survival Analysis
JEL Codes: C41, F10, F14

THE POLITICAL ECONOMY OF COLLECTIVE ACTION: LESSONS FROM/FOR ENVIRONMENTAL CONFLICTS

Ceren Soylu[1]

The dilemmas concerning collective action are central to issues around sustainability. A significant part of the related literature focuses on the role of heterogeneity in affecting the likelihood of collective action, which remains theoretically contested and empirically ambiguous. This paper studies this question by way of dissecting various dimensions of heterogeneity and sources of collective action problems. Drawing upon a review of empirical cases (from the Environmental Justice database) of collective action in the context of environmental conflicts, and the theoretical literature on collective action, we develop a theoretical framework for analyzing collective action focusing on the dynamic interplay of heterogeneity, identity, and social networks. We extend classical frameworks by modeling collective action as a dynamic, network-embedded process in which individual participation decisions are jointly shaped by heterogeneity in internal motivations (acquisitive as well as identity-affirming motives), network-based external motivations, and threshold-dependent behaviors (based on beliefs about the participation and identities of others). Building on insights from behavioral cascade theory (Granovetter; Marwell & Oliver), signaling models (Lohmann), and recent advances in social learning and diffusion over networks (Acemoglu et al.; Centola), we analyze how various forms of heterogeneity—economic inequality, heterogeneity of cost-benefit distributions, information and social heterogeneity (e.g. ethnicity)— affect both the emergence and spread of collective action, articulating the conditions under which heterogeneity facilitates or impedes collective action. Our approach highlights the dual processes of identity formation and network evolution, demonstrating that the relationship between heterogeneity and collective action is nonlinear, context-dependent, and mediated by the structure and dynamics of social ties.

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THE THERMODYNAMIC BOUND OF CAPITAL ACCUMULATION: A THEORY OF ENERGETIC DEGROWTH AND MONETARY SOVEREIGNTY

Ceyhun Elgin[1]

This paper introduces a unified theoretical framework that integrates monetary macroeconomics with the thermodynamic limits of production, offering a paradigm-shifting explanation for the structural incompatibility between fiat-based capital accumulation and planetary ecological boundaries. We argue that modern economies operate under two fundamentally distinct constraints: a thermodynamic budget, which limits real output via entropy and energy throughput, and a monetary regime, which permits endogenous expansion through institutional credibility. The contradiction between these two domains leads to systemic instability: when monetary claims grow faster than the biophysical capacity of the economy to absorb them, macroeconomic dislocation, inflationary spirals, and ecological overshoot emerge. We develop a stylized macro model in which aggregate demand is anchored not by fiscal limits, but by a maximum entropy constraint. The model introduces a thermodynamic constraint function and an endogenous monetary legitimacy variable, jointly determining the feasibility and stability of green investment trajectories. This framework generates new insights into inflation dynamics under energy constraints, the limits of green quantitative easing, and the macroeconomic design principles necessary for a degrowth-compatible transition. Our results imply that the pursuit of sustainable growth is not merely a technological or policy challenge, but a monetary-ecological contradiction requiring systemic redesign

Keywords: Monetary sovereignty, Thermodynamic constraints, Degrowth macroeconomics
JEL Codes: E12, Q57, E31

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INVESTMENT UNDER UNCERTAINTY AND THE THREAT OF NATIONALIZATION

Dimitrios Zormpas[1]

This paper considers the case of a multinational corporation who holds the option to invest in a foreign country. The company incurs the investment cost and gains access to a volatile profit flow once the project becomes operational. The cost is entirely sunk so the investor must account, not only for uncertain market conditions, but also for the threat of nationalization by the local government. By employing a dynamic model that incorporates both market uncertainty and political risk we determine the optimal timing for investment and nationalization, as well as the appropriate scale of the investment. We show that a reduction in the nationalization cost induces earlier but also smaller investment and also earlier nationalization. Our findings provide a theoretical explanation for the empirical observation that investors do not necessarily avoid industries susceptible to nationalization. We argue that the threat of nationalization leads to premature and undersized investments, rather than deterring them entirely.

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OFFICIAL DEVELOPMENT ASSISTANCE AND RENEWABLE ENERGY CONSUMPTION IN MENA NON-OIL EXPORTING COUNTRIES: THE ROLE OF FREEDOM OF EXPRESSION

Ebaidalla Mahjoub Ebaidalla[1]

The transition to renewable energy is a pressing priority for MENA countries, particularly for non-oil exporters seeking to reduce reliance on fossil fuels, and meet global climate commitments. Following international climate agreements such as the Kyoto Protocol (1997) and the Paris Agreement (2015), developed countries have extended substantial financial and technical assistance to developing nations, to support their transition to clean energy and mitigate climate change. Many empirical studies argued that ODA plays crucial role in promoting green energy transition. Like many developing regions, non-oil-exporting MENA countries have received significant official development assistance (ODA). However, despite this external support, renewable energy consumption remains limited in these countries, largely due to continued dependence on fossil fuels and weak domestic governance. Institutional factors, such as low transparency and limited freedom of expression, may undermine the effectiveness of foreign aid in promoting renewable energy. Open societies, where citizens can freely access and share information, tend to foster greater accountability and more effective energy policies. Yet, the moderating role of freedom of expression in shaping the impact of ODA on renewable energy consumption (REC) has received little attention, particularly in the MENA region. To address this gap, this study investigates the impact of ODA and freedom of expression on REC in MENA non-oil-exporting countries. Specifically, it addresses the following questions: (i) What is the impact of ODA on renewable energy consumption in MENA non-oil-exporting countries? (ii) To what extent does freedom of expression enhance the effectiveness of ODA in promoting renewable energy?

The study employed panel data covering seven MENA non-oil-exporting countries over the period 1991–2022. These countries include Egypt, Jordan, Lebanon, Morocco, Syria, Tunisia, and Yemen. Data on REC and macroeconomic variables are gathered from the World Bank's World Development Indicators (WDI), while data on freedom of expression are sourced from the Varieties of Democracy (V-Dem) dataset. The models were primarily estimated using the Pooled Mean Group Autoregressive Distributed Lag (PMG-ARDL) approach, with additional estimations conducted using Fully Modified Ordinary Least Squares (FMOLS) and Dynamic Ordinary Least Squares (DOLS) to ensure the robustness of the results.

The findings indicate that ODA has a positive and significant effect on green energy consumption in MENA non-oil-exporting countries. Additionally, the results suggest that freedom of expression strengthens this positive relationship, acting as a key institutional factor that enhances the effectiveness of ODA. Estimates obtained from alternative approaches, including FMOLS and DOLS, are consistent with those from the PMG-ARDL model, reinforcing the robustness of the results. These outcomes highlight the importance of aligning development assistance with institutional openness to support the expansion of renewable energy. The study concludes with some policy recommendations aimed at improving the effectiveness of ODA and institutional quality to accelerate the transition to clean energy in the region.

Keywords: Official development assistance, renewable energy, freedom of expressions, MENA

JEL Codes: F35, Q42, D72,

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TALLER AND HIGHER IN STATUS: THE IMPACT OF HEIGHT ON OCCUPATIONAL PRESTIGE SCORES IN TURKEY

Ekin Çalıcı Kıyak[1], Sezgin Polat[2]

Height is a comprehensive health indicator that reflects both socio-economic and genetic influences. Genetic inheritance and childhood conditions shape the association between adult height and labor market outcomes, a topic of considerable interest due to its implications for intergenerational transmission of inequality. In this study, we used cross-sectional data from the Turkish Health Survey (THS) to examine height-based occupational classification within a developing country context that has experienced a positive secular trend in adult height between generations. This is the first study to investigate the relationship between occupational status - a metric that encompasses both income and social dimensions of an occupation - and height in Turkey. Using an ordinary least squares (OLS) approach, we find that being taller has a significant positive effect on occupational prestige scores, even when controlling for various physical, mental and socioeconomic factors, as well as selective participation in the labor force.

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GREENFIELD FDI AND GREEN ECONOMIC GROWTH IN EUROPE: A SEMIPARAMETRIC ANALYSIS USING THE MALMQUIST- LUENBERGER INDEX

Elena Ketteni [1], Constantina Kottaridi [2], Andreou Sofia[3]

EU countries are committed to achieving the Sustainable Development Goals (SDGs) by aligning economic progress with environmental sustainability. Central to this strategy is the concept of *green economic growth*, which aims to drive economic development while conserving natural resources, minimizing pollution, and advancing social welfare in a carbon-neutral manner. This study enhances the theoretical understanding of green growth by introducing a new method for evaluating the green economic performance of 40 European countries between 2004 and 2022. It utilizes the Malmquist-Luenberger Global Productivity Index (GML), considering GDP as a desirable output and emissions as undesirable. It also examines how *greenfield foreign direct investment (FDI)* investment in new environmental, social, and governance-oriented projects—impacts green growth. A semiparametric approach (Partially additive linear model, estimated via marginal integration) assesses nonlinear effects and explores mediating factors such as corruption, governance, and openness. Key findings reveal that, on average, most countries demonstrated green productivity gains, with Ireland, Iceland, and Switzerland leading. In contrast, countries like Montenegro and Malta showed losses. Efficiency change metrics suggest that many EU countries are catching up to best practices in green policy. However, technical progress varies, with some Western countries showing signs of stagnation. The impact of greenfield FDI on green growth is nonlinear. While initial FDI inflows promote green economic growth, this effect weakens after a certain threshold. For EU countries, the relationship resembles a third-degree polynomial: positive at low and high levels, but negative at mid-levels of investment. In contrast, in non-EU European countries, greenfield FDI has a more straightforward diminishing return effect. Energy use also plays a complex role. In general, high-energy use negatively impacts green growth, though in EU countries it can sometimes be positive due to better energy regulation. Institutional quality—particularly corruption control and regulatory quality—significantly boosts green growth in non-EU Europe, while trade openness is key in the EU group. In conclusion, greenfield FDI is a valuable tool for sustainable development, but its effects are not uniform across Europe. The EU should strengthen institutional frameworks, promote collaborative green innovation, and support targeted investment in renewable technologies. Addressing disparities in macroeconomic conditions and ensuring policy coherence across countries are crucial to achieving sustainable green economic growth throughout the region.

Keywords: Green growth, Greenfield FDI, GML index, Semiparametric estimation
JEL Codes: C14, O44, O43, O47, Q5

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DILEMMAS OF SUSTAINABILITY AND INDUSTRIAL DEVELOPMENT IN TÜRKİYE

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This research aims to investigate Türkiye's industrial-based development trends and sustainability phenomenon. Within the scope of the paper, the industrialization policies carried out in Türkiye and the trends of new industrialization policies defined in the 21st century will be considered based on political economy approaches. In this period also globalization has gained a new dimension; all facts increase the importance of policies that will shape the scope of industrialization trends. Under these circumstances, SDG 9 (Industry, Innovation and Infrastructure)-based sustainable development targets pose specific challenges for Türkiye as an upper-middle-income country. In this context, multivariate analysis methods will be utilized for the post-1990 period. The global value chain indicators, UNIDO SDG 9 Industrial Tracker data, and SDGs index data are considered for the analysis. The main finding is that the decoupling remains weak with the increase in the value-added of the manufacturing industry and environmental degradation. The impact of employment and human capital-based data on the performance of the SDG 9 target remains weak. This situation reveals that Türkiye's sustainable industrialization targets and the international competitiveness conditions cannot be achieved simultaneously. Overall, the political economy implications of current global political economy trends for Türkiye comprise specific features that will be discussed in detail.

Keywords: Industrialization, Sustainable development goals and multivariate analysis, Türkiye and industrialization, Political economy of industrialization

JEL Codes: O5, L6, C3

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THE CONNECTION BETWEEN ENERGY TRANSITION AND ENVIRONMENTAL SUSTAINABILITY: EVIDENCE FROM SELECTED MENA COUNTRIES

Emrah Eray Akça[1], Ayşegül Han[2]

As a hot topic issue, environmental sustainability refers to responsible management of natural resources deployed for current needs without compromising of the ability to meeting for future generations' needs, requiring the protection and promotion of ecological system in an attempt to warrant a sustainable environment, notably in terms of health and wellbeing, for both current and next generations. In this context, many nations have ascertained and initiated notable strategies in accordance with the requirements of environmental sustainability, particularly in the framework of the Sustainable Development Goals of the United Nations. For that reason, this research aims to detect the role of energy transition, which is accepted as one of the most indispensable components of sustainable development goals, on the environmental sustainability for selected MENA countries during the period 2000-2023. For this purpose, we have constructed an empirical model in which our examined variable is environmental sustainability, represented by the ecological footprint. Our main explanatory variable is energy transition, measured with several indicators like carbon emissions, carbon intensity, energy intensity, clean energy investment, and combustible renewables, as reported by the International Energy Agency. Thanks to these energy transition indicators, we composed an energy transition index through Principal Component Analysis. The research also has included several control variables in the empirical model, such as economic growth, natural resources, renewable and non-renewable energy consumption, and urban population. The prior test results have prompted us to perform a second-generation panel cointegration technique. In this context, we conducted a second-generation cointegration analysis through the Durbin-Hausman test proposed by Westerlund (2008) and confirmed the long-run cointegration relationship among variables. Accordingly, we further estimated the long-run coefficients in the framework of Panel Autoregressive Distributed Lag (Polled Mean Group) modelling developed by Pesaran et al. (1999). Empirical findings corroborate the supporting role of energy transition in improving environmental sustainability. Renewable energy consumption contributes to environmental sustainability in contrast to the influences of economic growth and non-renewable energy consumption. Furthermore, the panel causality test of Emirmahmutoglu and Kose (2011) detects a one-way causality relationship from energy transition, renewable energy consumption, and urbanization to environmental sustainability, and a two-way causality relationship among natural resources and environmental sustainability. The research outcomes help provide notable insights into what should be traced to warrant environmental sustainability.

Keywords: Energy transition, Environmental sustainability, MENA countries

JEL Codes: N55, O13, Q56

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LIGHTS ARE FLASHING RED! UNRAVELLING THE PERSISTENT EFFECT OF TERRORISM ON AFRICA'S ECONOMIC ACTIVITY

Evi Tsavou[1], Sotiris K. Papaioannou[2]

We examine the impact of terrorism on economic activity in Africa over the period 2000 to 2020, using geocoded data aggregated at the $0.5° \times 0.5°$ grid-year level. Nighttime light emissions serve as a proxy for local economic performance. We provide robust evidence that terrorist activity significantly reduces economic output. Our panel event-study estimates identify both short- and long-term effects, showing that economic activity remains substantially below pre-attack levels for up to four years after the attacks. Importantly, we find that these adverse effects are not uniform across space or institutions: the economic consequences are significantly more pronounced in highly urbanized areas and in countries governed by authoritarian regimes. These findings suggest that terrorism may deepen existing development disparities and pose a persistent threat to economic stability in already fragile contexts. Our results underscore the need for context-specific policy responses, including institutional strengthening, infrastructure investment, and support for urban centers disproportionately affected by terrorism. By highlighting the localized and persistent economic costs of terrorism, this study contributes to the broader understanding of the development-security nexus in low-income regions.

Keywords: Terrorism, Economic activity, Nighttime lights, Africa, Event study, Subnational data
JEL Codes: O55, D74, R1, H56, P16, C23

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HOUSING DEBT AND LABOR FORCE PARTICIPATION IN TÜRKIYE

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This paper analyzes the potential impact of housing loan usage on individual labor force participation choices of household members. In particular, we analyze labor force participation choices of individuals, whose households experience mortgage, interest-bearing loan repayments and rent payments arrears unexpectedly. In this respect, we use the 2021-2024 period panel data from the Survey of Income Distribution and Living Conditions (SILC) produced by the Turkish Statistical Institute (TURKSTAT). There might be a simultaneous relationship between households' housing loan usage decisions and their labor force participation choices. We take advantage of selected questions from the SILC like loan arrears that indicate an exogenous shock to overcome potential simultaneity bias in the empirical analysis. We assume that arrears on mortgage, interest-bearing loan repayments and rent payments in the last 12-months period unexpectedly (failure to pay as planned) implies an exogenous shock. Our empirical findings support the hypothesis that households' failure to pay to repay their debts as planned raises the probability the household members' joining the labor force. Furthermore, the econometric analysis reveals that if the household experiences mortgage, utility bills or hire purchase installments arrears, the household head's children (son/daughter) are more likely than the rest of the household members to join the labor force to support household income. As a result, according to our empirical findings the additional worker effect stems mainly from the household head's children.

Keywords: Housing debt, Housing loan arrears and labor force participation
JEL Codes: D12, D14, J21, R21

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AN ASYMMETRIC REVISIT TO THE CRIME AND INEQUALITY NEXUS

Fadime İrem Doğan[1], Pınar Deniz[2]

There is a strand of literature devoted to the relationship between crime and inequality which lies at the center of major theoretical approaches, such as the cost-benefit analysis by Becker (1968), the theory of social disorganization by Shaw and McKay (1942), and the strain theory by Merton (1938). While Becker (1968) uses the cost-benefit analysis of engaging in crime, Shaw and McKay (1942) attribute the rise in crime rates to the weakening of social control within a society; and Merton (1938) utilizes the impact of the relative success of individuals on the frustration, which may lead to the rise in crime rates. These foundational theories demonstrate the connection between individual decision-making, societal structures, and crime. As reported in the literature, economic inequality has shown varying effects on crime rates. This study aims to empirically investigate the asymmetric relationship between crime rates and income inequality in EU states for the period of 2003-2022. Hence, our approach disregards the standardization of a linear link and proposes a novel methodological approach to investigate the issue accounting for nonlinearities. Methodologically, we utilize Kourtellos et al. (2016) structural threshold regression (STR) model to account for nonlinearities. Our analysis reflects the existence of nonlinearity regarding the income inequality and crime rates nexus.

Keywords: Crime, Regional economics, Asymmetric analysis, Income inequality, the EU

JEL Codes: K13, R1, Z13

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WHY DOES SUSTAINABLE FINANCE NOT FLOW INTO THE GLOBAL SOUTH?

Fatih Yılmaz[1], Akın Çilekoğlu[2]

Despite the substantial growth observed in private sustainable finance flows in recent years, they have been heavily concentrated primarily in major advanced economies. In contrast, emerging markets and developing economies—the Global South—face significant barriers to accessing much-needed private funds for their decarbonization efforts. In this paper, we empirically analyze the main bottlenecks affecting the flow of these funds globally. Our analysis shows that these barriers are primarily structural, including the underdevelopment of financial systems, high investment and climate-related risks, and insufficient climate policy initiatives in the Global South. Moreover, the complex and stringent requirements of the Environmental, Social, and Governance framework and sustainability reporting further complicate efforts to attract global private capital. Addressing these challenges will require a combination of long-term reforms and immediate financial interventions. Strengthening financial systems, developing inclusive green taxonomies, and fostering North-South collaboration are critical steps to unlocking sustainable finance for the Global South. In the short term, concessional finance and innovative blended finance mechanisms are crucial for de-risking investments and mobilizing private capital for decarbonization in developing countries.

Keywords: Sustainable finance, Global South, Enablers and Barriers

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INEQUALITY, GROWTH AND DEVELOPMENT: AN EMPIRICAL INVESTIGATION ON THE FRAGILE FIVE ECONOMIES

Fırat Cem Doğan[1] Nuran Akdağ[2] Nida Günsan[3]

This study analyzes the relationship between income inequality, economic growth, and socio-economic development in the Fragile Five economies Türkiye, Brazil, India, Indonesia, and South Africa over the period 2000–2023. These emerging market economies are characterized by macroeconomic volatility, dependence on external financing, currency fragility, and persistent structural weaknesses, making them a relevant context for examining how income distribution interacts with growth and development. Despite episodes of relatively strong economic growth, these countries have often struggled to convert expansion into inclusive and sustainable development outcomes. The study has two main objectives. First, it examines whether income inequality constrains economic growth in fragile emerging economies. Second, it evaluates whether sustained growth has translated into broader human development or has instead been accompanied by rising disparities. In line with the growing emphasis on inclusive growth in international policy debates, the study also assesses the effectiveness of growth-oriented macroeconomic policies in reducing inequality and fostering socio-economic development. The empirical analysis is based on a balanced panel dataset covering the period from 2000 to 2023. Data are obtained from World Development Indicators, the Standardized World Income Inequality Database, Human Development Index, and the IMF's World Economic Outlook. Key variables include the Gini coefficient, GDP per capita growth, HDI scores, and control variables such as inflation, public expenditure, and trade openness. The stationarity of the variables is tested using the Pesaran (2007) CIPS panel unit root test. The study follows a two-stage empirical approach. In the first stage, panel data models are estimated to identify the determinants of economic growth, with the Hausman test supporting the use of a fixed effects specification. Driscoll–Kraay robust standard errors are employed to address heteroskedasticity, autocorrelation, and cross-sectional dependence. In the second stage, the Dumitrescu–Hurlin panel Granger causality test is applied to examine causal relationships. The results show that income inequality and inflation have a statistically significant negative effect on economic growth, while trade openness, public expenditure, and human capital contribute positively. Causality findings reveal unidirectional causality from inequality, human capital, public spending, and trade openness to economic growth, and bidirectional causality between inflation and growth. Overall, the findings indicate that unequal income distribution and macroeconomic instability constrain growth, whereas investments in human capital, institutional capacity, and external integration enhance growth potential. Nevertheless, persistent structural challenges such as currency risk, productivity constraints, and fragile macroeconomic Fundamentals continue to limit the Fragile Five economies' ability to achieve inclusive and sustainable growth.

Keywords: Income inequality, Economic growth, Fragile Five, Development, Panel data
JEL Codes: E24, E60, H50, C5

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THE RELATIONSHIP BETWEEN ENVIRONMENTAL QUALITY AND ECONOMIC GROWTH IN MENA COUNTRIES WITHIN THE FRAMEWORK OF LCC HYPOTHESIS

Füsun Çelebi Boz[1]

Apart from the consumption side of natural resources, the production side also comes to the fore. The situation we call the loading capacity factor can be described as an indicator of the measurement of environmental quality in a sense. It indicates that the loading capacity factor decreases in the early days of economic development and increases after the income exceeds a certain threshold. At the same time, whether the loading capacity factor is greater or less than 1 indicates that environmental conditions are sustainable or unsustainable. In this context, the validity of the LCC hypothesis is tested in the study by considering the variables of economic growth, globalization and trade openness for MENA countries. In the study covering the years 1980-2022, after the determination of the cross-sectional dependencies, the panel Fourier unit root test including the factor structure was applied and then the validity of the LCC hypothesis was evaluated in different quantiles with the panel quantile method taking the boostrap method into account. In line with the results obtained, it can be said that the LCC curve in MENA countries is U-shaped and that as the share of renewable energy increases, environmental quality increases in the specified.

Keywords: LCC, Economic growth, Panel quantile

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MONETARY MESSAGING: EVALUATING THE EFFECT OF CBRT COMMUNICATION ON INFLATION EXPECTATIONS

Gökhan Şahin Güneş[1]

This study analyzes whether the verbal communication of the Central Bank of the Republic of Türkiye has impact on the inflation expectations. By providing economic data and the statements accompanying the interest rate announcements to ChatGPT, the paper, first, quantifies the tone of each policy rate decision between 2015 January and 2024 December. Then, the study examines the impact this tone on the inflation expectations of the market participants, real sector, and households. The findings are twofold: (1) in the whole sample, only the inflation expectations of the real sector responses to the communication of the CBRT, (ii) in the time-varying analysis, the inflation expectations of the real sector decreased with the communication since 2023; however, the inflation expectations of the households increased between 2018 August and 2022 September.

Keywords: Artificial intelligence, Central bank communication, Inflation expectations
JEL Codes: E31, E52, E58

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INSTITUTIONAL TRANSITIONS AND RESOURCE CAPTURE: THE VOLATILITY OF POLITICALLY CONNECTED FIRMS

Gül Berna Özcan[1]

The paper develops a new conceptual framework which integrates the Resource Dependence Theory with the analysis of political power. We conceptualize a firm's ability to negotiate with political actors and to obtain benefits from them through a mutual dependency and examine their relations in three domains: structural conditionality, constraint absorption, and risk of shocks. The evidence comes from the Borsa Istanbul Main Index during two event windows with sharply contrasting outcomes. The findings highlight that the political leaderships follow strategies of resource capture when they instigate a major institutional transition. Firms' engagement to power building follows diverse strategies. Connected firms are more volatile and stand on fickle resource advantages.

Keywords: Adverse shocks, Dominant party regimes, Emerging markets, Listed firms, Political ties

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COMPETITIVE SURVIVAL OF NATIONAL CHAMPIONS IN EMERGING MARKETS: EVIDENCE FROM TURKEY'S TOP INDUSTRIAL ESTABLISHMENTS

Halit Sağlam[1], Murat Çokgezen[2], Gül Berna Özcan[3]

Using the resource-based approach and the cox regression analysis, this paper investigates the factors that influence large industrial firms' competitive survival. The results of the analysis, based on the ISO data set of Turkey's 500 largest establishments between 2000 and 2019, show that firms that are older, exporter, group-affiliated, foreign-owned, operating in more innovative industries and located in relatively less agglomerated regions are more likely to remain in the top list. However, for the largest firms, the significance of most resource capabilities diminishes, whereas the importance of belonging to a business group and of being an exporter remains essential. The paper articulates implications of finding for policy makers and managers.

Keywords: National champions, Competitive endurance, RBV, Emerging markets, Turkey

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GENDER INEQUALITY IN EDUCATIONAL MISMATCH AND ITS IMPLICATIONS FOR EARNINGS OUTCOMES IN THE TURKISH LABOR MARKET

Gülbin Erdem Karahanoğlu[1]

This study provides a comprehensive empirical analysis of educational mismatch and its implications for earnings across the wage distribution in the Turkish labor market. Utilizing Turkish Household Labor Force Survey (THLFS) data spanning 2014-2020, this research addresses notable gaps in the literature, particularly the limited application of advanced econometric methods to emerging market contexts such as Türkiye. Methodologically, the first contribution of this study lies in employing Unconditional Quantile Regression (UQR) with the Recentered Influence Function (RIF) approach, thereby expanding beyond mean-based analyses to capture heterogeneous wage effects across quantiles. This technique explicitly addresses unobserved heterogeneity and provides deeper insights into how mismatch impacts vary significantly at different wage levels. Empirical findings underscore that educational mismatches including both overeducation and undereducation impose substantial and varying penalties across the wage distribution. The results indicate that wage penalties due to mismatch are not uniform, with overeducation disproportionately affecting lower-wage workers, reflecting limited opportunities for surplus skill utilization at these income levels. Conversely, the penalties for undereducation intensify towards the higher end of the wage distribution, highlighting severe implications for high-wage workers lacking formal educational qualifications matching their roles. The second contribution is decomposing gender differentials using quantile decompositions with the RIF method. The magnitude, direction and gender differentials of these mismatch penalties differ significantly depending on the specific quantile analyzed, reinforcing the importance of employing methods sensitive to distributional heterogeneity rather than relying solely on average effects.

Keywords: Educational mismatch, Gender differentials, Earnings, Unconditional quantile regression, Decomposition

JEL Codes: C31, J21, J31

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REDEFINING POVERTY: SYSTEMATIC LINKAGE OF MONETARY, PARTICIPATORY, AND MULTIDIMENSIONAL APPROACHES[1]

Gülşah Sedefoğlu[2], Merve Şahin[3]

This study conducts a systematic literature review to analyze the evolution of poverty definitions, measurement methods, and key findings. Employing a comprehensive and bias-minimizing approach, the review systematically identifies and evaluates studies addressing the questions: "What is poverty, what are its determinants, and how is it measured?". It also provides a critical and comparative analysis of poverty research across different countries, periods and methodologies. Focusing on the developmental process of poverty studies, the progression from monetary poverty approaches to participatory poverty assessments and finally to multidimensional frameworks is assessed. The review highlights a recent trend toward greater adoption of field-based quantitative research and notes how participatory insights have started to influence indicator selection, weighting, and threshold setting in multidimensional poverty measurement. However, it also identifies key gaps: insufficient integration between qualitative and quantitative methods, limited and explicit discussions of incorporating participatory findings into measurement processes, and inadequate representation of localized poverty definitions in the literature. The study proposes a more holistic view of poverty research by addressing these gaps and introducing the inclusive poverty approach.

Keywords: Poverty, Poverty measurement, Systematic literature review
JEL Codes: I32, P36, C80

THE PRIVATE SECTOR FULCRUM: HOW SECTORAL BALANCES DICTATE MONETARY POLICY EFFECTIVENESS IN THE EURO AREA

Hamid Raza[1], Malcolm Sawyer[2], Jalal Qanas[3], Jawad Khawaja[4]

This paper demonstrates that sectoral financial balances function as a crucial, previously overlooked, state variable governing the impact of monetary policy. Using quarterly data for 10 Eurozone countries over 1999Q1-2023Q3, we trace how contractionary monetary surprises, identified from high-frequency reactions to ECB announcements, affect the financial positions of households, non-financial and financial corporations, the government, and the external sector. By decomposing each sector's financial balance into income and expenditure flows, we uncover how monetary policy shocks alter sectoral income and spending, and how these changes feed into GDP via both income-side and expenditure-side channels. Our central finding is that monetary tightening is most contractionary when the private sector is in surplus (net saving), and its effects are significantly dampened when the private sector is in deficit (net borrowing). This introduces the private sector's financial position as the primary economic fulcrum upon which the lever of monetary policy acts, adding a new and critical dimension to the study of monetary transmission.

Keywords: Monetary policy, EU
JEL Codes: E12, E52, E25, E32, D33

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DEMOGRAPHIC DIVIDEND AND SUSTAINABLE DEVELOPMENT THROUGH A GENDER LENS: EVIDENCE FROM MENA COUNTRIES

Hanan AbdelKhalik Abouelfarag[1], Noha Nagi Elboghdadly[2]

This paper investigates how demographic dividends and female employment affect sustainable development in Middle Eastern and North African countries, distinguishing between oil-exporting and non-oil-exporting economies. Using the Pooled Mean Group (PMG) estimator, the study evaluates both long-run and short-run effects of the working-age population, female labor participation, economic globalization and fuel exports on the Sustainable Development Index (SDI). The results reveal clear structural differences between the two groups. For non-oil-exporting countries, the working-age share displays a long-run inverted U-shaped relationship with SDI, indicating that demographic dividends generate gains up to a threshold, beyond which additional increases cease to be beneficial. Female employment exerts a positive and significant long-run effect, enhancing sustainable development, while fuel and mineral exports slightly reduce SDI. In the short run, demographic and gender variables are largely insignificant, suggesting that demographic benefits materialize only gradually. In oil-exporting countries, the long-run relationship follows a U-shape: initial expansions in the working-age population reduce SDI, but eventually contribute positively as structural reforms and economic diversification take hold. Conversely, short-run estimates show an inverted U-shape, meaning SDI improves only up to a certain working-age threshold before immediate constraints trigger negative effects. Female employment has no long-run effect in these economies, though short-run dynamics vary. This highlights the need to enhance female economic inclusion as a pathway to sustainability and to invest in human capital to ensure that the expanding workforce contributes to sustainable growth. Overall, the findings show that demographic dividends are contingent on long-term reforms, labor-market flexibility, and gender inclusion.

Keywords: Sustainable development, Gender equality, Demographic dividend, MENA

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HUMAN CAPITAL INVESTMENTS AND CARBON EMISSIONS: EVIDENCE FROM ESG REPORTS IN THE TRANSPORTATION SECTOR

Hande Kul Gelal[1] , Pınar Gürol[2]

Controlling carbon emissions is of strategic importance in the global fight against climate change, leading countries to adopt regulatory frameworks that emphasize environmental responsibility. ESG (Environmental, Social, and Governance) frameworks have emerged as key standards for evaluating a firm's sustainability performance. Companies declare their sustainability practices through ESG reporting.

Energy-intensive sectors, particularly transportation, are major contributors to global CO_2 emissions, with maritime transport standing out as a highly carbon-intensive component of global supply chains. Accordingly, analyzing ESG disclosures of maritime transportation firms is of critical importance.

Within the ESG framework, human capital formation plays a central role in achieving sustainability objectives. When managerial decisions are effectively embedded in corporate culture and supported through systematic employee training, sustainability mechanisms become more functional and operational.

This study investigates the causal impact of employee training on carbon emissions using ESG data from maritime transportation firms obtained through Thomson Reuters. To address potential endogeneity, we employ instrumental variables (IV) approach for panel data, using the instrument diversity and opportunity policy and deriving the econometric implications from the causal graphical model. The findings reveal a robust and negative causal relationship between employee training and CO_2 emissions. This underscores the dual role of workforce development—not only as a human capital investment but also as a strategic lever for achieving environmental sustainability.

Keywords: Human capital investment, Carbon emissions, Transportation sector

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CORRECTING FOR THE MISSING RICH: IMPUTING MISSING INCOMES INTO HOUSEHOLD DATA PROPORTIONAL TO WEALTH DISTRIBUTION

Halit Güzelsoy[1], Hasan Tekgüç[2]

In this study, we propose a method that can correct downward bias in income distribution in official statistics, using publicly available data. First, we compare alternative imputation methods to correct for missing incomes of the rich in inequality estimates where official tax statistics are not available or reliable. First, we demonstrate that correcting household survey data by imputing missing incomes proportional to wealth distribution is both (i) economically intuitive and macroeconomically consistent, and (ii) yields results close to benchmark studies for Turkey for 2019. We follow Alvaredo et al. (2019) and use the average of the US, China, and France's wealth distribution (from WID) for countries where wealth distribution data is missing. Second, we validate our method with summary statistics data for Brazil and Chile from LIS. We compare our estimates for corrected Gini for Brazil and Chile with existing studies (De Rosa et al., 2024) employing official tax statistics. Our estimates approximate De Rosa et al. (2024) findings both in magnitude of correction and in trends over time. Third, we estimate corrected Gini coefficients for developing countries where no reliable tax data is available and show that official Gini estimates for disposable incomes under-estimate inequality by more than 10 percentage points in most places and times. To conclude, we propose a method to correct inequality estimates for missing incomes of the rich that requires only publicly available summary data from LIS (for income distribution), WID (for wealth distribution), and World Bank WDI for GDP and its expenditure components and no specialized software.

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ALGERIA'S ENERGY TRANSITION: TOWARD A SUSTAINABLE ENERGY MIX AND ECONOMIC DIVERSIFICATION

Sonia Kherbachi [1], Hind Slamani Dib[2]

In recent years, discussions surrounding a rapid reduction in the use of fossil fuels have taken on increasing importance in global climate debates. For resource-rich economies, this raises a central question: how decarbonisation objectives can be considered alongside development priorities. In this context, the paper explores the conditions under which an energy transition may constitute a viable development pathway, drawing on insights from well-established contributions within the economic literature.

Using a qualitative case study approach, the analysis combines public policy documents, international datasets, and peer-reviewed academic research within a structured thematic framework. The study examines how an energy model in a fossil energy–rich context interacts with macro-fiscal arrangements, processes of economic diversification, and employment dynamics. Particular attention is given to the Algerian case, which provides an informative analytical setting due to the significance of its oil and gas resources and its gradual engagement with energy transition objectives.

The paper focuses on the configuration of energy pricing mechanisms, subsidy arrangements, and investment orientations, and on how these elements relate to broader macroeconomic structures. Rather than advancing prescriptive conclusions or normative judgments, the analysis seeks to clarify key relationships, interactions, and analytical elements relevant to understanding energy transition pathways in resource-rich economies.

Keywords: Resource-rich economies, Energy transition, Economic diversification

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DO LABOR SHARES BOOST FORWARD GVC PARTICIPATION IN MANUFACTURING?

Hüseyin Alperen Özer[1], Taner Turan[2] , Halit Yanıkkaya[3]

This paper examines how labor shares across different skill levels affects forward global value chain (FGVC) participation within the manufacturing sector. Specifically, it investigates whether the labor share of different skilled workers influence FGVC, and how these effects differ by income level and technology level of manufacturing. This paper utilizes EXIOBASE-3 multiregional input output tables consist of labor compensation by skill level, value-added and GVC indicators for 44 countries from 1995 to 2022. The fixed-effects panel regression is employed to estimate the effects of labor shares by different skills on FGVC participation. Specifically, FGVC participation is measured following Koopman et al. (2014). For the full sample and developing countries, the empirical results indicate that labor share in manufacturing across all skill groups raises FGVC participation. For developed countries, only low-skilled labor share increases FGVC participation. On the other hand, the effects of labor share differ significantly considering technology level of manufacturing. Specifically, labor shares of all skill levels boost high-tech manufacturing FGVC yet do not affect that of low-tech manufacturing. This study provides novel insights into how labor share composition across skill levels shapes FGVC participation in the manufacturing sector. Importantly, these results highlight that to enhance the value-chain integration in manufacturing, policymakers should consider income level, skill composition and technology level accordingly.

Keywords: Global value chains, Labor shares, Manufacturing, Income level
JEL Codes: F11, F14, F16

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THE UNINTENDED CONSEQUENCE OF A MACROPRUDENTIAL POLICY IN A DEPOSITS MARKET

Hüseyin Öztürk[1], Tuba Pelin Sümer, Ayça Topaloğlu

This study investigates the anatomy of a macroprudential policy in Turkiye which aims at curbing dollarization in the financial system by levying certain thresholds for commercial banks to hold domestic currency deposits. While this policy has produced intended outcomes in terms of dollarization, potentially because commercial banks opt to offer marginally higher rates to large depositors, its expected support for monetary policy transmission has been weak. Our causal estimates indicate that, the implementation of the macroprudential policy widens the spreads between interest rates of different deposit sizes by up to 9%. The additional premium between deposit sizes complicates the workout of deposit channel of monetary policy transmission, as smaller deposit holders, who constitute a significant stake of household income in the country, were relatively disincentivized from saving. The results underline that the policy-maker needs to consider the potential adverse effects of macroprudential policy formulation.

Keywords: Macroprudential policy, Deposits, Difference-in-differences, Monetary policy transmission

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BURNOUT AND THE GENDER GAP: EVIDENCE FROM A MULTINATIONAL WORKFORCE IN THE UAE

İlker Kaya[1]

This study examines the gendered aspects of job burnout in the United Arab Emirates (UAE), concentrating on the reasons women may be more exposed to burnout than men in a rapidly evolving labor market. Despite male predominance in workforce participation in the UAE, female labor force involvement is progressively rising, driven by national development targets and societal reforms. This transition offers a valuable opportunity to analyze the distinct symptoms of occupational stress and burnout across genders within the specific socio-cultural and demographic context of the UAE.

Drawing from extensive literature indicating that women often experience elevated emotional and physical exhaustion, we seek to evaluate whether frequently mentioned burnout determinants—such as workload, job type, and familial responsibilities—adequately account for these gender disparities. We also investigate a new aspect: the influence of gender role expectations and perceptions of empowerment on women's experiences of work-related stress. We hypothesize that the emotional strain of simultaneously performing professional duties and familial or societal obligations may intensify burnout in women. To examine these dynamics, we will gather and analyze unique survey data from a varied sample of workers in the UAE, including both nationals and expats from diverse cultural, ethnic, and religious backgrounds. This diversity provides a crucial perspective for comprehending the variations in gendered experiences of burnout among different groups within a multicultural workforce. The survey contains specific questions about work-life balance, perceived autonomy, emotional labor, subjective views on gender roles and empowerment, and employment conditions.

This research aiming to provide both theoretical and policy-relevant contributions and seeks to clarify the factors underlying gender differences in burnout, thereby informing workplace practices and gender equity legislation specific to the region's distinct labor market. This facilitates a more profound comprehension of the interplay between gender, culture, and social norms in influencing occupational well-being in rapidly modernizing economies.

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REGIONAL PATTERNS OF FEMALE INFORMAL EMPLOYMENT IN TÜRKIYE: A DESCRIPTIVE ANALYSIS

İlkin İlke Yegek[1], Bilge Eriş Dereli[2]

A defining characteristic of labor markets in developing countries is the prevalence of informal employment, particularly among individuals not covered by any social security legislation. Women are especially overrepresented in the most vulnerable and precarious segments of informal work. As a developing country, Türkiye is no exception, and understanding the regional dynamics of female informal employment is essential for addressing gender inequality and reducing women's poverty. This study explores the regional distribution of female informal employment across Türkiye's NUTS-2 regions. Using individual-level data from the Household Labor Force Survey (HLFS) conducted by TurkStat for the period 2005–2024, the study offers a detailed descriptive analysis of this phenomenon. The analysis incorporates a range of female subsamples to uncover spatial patterns and regional disparities in informal employment, thereby providing a comprehensive understanding of the issue.

Keywords: Informality, Employment, Türkiye, Gender inequality, Regional disparities

JEL Codes: J16, J46, R23

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COUNTING LIPSTICKS: ACCOUNTING FOR PREFERENCES

Mahdi Majbouri[1]

Women's status is strongly associated with the level of development. But it is also specifically related to social norms on gender. Therefore, understanding changes in gender-related social norms is crucial in predicting the women's outcomes and eventually level of development in the future. This paper documents the change in social norms regarding how women dress in Iran. The most important contribution of the paper is the fact that it uses consumption of cosmetics as a quantitative measure for how they dress. It estimates the demand for cosmetics between 1992 and 2011 controlling for prices and a (linear and) non-linear function of income and shows that preferences for consumption of cosmetics continuously increased during the 2000s. This is the first documentation of change in women's dress in Iran.

Keywords: Institutions, Women's status, Demand estimation, Consumption of cosmetics

JEL Codes: R22, E21, O17

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EFFICIENCY PROFILES OF MENA BANKS DURING THE COVID-19 CRISIS: A TWO-STAGE DEA ANALYSIS

Manal Elkassimi[1], Khalid El Badraoui, Jamal Ouenniche

This study investigates the impact of the COVID-19 pandemic on the efficiency of 105 commercial banks across the MENA region from 2015 Q3 to 2022 Q3. Using a two-stage DEA framework, we assess overall technical efficiency (OTE), pure technical efficiency (PTE), and scale efficiency (SE) through slacks-based measure (SBM) models. The first stage applies four model specifications: general intermediation, loan-based, loan-income, and total-income perspectives. The second stage involves Simar-Wilson regressions to explore efficiency determinants, including bank-specific features, macroeconomic variables, and government response measures.

Our findings show that MENA banks maintained stable efficiency during the pandemic, reflecting institutional resilience. Borrower support policies significantly improved PTE by enhancing decision-making in deposit and lending activities. While prudential policies initially constrained loan efficiency, they positively influenced OTE and PTE in income-based models, supporting financial stability. Islamic banks outperformed their conventional counterparts in managerial efficiency, likely due to risk-sharing and strong governance. GCC banks also showed greater efficiency than non-GCC banks. Additionally, larger size, higher capital adequacy, and profitability were positively associated with efficiency, while inflation impacted income efficiency. These results underscore the importance of tailored policy measures and sound risk management in reinforcing bank efficiency amid crises.

Keywords: COVID-19, Bank efficiency, MENA, SBM, Two-Stage DEA, Simar-Wilson regression
JEL Codes: C61, G01, G21

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DIRECT ADMISSIONS INTO COLLEGE MAJORS

Maryam Yavas[1]

This paper attempts to explain the trend, in the U.S., of direct admissions into competitive majors (such as business and engineering majors) using a model of admissions and enrollment decisions for schools with known and students with unknown heterogeneous quality. Given the preference for competitive majors, students must make enrollment decisions and schools must make admissions decisions using noisy signals on student quality. Students must weigh their preference for a better university against the likelihood of eventual admission into each university's competitive major. Universities can use direct admissions to skew a student's university choice by guaranteeing otherwise uncertain admission into competitive majors. Schools may or may not benefit from the direct admissions equilibrium (as opposed to one with no direct admissions), based on signal strength and school quality. I test the model in a two-school case with the University of Wisconsin-Madison and the University of Minnesota-Twin Cities.

ADOPTION OF ENERGY TRANSITION TECHNOLOGIES AND INSTITUTIONAL DYNAMICS IN THE MENA REGION: AN EMPIRICAL STUDY

Med Wael Ben Khaled[1]

Despite possessing one of the world's highest potentials for renewable energy, the Middle East and North Africa (MENA) region has shown limited progress in transitioning to sustainable energy systems. This paper investigates the institutional drivers behind this paradox through a neo-institutionalist framework. We use a panel data from ten MENA countries (2000–2021) to empirically examine the relationship between institutional quality and the adoption of total, solar, and wind energy technologies. We employ the Vector Error Correction Models (VECM) and Impulse Response Functions (IRF) to capture the long-term and short-term institutional effects. The results reveal that institutional impacts are heterogeneous across technologies and time horizons. The analysis also identifies structural breaks around key policy shifts to highlight the temporal sensitivity of institutional influence. Our findings provide strong evidence that the energy transition in MENA is fundamentally an institutional challenge. We offer policy recommendations suggesting the need for context-sensitive, sector-specific institutional reforms to accelerate renewable energy adoption.

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GREEN TOTAL FACTOR PRODUCTIVITY AND FOOD SECURITY: EVIDENCE FROM MENA COUNTRIES

Mehmet Ali Aydın[1], Muhammet Yunus Şişman[2]

Projections indicate that the global population will reach 10 billion by 2050, necessitating a minimum 50% increase in food production to meet growing demand. This surge poses significant challenges to global food security and compels governments to implement macroeconomic policies aimed at prevention. With agricultural land declining over the past two decades and per capita availability decreasing even faster, enhancing agricultural productivity emerges as the only viable solution. While the Green Revolution of the 1960s led to remarkable gains in productivity, it also contributed to environmental degradation, including excessive energy use, climate change, land erosion, and water and air pollution. Currently, agriculture accounts for 30% of global carbon emissions and 70% of water consumption. Moreover, despite higher yields, concerns have risen over declining food quality and the presence of pesticide residues.

In response, the concepts of Sustainable Development and Green Total Factor Productivity (GTFP) have gained prominence. GTFP incorporates environmental costs and undesirable outputs into productivity assessments. Innovative technologies such as soilless farming and precision input management now offer pathways to increase productivity while mitigating ecological harm. This article employs Panel ARDL approach to investigate the nexus between green total factor productivity and food security in MENA countries. Findings imply that an increase in green total factor productivity stimulates food security in MENA countries. This research highlights the significance of environmentally sustainable productivity growth in tackling the twin challenges of rising food demand and maintaining ecological stability. Advancing eco-friendly farming methods and technologies can greatly enhance food security in MENA countries, providing a long-term solution to fulfill the nutritional requirements of future populations.

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DIRECT AND INDIRECT IMPACT OF CLIMATE CHANGE IN INDUCING MIGRATION IN MENA

Arhan S. Ertan[1], Başak Yavçan[2], Mehmet Burak Akren[3]

Extant literature on the drivers of international migration flows suffers from various pitfalls including lack of adequate measurements of volume, direction and completeness. As a result, most studies focus on a certain time period - frequently the last two decades, a small group of destination countries - predominantly OECD countries or specific forms of flows - forced or voluntary. In reality, the borders with such migration categories are blurred, destination countries are expanding with many developing countries hosting high number of migrants and the drivers have a differing impact on flows across time. In our previous work which attempted to account for some of these data related gaps (using Abel (2018) flow estimations derived from migrant stock data from 1960 to 2015), we illustrated the impact of structural drivers against environmentally induced migration. Our results pointed to geographical variabilities supporting previous work in the area as a function of both agricultural dependency and experience of the environmental tipping points at different times due to their latitudinal location.

Sub-Saharan Africa, as source of migration, is often considered an easier case to illustrate this impact – as evidenced by numerous case studies and meso-level quantitative research and as pointed out by many case studies and meso level quantitative studies. But the region extending from the Middle East and North Africa are at least equally worthy of a deeper investigation. Not only is the role of environmental drivers already provoking a lively discussion in the academic and policy circles, but the region's demographic characteristics – with countries of both low- and middle-income levels as well as its proximity to Europe – make it a very salient case deeming further investigation. Therefore, in this paper, we focus on the countries of the MENA region both as countries of origin and destination and illustrate the impact of both slow onset and rapid onset changes against the socioeconomic drivers of migration. Our results illustrate how both the direct and indirect impact of climate variability on migration differs across countries' level of economic development. The poverty-inducing impacts of climate change are already visible, leading to immobility in low-income countries. Our results have important implications on understanding current and future migration flows from and to MENA.

Keywords: Environmental drivers of migration, Migrant stock data, MENA region

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GREENER HORIZONS: UNLEASHING THE POWER OF FINANCE, GROWTH AND RENEWABLES TO CURB CARBON EMISSIONS

Mehmet Hanifi Ateş[1], Sabri Kurtoğlu[2], Canan Dağıdır Çakan[3]

The rising global temperatures and the accelerating impacts of climate change have brought issues such as global warming and environmental degradation to the forefront of academic, scientific, and policy discussions worldwide. Within the framework of the United Nations Sustainable Development Goals (SDGs), green technological innovations, renewable energy adoption, and financial development are considered critical components in mitigating global warming and limiting the rise in global temperatures to 1.5°C. These factors are also believed to play a key role in achieving the SDGs. This study investigates the impact of financial development, renewable energy consumption, and economic growth on carbon emissions (CE) in the 20 countries with the highest levels of carbon emissions. The aim is to assess how these variables contribute to environmental protection. To this end, the empirical analysis covers the period from 2000 to 2022 and employs the CIPS unit root test, Westerlund (2007) cointegration test, and the CCE-AMG estimators, all of which account for cross-sectional dependence and heterogeneity among the countries. The results obtained show that all variables are cointegrated in the long term and that renewable energy has a negative effect on environmental degradation, while financial development has a positive effect. The findings obtained show that renewable energy use and financial development will provide significant gains in terms of environmental policy.

Keywords: Carbon emissions, Renewable energy, Financial development, Panel data analysis

JEL Codes: E02, O13, Q43

[1]*The views expressed in this study are those of the authors and do not necessarily represent the official views of the Central Bank of the Republic of Turkey*

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DO HIGH SCHOOL CURRICULA MATTER FOR PERFORMANCE IN UNIVERSITIES?

Mishal Ahmed[1]

Little empirical work has been done to identify the impact of different high school curricula on performance in universities. Using a novel setting in a Middle Eastern university that admits students from the American, British, International Baccalaureate (IB) and various other high school curricula, we test for differences in several performance measures of university students. British-curriculum graduates consistently outperform all other groups across most outcomes. IB students exhibit greater dispersion: strong IB graduates match British students, while weaker IB students sort into less demanding majors and earn lower GPAs. American, Saudi, and other curricula show sizable negative differentials. The results indicate meaningful and persistent differences in university readiness across curricula, with implications for parents, schools, policymakers, and admissions offices.

Keywords: High school curriculum quality, Performance in universities, Returns to education, Human capital development, Educational attainment

JEL Codes: I21, I26

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INTERNATIONAL PUBLIC SECTOR ACCOUNTING STANDARDS (IPSAS), FINANCIAL TRANSPARENCY AND GOVERNANCE: BIBLIOMETRIC MAPPING OF A DECADE OF SCIENTIFIC RESEARCH

Mohamed Knıdırı[1], Sidi Mohamed Rigar[2]

In the last decades, the modernization of public sector accounting has been among the most important tasks for governments in promoting transparency, accountability, and efficiency. Introduction of International Public Sector Accounting Standards (IPSAS) on an accrual basis is among the reforms that adhere to New Public Management (NPM) principles. IPSAS seeks to harmonize financial reporting and enhance the quality and comparability of public financial information. However, despite widespread adoption, the actual impact of IPSAS on governance and financial transparency remains underexplored.

The paper utilizes a bibliometric analysis to plot the scientific literature that discusses IPSAS adoption, transparency, and governance relationships. 223 English language articles that are relevant to the discussion were found in Scopus and Web of Science databases. There was no time constraint. The search strategy utilized keywords associated with IPSAS, transparency, and governance, where manual screening was applied to screen topic relevance. Mirroring Casprini (2020) and Najaf et al. (2021), bibliometric analysis allowed the projection of publication trends, leading authors, and theory in this new field.

The research identifies growing academic interest in IPSAS, with a visible trend toward investigating their role in improved financial transparency, improved accountability, and ease of responsible public sector management. While the majority of studies establish a positive relationship between adoption of IPSAS and improved transparency and good governance, there are setbacks, mainly costs of implementation, institutional readiness, and technical complexity.

The research adds to debates on public sector reform and joined-up governance by giving an overview of current knowledge and potential areas of research. The findings pinpoint the relevance of IPSAS as a reform vehicle while underscoring the imperative of context-relevant strategies to enable their successful utilization.

Keywords: IPSAS, Financial transparency, Public governance, Bibliometric analysis, New public management

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BUSINESS SUSTAINABILITY WITH EMBEDDED FINANCE: A STRATEGIC APPROACH FOR SMES

Muddassir Sayeed Siddiqui[1], Junaid Rehman[2], Shahida Suleman[3], Asia Khan[4]

The concept of Embedded Finance has evolved in the recent years due to rapid financial digitization which has introduced the concept of integration the financial services into non-financial platforms. Embedded Finance is being adopted rapidly all over the world, transforming the ecosystem of small and medium enterprises. This widespread adoption of the Embedded Finance is reshaping the financial landscape of SMEs, enhancing their accessibility to financial services and streamlining the operations. Despite the growing adoption all over the world, the theoretical underpinning, explaining the strategic value is Embedded Finance in SMEs is still unexplored. Based on the findings of the literature review, this paper proposes the conceptual framework of Embedded Finance grounded in the Resource Based View (RBV). We proposed that the Embedded Finance can be conceptualized as the Valuable, Rare, inimitable and non-substitutable resource which is able to enhance the customer's experience, customer's retention, operational efficiency and firm's revenue. Based on the understanding developed in the light of literature review of financial innovation, SME finance and strategic management, we further suggest that the Embedded Finance can develop the competitive advantage for the firm when it is aligned with the internal organizational resources. Furthermore, the proposed model also suggests that helps reduce transaction cost, improves financial inclusion, and access to capital. This paper contributes to both theory and practice by prosing the novel RBV informed perspective on Embedded Finance and its implementation to gain competitive advantage.

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REBUILDING LIVES: THE ROLE OF DISPLACEMENT-ERA TRAINING IN SYRIAN WOMEN'S POST-RETURN ECONOMIC OUTCOMES

Najah Abdulhalim[1], Sara Cherqaoui[2]

This study focuses on Syrian women returnees and examines how their experiences with vocational training during displacement have shaped their ability to economically reintegrate after returning home in 2024. Using empowerment and human capital theory, the paper explores how vocational skills have supported women in rebuilding livelihoods and navigating economic uncertainty in a post-conflict setting. Many of these women participated in training programs while displaced either as refugees or as internally displaced persons (IDPs) and are now facing the challenges of return amid fragile institutions and disrupted local economies.

The research employs a mixed-methods approach, including analysis of displacement datasets, donor program evaluations, and interviews with returnee women, employers, and local stakeholders across several Syrian governorates. The objective is to understand which types of training most effective, which women were benefited the most, and how outcomes vary by location, return status, and training type. This study highlights the voices and needs of women who are often marginalized in reconstruction agendas, particularly those lacking formal support or access to stable employment. Their experiences offer valuable insight into how future programs can better support women rebuilding their lives under difficult post-conflict conditions.

The findings demonstrate the long-term impact of donor-supported empowerment initiatives and identify key factors influencing their success or failure. By documenting these reintegration trajectories, the research contributes to the design of more responsive and inclusive reintegration policies in Syria and in other contexts experiencing mass return. It provides practical recommendations grounded in the lived experiences of displaced women.

This paper aligns with the conference theme "Transforming Economies: Energy Transition, Geopolitics in International Finance, and Sustainable Growth" by examining how internationally financed development interventions specifically, vocational training translates into economic resilience and sustainable livelihoods in post-conflict Syria. It interrogates the effectiveness of donor funding within fragile recovery settings and contributes to debates on equitable growth, local integration, and the geopolitics of humanitarian finance.

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NETTING THE TRUTH: EXPLORING EUROPE'S FISH IMPORTS AND THEIR IMPACT ON THE TURKISH MARINE FISH BIODIVERSITY

Micha van Os[1], Sevil Acar[2], Nathalie Hilmi[3]

Along with the increasing demand for seafood globally, marine areas subsequently become subject to overexploitation. In many cases, the exploitation of the ocean in the form of overfishing has been proven to cause a decrease in fish population and biodiversity. In addition to these overfishing practices, many industrial fisheries generate serious amounts of pollution in marine ecosystems. Though much of these unsustainable practices can be attributed to industrial fisheries, which harvest fish on a faster scale than nature can replenish their resources, they can also be seen as the servers of society's demands. Looking at the data from the past years, it can be deduced that Europe is one of the largest importers of fish products from countries such as Turkiye. Considering that Turkiye has been criticized for its unsustainable practices in its fishing industry, it is time to deploy a broader perspective on this situation. The aim of this research is therefore to examine the impact that the fish exports to Europe have on Turkiye's marine fish biodiversity. The current paper first investigates the significance of Europe's fish imports for the Turkish fish industry. Then, the current fishing practices in Turkiye are examined by looking at two major factors: overfishing and pollution. Lastly, the changes in the overall Turkish marine fish biodiversity are studied through the change in the number of alien fish species, the changes in fish catch, and the fish migration patterns.

Keywords: Fish exports, Europe, Turkiye, Marine biodiversity, Overfishing, Marine pollution
JEL codes: Q22, Q27, Q53, Q56

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GREEN ENERGY TRANSITION AND THE IMPORTANCE OF CROSS-BORDER COORDINATION

Nikos Fatouros[1], Myrto Kasioumi[2]

Economists and policymakers have deemed green energy transition as one of the most effective tools tackling climate change. Generally, strategic interactions are playing a huge role on the effectiveness of policies regarding green energy transition. In this paper we emphasize on the importance of cross-border coordination. Our analysis expands on a standard macroeconomic model of energy policy choices, in order to take into account, the extremely important emission external effect of neighboring countries. Our findings suggest that countries are proceeding to a slow green transition because of the externalities produced by the emissions of neighboring countries. Thus, countries are stuck in a prisoner's dilemma game, while international cooperation seems to be the only way for them to move to the socially optimal equilibrium.

Keywords: Green energy transition, Coordination, Environmental policy, Prisoner's dilemma
JEL Codes: E6, Q28, Q43, Q58

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A STOCK-FLOW CONSISTENT MODEL OF THE UK ECONOMY WITH TWO-HOUSEHOLDS: POST-COVID INFLATION AND INCOMES POLICY

Oktay Özden[1], Alp Erinç Yeldan[2]

This article presents a two-household stock-flow consistent (SFC) model of the UK economy using data from the Office for National Statistics (ONS). The model explores the dynamics of post-COVID inflation with a particular focus on the interplay between inflation and income inequality, drawing on the theoretical framework of income conflict. It comprises six sectors: households (disaggregated into rentiers and workers), non-financial corporations (NFCs), monetary financial institutions (MFIs), insurance corporations and pension funds (ICPFs), the government, and the rest of the world (RoW). Employing a combination of estimation and calibration techniques, the model replicates key macroeconomic aggregates reported by the ONS between 2020 and 2023. We impose several short-term scenarios on the model to evaluate the model's capabilities to capture distributive tensions underlying recent inflationary developments.

Keywords: Stock-Flow Consistent Model, UK economy, post-COVID inflation, Income inequality

JEL Codes: E12

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ASSESSING THE ROLE OF DOMESTIC AND FOREIGN VALUE-ADDED IN SHAPING CURRENT ACCOUNT BALANCE IN THE FRAGILE FIVE COUNTRIES

Orhan Cengiz[1], Ömer Demir[2], Levent Yülek[3]

Current account balance (CAB) is a key priority for developing countries. Specifically, current account deficit (CAD) is a crucial economic issue associated with economic growth, unemployment, debt, and inflation. The import dependency of exports is a common structural drawback in developing countries. Hence, regarding the causes of CAD, the main arguments go hand in hand with the idea that the high import dependency of exports is the primary reason for CAD. However, it is assumed that as the share of foreign value added to exports rises, it causes an increase in CAD, but this still needs to be clarified. In this study, we investigate the effects of domestic and foreign value-added on CAB in the Fragile Five countries—Brazil, India, Indonesia, South Africa, and Türkiye—using annual data from 1995 to 2020. Employing the augmented mean group (AMG) estimator, which accounts for cross-sectional dependence (CSD), our findings indicate that foreign value-added in exports negatively impacts CAB, while domestic value-added contributes positively. In addition, economic growth, budget balance, and reel exchange rate are negatively related to CAB. Moreover, country-specific results also align with the panel group's findings. The current paper concludes that, along with integration into the world economy, import dependency in exports may contribute to CAD; we argue that attributing CAD solely to import dependency oversimplifies the structural complexities involved. These findings emphasize the need for nuanced policy approaches to address structural trade imbalances.

Keywords: Current account deficit, Domestic value-added, Foreign value-added, Import dependency, AMG

JEL Classification: F14, F15, F32

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NAVIGATING SUSTAINABLE DEVELOPMENT: THE ROLE OF GOVERNANCE AND CSR COMMITTEES IN MENA BANKS' SDG DISCLOSURES

Osamah AlKhazali[1], Mustafa Raza Rabbani[2]

Stakeholders increasingly view the United Nations Sustainable Development Goals (SDGs) as crucial for building a better and more sustainable future for all by 2030. However, despite the increasing focus on corporate sustainability issues, literature relating to SDG disclosures by the banking sector is still scarce. Based on this premise, we empirically examine the interplay between internal governance mechanisms, CSR committees, and SDG reporting. Employing a dataset covering 99 banks from 9 MENA countries, our results indicate that banks' involvement in the UN's SDGs is still in its infancy in the region. Our results also show that MENA banks are more committed to disclosing information related to the economic dimension, whereas the least attention is paid to the environmental dimension. The multivariate regression analyses show that board independence is positively associated with a bank's SDG reporting, whereas board size adversely affects MENA banks' SDG reporting. Meanwhile, board gender diversity is insignificantly related to the SDG disclosures. However, further analyses show that the CSR committee plays a significant role in escalating the association between board independence and SDG disclosures. Our paper adds to the literature by assessing the progress of MENA banks toward achieving SDGs and shedding some light on the role played by internal governance mechanisms and CSR committees in SDG disclosures.

Keywords: Board independence, Gender diversity, Sustainable development Goals: CSR Committee: Agency theory

JEL Classification: Q01, Q56, O33, O31

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HOW DO INDUSTRIAL INTENSITY, GLOBALIZATION, AND INCOME INEQUALITY AFFECT ENVIRONMENTAL DEGRADATION ACROSS REDISTRIBUTIVE REGIMES? EVIDENCE FROM THE MENA

Özge Kozal[1], Daniel Balsalobre-Lorente[2]

This study investigates the factors influencing environmental degradation—proxied by the inverted load capacity factor—with a primary focus on industrialization intensity, globalization, and income inequality. The analysis covers 17 MENA countries over the 1995–2021 period and also controls for natural resource rents and foreign direct investment. The study is guided by two research questions: (1) Are the determinants of inverted load capacity factor heterogeneous across different levels of environmental degradation? (2) How do industrial intensity, globalization, income inequality, foreign direct investment and natural resource rents influence environmental degradation under varying redistributive regimes? A central contribution of the study is examining how these effects differ across redistributive regimes, proxied by (i) the equal distribution of resources index and (ii) government final consumption expenditure as a share of GDP, representing government size. To address these questions, two complementary methodologies are employed: Method of Moments Quantile Regression (MMQR) and Threshold Regression. The primary results reveal that industrialization intensity, globalization, income inequality, foreign direct investment, natural resource rents, and redistributive capacity all exert significant—though varying—effects on environmental degradation. Importantly, the threshold regression analysis confirms significant regime-dependent effects: Industrialization intensity increases environmental degradation only in low-redistributive settings, while FDI reduces degradation exclusively in high-redistributive contexts. Income inequality consistently exacerbates environmental degradation, even with a stronger impact in high-redistributive regimes. Notably, globalization worsens environmental degradation across all regimes, and strong redistributive policies appear effective in mitigating environmental harm. These findings highlight the importance of tailoring environmental policies to the redistributive capacity of countries, suggesting that stronger redistribution mechanisms can enhance the effectiveness of sustainability efforts in the MENA region.

Keywords: Environmental degradation, Industrialization, Globalization, Income inequality, Redistributive policy
JEL Codes: Q56, O44, F63, D63, C23

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SCOPE AND CHALLENGES OF RISING INFORMAL EMPLOYMENT IN EGYPT OVER 2008-2023

Philippe Adair[1] , Alex Hamed[2]

We address the issue of rising informal employment (henceforth informality) in Egypt over 2008-2023, which highlights the Sustainable Development Goal of decent work and include both macro and micro analytical and policy purposes. We first discuss the consistence and achievement of the updated definition of informality, its scope and methods. The update improves the various layers of informality, which fit into one another. There are several theories, among which only labour market segmentation proves fully relevant in addressing the informal employment issue. Second, we turn to macroeconomic analysis, data collection from labour force surveys and somewhat surprising observation running against stylised facts i.e., rising informality rate associates positively with GDP growth. Third, we tackle microeconomic analysis, taking advantage of panel data surveys (2012, 2018 and 2023) to discuss segmentation vs occupational mobility, earning function on the labour supply side vs wages differentials decomposition on labour demand side. Last, we take into account the insider-outsider theory in order to explain the limitations of formalisation policies. We pay attention to the evolution of distinct gender patterns. Last, we discuss the impact of policies, addressing both informal wage employment and informal self-employment. Conclusion points out the persistence and prominence of informality with declining occupational mobility and the role of the public sector supporting insiders that may explain the modest impact of formalisation policy.

Keywords: Egypt, Income gaps, Informal employment, Occupational mobility, Regressions, Labour market segmentation, Wage differentials

JEL Codes: E26, J46, O17

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SPATIAL REVISIT TO THE RENEWABLE ELECTRICITY GENERATION: EMPIRICAL EVIDENCE FROM THE EU

Pinar Deniz[1], Thanasis Stengos[2]

Adapting the electricity grids to renewables is the key for the EU to ensure the long-discussed energy security and environmental targets. However, connectivity of the grids across countries may create an inertia in the region since member states are heterogeneity in terms of their concerns and planning on the issue. Following the fact that the spatial distribution of the renewable electricity depicts geographical clusters due to the electricity grids, this study examines the impact of the variables that create an incentive regarding the perspective of economic growth, cost of electricity and environment on renewable electricity generation allowing for spatial dependence using spatial autoregressive model (SAR), spatial error model (SEM), and spatial Durbin model (SDM). Preliminary analysis depicts spatial dependence in the region.

Keywords: Renewable electricity generation, Spatial spillover effects

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GENDER DIVERSITY AND ENVIRONMENTAL IMPACT: ESG-BASED EVIDENCE FROM THE TRANSPORTATION SECTOR

Bige Küçükefe[1], Pınar Gürol[2]

Gender equality in the workplace holds strategic importance not only in terms of fair representation but also due to its indirect effects on organizational efficiency and sustainability. Greater participation of women in the workforce contributes to increased diversity within organizations and encourages more inclusive decision-making processes, which in turn yield positive outcomes for both equity and organizational performance (Chang & Milkman, 2020). Nevertheless, in many sectors, women remain underrepresented and face systemic biases in promotion and compensation processes (Hebl & King, 2019). As in numerous other industries, the transport and logistics sectors have historically been shaped by male-dominated structures, limiting women's presence both in general representation and in decision-making positions. Globally, the average representation of women in the transport sector stands at only 17% (Ng & Acker, 2020). This imbalance is concerning not only from a social justice perspective but also in terms of environmental performance. According to a multi-year panel data analysis conducted by Kuzey et al. (2022) in the transport sector, an increase in female representation on corporate boards is significantly associated with reduced carbon emissions, improved resource efficiency, and the promotion of eco-friendly innovation. In this context, analyzing the correlation between gender distribution and carbon emissions in the transport sector can provide critical insights for both climate policy and gender equality objectives. This study will examine the gender-related workforce data and carbon emissions data disclosed in the ESG (Environmental, Social, and Governance) reports of firms operating in the transport sector. The relationship between the proportion of female employees and carbon emission levels will be investigated using descriptive statistics, correlation analysis, group comparisons, and simple regression methods. Despite the limited sample size, this approach enables the exploration of meaningful structural relationships. The analysis is still in progress; comprehensive findings will be included in the full manuscript submission.

Keywords: Gender diversity, Carbon emissions, Transportation sector
JEL Codes: J16, L91, M14, Q56

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TRADE BALANCE AND BANK LOANS

Pınar Özlü[1], Aysu Çelgin[2], Okan Eren[3]

This study analyzes the effect of total and consumer-commercial credit utilization on the core trade balance, i.e., the trade balance excluding gold and energy, and the gold and energy trade balances separately. The findings indicate that an increase (decrease) in total credit utilization increases (decreases) the core trade deficit. When analyzed by credit sub-categories, it is observed that both consumer and commercial loans affect the trade balance. In addition, this paper contributes to the related literature by revealing for the first time that total and consumer-commercial credit utilization statistically significantly increases the gold trade deficit. On the other hand, total and sub-item credit utilization does not have a statistically and economically significant effect on the energy trade deficit.

Keywords: Credit growth, Trade balance, Consumer loans, Commercial loans
JEL Codes: F14, F31

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FROM PLANNING TO REFORM: AN IN-DEPTH LOOK AT EGYPT'S ECONOMIC PHASES

Rasha Qutb[1]

This study analyses Egypt's economic evolution across four distinct phases (1952–2024) to evaluate the effectiveness of policy strategies, their socio-economic repercussions and insights for promoting sustainable development. This study employs a mixed-methods framework, combining quantitative analysis of macroeconomic indicators (GDP, investment rates, savings gaps, per capita income) with qualitative evaluation of historical policy documents, institutional reports, and scholarly critiques. Longitudinal data from Egypt's Ministry of Planning, World Bank, IMF, and peer-reviewed sources are analyzed to assess structural outcomes across four economic phases (1952–2024). The qualitative component contextualizes quantitative trends through thematic examination of policy shifts, external shocks, and socio-political dynamics, enabling a holistic critique of Egypt's growth strategies. The Central Planning Policy (1952–1973) stimulated industrial expansion yet it was plagued by inefficiency and agricultural deterioration. Economic Liberalization (1974– 1990) attracted foreign investment yet increased debt and sectoral imbalances. The Structural Adjustment Program (1991–2010) stabilized the economy but exacerbated inequality. Post-2011 reforms achieved recovery through infrastructure and FDI, yet inflation, unemployment, and structural gaps persisted. The study underscores the necessity for policies balancing macroeconomic stability with social equity. Recommendations include enhancing productivity through technology, strengthening human capital, improving governance, diversifying sectors, and fostering inclusive growth to mitigate disparities. As the first comprehensive longitudinal analysis of Egypt's economic phases, this study uniquely links historical policy shifts to persistent structural challenges, offering a framework for transitional economies to harmonize market reforms with equitable development.

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ICT, FINANCIAL PERFORMANCE, AND MARKET POWER: EVIDENCE FROM THE MOROCCAN BANKING SECTOR

Sara El Yahyaoui[1]

This research investigates the impact of Information and Communication Technology (ICT) on the financial performance and competition within the Moroccan banking sector. Specifically, we examine the effect of ICT on key performance indicators—Return on Assets (ROA), Return on Equity (ROE), and the Cost-to-Income Ratio (CIR)—while also analyzing the moderating role of market competition, proxied by the Lerner Index. Using a panel dataset of Moroccan banks and employing the Generalized Method of Moments (GMM) to address potential endogeneity issues, our findings reveal that ICT has a statistically significant but negative impact on ROA and ROE. However, when accounting for the interaction between ICT and competition, the results indicate a positive effect on financial performance, suggesting that competition enhances the beneficial impact of ICT. These results highlight the importance of a competitive environment in maximizing the gains from digital advancements, such as internet and mobile penetration, in the banking sector.

Keywords: ICT, Financial performance, Banking competition
JEL Codes: G21, L86

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TRANSMISSION OF FINANCIAL SHOCKS ORIGINATED IN ADVANCED ECONOMIES TO DEVELOPING ECONOMIES

Seçil Yıldırım Karaman[1], Burak Alparslan Eroğlu[2], Ahmet Usta[3],

This study aims to investigate the transmission of financial shocks from advanced economies to the financial markets of developing economies using a panel data analysis including fourteen developing economies with high-frequency daily data. To analyze the asymmetric transmission of financial shocks, the model integrates interaction terms between financial shocks and key macroeconomic variables that measures the macroeconomic stability, economic conditions and financial development. Empirical evidence from the regression analysis indicates that financial markets in developing economies exhibit significant responses to financial shocks emanating from advanced economies. Moreover, the magnitude of these responses in developing economies are highly sensitive to countries' specific macroeconomic characteristics.

Keywords: Financial shocks, Developing economies, Panel data analysis
JEL Codes: E43, E44, E50, E52, G10

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THE DYNAMICS OF VARIABLE RENEWABLE ENERGY INTEGRATION: A MULTI-DIMENSIONAL FRAMEWORK FOR FUTURE POWER SYSTEMS

Selahattin Murat Sirin[1], Sandrine Wachon[2], Amro Elshurafa[3]

This paper examines the impacts of integrating a high share of variable renewable energy (VRE) on power systems and markets, proposing a multi-dimensional framework to analyze its technical, economic, and regulatory challenges. A structured literature review and topic modeling are employed, and key constraints, incentives, signals, and risks associated with VRE integration are identified. The authors then propose measures to address the key challenges posed by VRE at different stages of system penetration. The analysis is illustrated with practical examples from diverse electricity systems worldwide, demonstrating a common set of solutions applied across different countries, each with distinct legal, regulatory, and technical contexts. A holistic approach – combining technological innovation, adaptive governance, and coordinated policy – will be crucial for ensuring an affordable, reliable, and sustainable electricity supply in a VRE-dominant future.

Keywords: Variable renewable energy, Market design, Electricity

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HOUSEHOLD VULNERABILITY DURING THE PANDEMIC: AN ANALYSIS ON INCOME AND LIVING CONDITIONS SURVEY

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The Covid-19 pandemic has dramatically highlighted inequalities in meeting basic humanitarian needs such as health services, nutrition, and housing throughout the World and has led to more studies on coping mechanisms against unexpected shocks in the current literature. To create an effective response to such major shocks, which are unpredictable and affect social life in every aspect, it is important to anticipate the risks in advance. In this context, models that go beyond ex post analyses based on an actual situation and allow for forward-looking ex ante predictions can serve as effective tools for understanding poverty/deprivation dynamics against unexpected shocks. The concept of "vulnerability as expected poverty" (VEP) has been developed to put coping mechanisms against unexpected shocks in a forward-looking perspective (Chaudhuri et al., 2002). Following the literature developed by Chaudhuri et al. (2002) and their successors, this study analyses the vulnerability levels of households and the main characteristics of vulnerable households during the pandemic using micro data from the Survey of Income and Living Conditions (SILC).

Turkey entered the pandemic period without being able to overcome the effects of the exchange rate shock in 2018. It was stated that the social policy proposals that came to the agenda to repair the negative repercussions of the economic situation, which was already slowing down before the pandemic, were far from providing adequate protection for low income groups (Tekgüç et al., 2023). Therefore, it is more important to assess the economic vulnerability of households in the context of poverty in Turkey, which experienced a pandemic-induced economic recession followed by a severe exchange rate shock and then high inflation, compared to similar countries.

In this study, household vulnerability is assessed based on the material deprivation, employment patterns, indebtedness and assets of household members, and VEP rates are estimated. Thus, the relationship between the potential of households to fall into poverty during the pandemic and their actual poverty rates are discussed. The results indicate an average vulnerability rate of 12.5 percent over the period. This estimate is quite close to Limanlı's (2020) vulnerability rate of 13 percent, exhibiting a consistency. Moreover, the results show that the vulnerability rates have a similar trend to the poverty rate during the pandemic and changed negligibly. In 2019 both poverty and vulnerability have slightly increased, while they seem to have declined in 2020 and 2021. The higher ratios of social assistance recipients among vulnerable households seem to have an impact on poverty alleviating during the pandemic.

Keywords: Poverty, Vulnerability, Covid-19

JEL Codes: I32, I38

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DISTANCE'S EFFECT ON STUDENT MOBILITY ACROSS TURKISH PROVINCES

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Students enroll universities through centralized examination held by OSYM (Student Selection and Placement Centre) as of 1974 namely YKS. According to results of YKS, selection of programme, university and city is made in the process of being graduate students. For the past four decades   by building new institutions and increasing the enrolment capacity of already-existing ones Turkiye has increased its ability of access to higher education in order to meet young population demand on higher education. Consequently, due to the latest higher education policy every province has its own university and this leads incremental student mobility between provinces.

Centralized assignment system and the countywide spread of state universities concurrently facilitate increased student mobility among the provinces. This study aims to analyse student mobility among provinces via gravity model for the period of 2018-2024 in terms of potential student population of cities and distance. We employed the R package *thestat*s, created by Çavuş and Aydın (2023), for the period of 2018-2020 which is based on the YOK-ATLAS data. By utilising fixed effect panel count data estimations, we expect that the gravity model will explain the student flows among the provinces of Türkiye and student mobility across provinces is affected by the distance and student population of cities.

Keywords: Higher education, Gravity model, Panel data analysis

JEL Codes: I23, I28, C33

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THE EFFECT OF ECONOMIC AND POLITICAL FREEDOM ON CORRUPTION IN MENAT COUNTRIES

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This study examines the effects of economic and political freedom on corruption in MENAT countries (Middle East and North Africa including Türkiye) from 2003 to 2023. The main objective of this paper is to enhance understanding of institutional quality and governance by identifying which type of freedom – economic or political – is effective in curbing corruption in MENAT countries. In fact, this paper contributes to the intellectual richness of the debate by examining the simultaneous impact of political and economic freedom on corruption in the region. Using empirical evidence and panel data analysis, this paper shows that both economic and political freedom significantly affect corruption. Political freedom plays a constructive role in the MENAT region; increasing political freedom leads to lower levels of corruption. The results also show that increasing economic freedom significantly reduces corruption levels. The findings provide practical insights for policymakers who intend to implement targeted reforms and highlight the importance of expanding economic and political freedoms when designing anti-corruption strategies.

Keywords: Economic freedom, Political freedom, Corruption, MENAT Countries
JEL Codes: P16, O17, D73, K42

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DOMESTIC AND INTERNATIONAL SPILLOVER EFFECTS OF RENEWABLE ENERGY TRANSITIONS IN ADVANCED ECONOMIES: EVIDENCE FROM GERMANY

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The cross-border effects of Germany's renewable energy policies are particularly crucial for understanding the spillover impacts on global energy markets and the energy strategies of other nations. Thus, this research examines the broader impacts of Germany's renewable energy transition, focusing on both domestic and international spillover effects. For this purpose, the study employs the Oxford Economics Global Economic Model (OEGEM). The OEGEM offers a comprehensive framework for scenario analysis and projections of economic, energy, and environmental issues. In this work, we evaluate what happens domestically and internationally if the renewable energy transition in Germany would be 10% more compared to the baseline projection. We consider 5 domestic indicators representing economy, energy, and environment. Also, we consider 2 international indicators - Chinese non-fuel exports as a proxy to technological spillover and the World renewable energy representing the German contribution to the world's energy transition. The scenario analysis covers the quarterly period of 2024Q1 – 2050Q4.

The results indicate that a 10% increase in renewable electricity generation leads to an average 4% reduction in electricity producer prices in 2024-2035, with the effect doubling in the 2035–2050 sub-period. In addition, a 1% increase in renewable electricity generation leads to about 0.6% and 0.8% reduction in emissions from energy in the first and second samples, respectively. Economically, modest growth in GDP and job creation are observed through direct and indirect channels. We find that a 10% increase in renewable energy transition brings about 0.1% and 0.01% economic growth and job creation in 2024-2050. In addition, the analysis highlights international spillover effects, particularly through Germany's imports of renewable energy equipment from China. Germany's renewable transition contributes 0.2% to global renewable energy adoption, with stronger effects in the initial phase.

Keywords: Spillover effects, OEGEM, Renewable energy, Germany

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POLITICAL LOYALTY OR ECONOMIC COMPETENCE? EVALUATING PROVINCIAL GOVERNORS' APPOINTMENTS IN IRAN

Shahrzad Shahmohammadi[1], Theocharis Grigoriadis[2]

This study examines the political selection of provincial governors in Iran's centralized authoritarian regime, focusing on the trade-off between political loyalty and economic competence in gubernatorial appointments from 2000 to 2016. Employing an original dataset and utilizing the Feasible Generalized Least Squares (FGLS) estimation method, this research evaluates whether electoral legitimacy, as reflected in voter turnout during parliamentary elections, or economic performance indicators such as GDP per capita, the misery index, and industrial value-added influence the tenure and reappointment of governors. The findings indicate that political loyalty, demonstrated by high voter mobilization, is the primary determinant of gubernatorial retention, while economic competence has an insignificant effect. Additional analyses reveal that governors in ethnolinguistically diverse and geographically distant provinces experience different appointment dynamics, reflecting the regime's strategic concerns over regional stability. The study contributes to the broader literature on authoritarian governance by illustrating how electoral authoritarian regimes prioritize short-term political legitimacy over long-term economic performance. These findings have significant implications for understanding regime durability, political control mechanisms, and governance efficiency in Iran and similar electoral autocracies.

Keywords: Political selection, Electoral authoritarianism, Provincial governors, Sub-national governance, Iranian politics, Regime legitimacy, Authoritarian elections, Bureaucratic appointments, Governance and stability

JEL Codes: D72, D73, H77, P16, P26, O53, C23

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LABOR MARKET IMPACTS OF THE GREEN TRANSITION IN THE MENA

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As the rising risks of climate change intensify the imperative for global decarbonization, economies worldwide are gravitating toward a green transition. This shift's impact on labor markets varies starkly between regions. While advanced economies are experiencing steady growth in environmentally sustainable jobs, Middle East and North Africa (MENA) transitional economies—many long tethered to oil revenues including through remittances from their migrant workers—face mounting pressure to decouple their development from oil dependence. This shift will create both winners and losers. Traditional fossil fuel industries and their workers may face job losses and skill obsolescence, particularly in regions heavily reliant on oil extraction. Meanwhile, emerging green sectors like renewable energy, sustainable construction, and eco-tourism stand to gain, offering new opportunities for skilled workers and entrepreneurs. This paper provides the first comprehensive assessment of green skills and jobs across the region using data from four MENA countries: Egypt (2018), Jordan (2016), Palestine (2020) and Tunisia (2014). Applying a skill greenness classification derived from the U.S. O*NET database to labor market surveys in these four countries, we estimate that nearly 15% of MENA workers currently hold green jobs. Strikingly, our analysis reveals considerable heterogeneity: women's representation in green occupations surpasses men's in most countries; more educated workers and those in higher economic strata show markedly higher green job shares. However, finding a negligible difference between youth and prime-working age adults is unexpected. These findings underscore the transformative potential of the green transition in MENA while raising concerns that the green shift may exacerbate existing inequalities. Our study provides clear policy recommendations in crafting targeted interventions, from worker reskilling, job matching and labor mobility support, to enhanced access to finance and industry-academia partnerships, ensuring an inclusive, sustainable economic future for the region.

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OCCUPATIONAL SEGREGATION AND THE GENDER WAGE GAP IN EGYPT, 1998–2023

Shireen Alazzawi[1] and Vladimir Hlasny[2]

Female labor force participation in Egypt remains low, and wages consistently under-reward women compared to men. This disparity is partly driven by the systematic channeling of women into lower-paying sectors, occupations, and firms, which results in downward pressure on wages. This paper examines the long-term relevance of the occupational segregation hypothesis in Egypt, utilizing labor market surveys from 1998 to 2023. Our findings reveal that women are predominantly concentrated in teaching, nursing, and clerical roles, despite increasing educational attainment in recent years. Occupational segregation significantly contributes to gender wage gaps, especially at the lower end and middle of the earnings distribution, where women face greater wage penalties. We conclude that addressing the gender pay gap in Egypt requires empowering women to access equal opportunities in diverse sectors, firms, and occupations, thus ensuring they can compete on equal terms with men in the labor market.

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ASSESSING THE VULNERABILITY OF COAL-WORKER HOUSEHOLDS IN TURKEY WITHIN THE CONTEXT OF A JUST TRANSITION

Simay Kızılkaya[1], Tolga Aksoy[2]

This study explores the vulnerability of coal-worker households in Turkey within the framework of a just transition by utilizing a pseudo panel constructed from nationally representative Household Budget Surveys (HBS) for the years 2015, 2016, 2017, 2018, 2019, 2022, and 2023. Given the challenges posed by limited cross-sectional sample sizes—particularly for occupationally defined subgroups such as coal-sector workers—a pseudo panel approach is adopted to enhance the statistical power of the analysis and observe temporal dynamics in household vulnerability.

The core objective is to assess whether households with members employed in the mining and quarrying sector exhibit distinct vulnerability patterns compared to others during the coal phase-out. To this end, a multidimensional vulnerability index is constructed using the IPCC's three-pillar framework—exposure, sensitivity, and adaptive capacity—and weighted through an entropy-based method. Cohorts are defined based on household head sectoral affiliation, allowing for comparative analysis across occupational categories while preserving household-level granularity.

The use of multiple HBS waves enables the examination of structural disparities in vulnerability over time and across sectors. Particular attention is paid to the mining and quarrying sector, which is most exposed to transition risks. Through this sector-focused cohort design, the study highlights how household characteristics, employment structures, and service access intersect to shape vulnerability trajectories during energy transitions.

This methodology contributes to the just transition literature by demonstrating how pseudo panels can be employed to overcome data constraints in vulnerability assessments. It also provides a replicable approach for tracking household resilience in fossil-fuel-dependent economies undergoing structural change.

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REGIONAL INPUT-OUTPUT IMPACTS OF THE COAL ECONOMY IN MUĞLA, TURKEY

Simay Kızılkaya[1], Sevil Acar[2], Ahmet Atıl Aşıcı[3], Bengisu Özenç[4]

This study establishes an analytical framework to evaluate the macroeconomic and sectoral impacts of Turkey's current coal subsidy policies and proposes a just transition strategy for phasing out coal in a local economy. Specifically, it assesses the economic and environmental consequences of removing subsidies allocated to coal-fired power plants in Muğla, with a particular focus on greenhouse gas (GHG) emissions.

The analysis is conducted in two stages. First, it examines the direct impacts of removing coal subsidies on regional economic indicators such as output, value added, and employment, as well as environmental outcomes, primarily GHG emissions. Second, it investigates an alternative scenario in which these subsidies are reallocated to lower-carbon sectors within the regional economy. This dual approach enables a comparative assessment of the costs and benefits of subsidy reform through a just transition lens.

The study's findings aim to inform regional development strategies that reconcile economic performance with climate mitigation goals. By highlighting the distributional and environmental trade-offs of coal subsidy removal and green investment redirection, the paper contributes to policy design for equitable decarbonization at the local level.

Keywords: Just transition, Coal subsidy, Input-output analysis, Green investment, GHG emissions

JEL Codes: Q52, R15, O44

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THE IMPACT OF GEOPOLITICAL RISK ON FOREIGN PORTFOLIO INVESTMENTS:
THE CASE OF MENA COUNTRIES

Sinem Atıcı Ustalar[1]

Geopolitical risks are uncertainties that arise due to factors such as political tensions between countries, war threats, terrorist attacks, diplomatic crises and energy security. In today's financial system, geopolitical risks do not remain only as country-specific risks, but also affect economies as a global risk factor. The increase in geopolitical risks increases investors' risk perception, which can lead to a decrease in direct foreign portfolio investments. Such risks cause investors to experience uncertainty about expected returns and to turn to safer havens. Especially developing countries are more affected by fluctuations in portfolio investments because they exhibit more fragile structures against geopolitical risks.

This study investigates the importance of geopolitical risk on foreign portfolio investments of MENA countries. The financial gravity model is used in the study. The model is estimated using bilateral portfolio investments, equity portfolio investments and debt instruments portfolio investments of 97 countries between 2001 and 2024. The geopolitical risk index of Caldara *et al*. (2023) is used in the model. True state dependency in financial asset investments is a proven fact in the literature. For this reason, Heckman's Selection Model is used in estimating the financial gravity model. The estimation results show that the effect of geopolitical risk on foreign portfolio investments is significant. International portfolio investors avoid geopolitical risk. In particular, the effect of geopolitical risk is higher in debt instruments investments than in equity investments. Because in periods when geopolitical risk increases, investors worry about the capacity of the relevant country to repay its debts. This leads to an increase in country risk premiums (e.g. credit default swap premiums). Investors demand higher returns, which increases borrowing costs and may reduce the demand for debt instruments. In addition, geopolitical tensions direct investors to less risky and more liquid instruments. This may cause foreign investors to reduce their bond positions, especially in emerging markets.

The effect of geopolitical risk on foreign portfolio investments is of great importance in terms of international financial flows, especially in regions where political instability, armed conflicts, terrorist threats and diplomatic crises are intense. In this context, the Middle East and North Africa (MENA) region is of particular interest in the literature due to its historical location at the center of geopolitical tensions and also hosting emerging economies with high investment potential. Although the existing literature generally reveals that geopolitical uncertainty weakens investor confidence and leads to fluctuations in capital flows, it is emphasized that this effect shows regional differences and should be examined more deeply in MENA countries. Therefore, analyzing the impact of geopolitical risks on portfolio investments in MENA countries contributes to the academic literature and has strategic importance for policy makers and investors.

Keywords: Geopolitical Risk, Foreign Portfolio Investments, Gravity Model, Selection Model
JEL Codes: C33, F51, G1

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GREEN INNOVATION AND ECONOMIC DIVERSIFICATION IN MENA: A PATHWAY TO SUSTAINABLE GROWTH IN THE ERA OF ENERGY TRANSITION

Sour Ouieme[1], Hadjer Boulila[2]

The Middle East and North Africa (MENA) region stands at a pivotal juncture as global momentum toward decarbonization and sustainable energy intensifies. Historically characterized by economies heavily dependent on oil and gas revenues, MENA countries are increasingly recognizing the urgency to diversify their economic base and adopt greener growth trajectories. This paper investigates the transformative potential of green innovation as a cornerstone for economic diversification and long-term sustainable development in the MENA region amidst the ongoing global energy transition.

Green innovation, including clean energy technologies, circular economy models, sustainable agriculture, eco-friendly manufacturing, and environmental services, offers a critical pathway for MENA countries to reduce their carbon footprints, build new industrial capabilities, and generate inclusive employment. Through a multi-method approach, this research combines theoretical insights from sustainability and innovation economics with empirical analysis of policy frameworks, green investment trends, and innovation indicators across selected MENA countries, namely the United Arab Emirates, Morocco, Saudi Arabia, Egypt, and Algeria.

Methodologically, the study adopts a qualitative research design anchored in comparative case analysis. It draws on extensive document and policy review, examining national development visions, climate strategies, and innovation roadmaps to evaluate the institutional and policy environments supporting green innovation. This qualitative assessment is complemented by a secondary quantitative analysis using data from international databases (e.g., Global Innovation Index and World Bank) to contextualize performance in green innovation capacity, renewable energy deployment, and economic diversification metrics. Together, these methods aim to identify success factors, barriers, and policy implications relevant to both oil-rich and emerging economies in the region.

Key findings suggest that while several MENA countries have made notable progress in deploying renewable energy infrastructure such as large-scale solar and wind projects in the UAE and initiating sustainable mobility or water management initiatives, structural challenges remain. These include institutional inertia, limited private sector engagement, fragmented innovation systems, and insufficient regional coordination. However, the emergence of national visions, such as Saudi Arabia's Vision 2030 and Egypt Vision 2030, signals a strong political will to embrace sustainable development pathways.

The paper concludes by proposing a framework for integrated green innovation policy in MENA that emphasizes cross-sectoral coherence, inclusive governance, regional cooperation, and the alignment of economic diversification goals with environmental sustainability. It argues that green innovation is not merely an environmental imperative but a strategic lever for resilience, competitiveness, and long-term prosperity in the post-carbon global economy.

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ENERGY PRICES AND GROWTH: DYNAMICS OF ECONOMIC TRANSFORMATION IN SELECTED EMERGING COUNTRIES

Şükrü C. Demirtaş[1], Vahap Taştan[2]

This study examines the impact of oil price fluctuations on economic growth and sustainable growth in selected emerging economies between 2009 and 2024. An empirical analysis was conducted using panel data techniques, incorporating GDP growth rates, sustainable growth indicators and oil prices. The study also used causality tests to investigate causality relationships. Additionally, machine learning techniques (such as Random Forest, Support Vector Regression) were employed to predict growth indicators, analyse variable importance, and identify complex non-linear relationships between oil prices and economic outcomes in selected emerging economies.

Preliminary results indicate that increases in oil prices are generally associated with higher current deficit and deterioration in inflation in selected emerging economies. Additionally, declines in oil prices usually result in improvements sustainable growth, particularly for countries with emerging economies. These effects tend to become more pronounced in the context of the global energy transition, highlighting the importance of economic transformation and policy adaptation for the economies long-term growth.

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PRODUCTIVITY AND TECHNICAL EFFICIENCY IN INDONESIA'S FOOD AND BEVERAGE INDUSTRY: THE IMPACT OF MANAGEMENT CERTIFICATION

Tri Haryanto[1], Deni Kusumawardani[2], Rossanto Dwi Handoyo[3], Achmad Solihin[4], Wahyu Wisnu Wardana[5]

This study examines the impact of management standard certifications on productivity and technical efficiency in Indonesia's food and beverages industry. Drawing on firm-level data from the Annual Manufacturing Survey and employing a Data Envelopment Analysis (DEA) framework, the research estimates technical efficiency scores while assessing the influence of certifications such as ISO and the Indonesian National Standard (SNI). The empirical findings indicate that certified firms exhibit significantly higher levels of productivity and operational efficiency compared to their non-certified counterparts. Moreover, certifications are found to contribute not only to internal process optimization but also to improved competitiveness in domestic and international markets. These results underscore the strategic importance of adopting standardized management practices to enhance resource utilization and meet global market expectations. The study offers policy-relevant insights for industry stakeholders, suggesting that broader certification adoption can serve as a catalyst for sustainable industrial development in emerging economies such as Indonesia.

Keywords: Productivity, Technical efficiency, Food and beverage industry, Management standard, ISO, SNI

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FIRM PERFORMANCE, ESG RATINGS AND LEADERSHIP GENDER DIVERSITY

Ünay Tagaç Tezcan[1], Galina Hale[2]

In recent decades we observed two important trends in corporate governance: a push for broader diversity, including increased gender diversity, in corporate leadership and an interest in environmental (E), social (S), and governance (G) performance (ESG) of companies. Do these governance changes actually improve firm performance or do they come at a cost? In this paper, we analyze empirically the performance of 9604 firms, out of which 3536 report gender and ESG scores, from 50 countries from 2009 to 2022. Allowing for non-random selection into reporting ESG and gender data, we show that a larger share of women on corporate boards do not have a significant positive or negative impact on performance of firms in terms of their returns on assets. However, firms with a larger share of women on their boards have higher ESG scores. Firms with higher ESG scores also tend to have better performance, but only if their boards have a higher share of women. The effect of gender diversity among executives is similar qualitatively but is less pronounced. Work in progress is focusing on how these effects are reflected in the stock market.

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NOWCASTING TURKISH HOUSEHOLD CONSUMPTION WITH CREDIT CARD DATA

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This paper discusses using high-frequency payment card data on credit cards to nowcast Turkish quarterly household demand, which helps with the lags of official economic statistics. With Quantile Autoregressive Distributed Lag Mixed-Frequency Data Sampling (QADL-MIDAS) models, the paper use BDDK weekly credit card transactions data to nowcast household consumption. The results indicate that information from credit cards provides statistically significant and much more accurate forecasts compared to autoregressive counterparts and other monthly or weekly indicators. This improved performance holds robust across most forecast horizons and quantiles of the household demand distribution, indicating its relative ability to capture both standard patterns of consumption as well as tail risk. The findings confirm that high-frequency transaction data is a powerful tool in real-time economic monitoring, delivering policymakers a prompt and reliable feed for effective policy interventions and the improvement of financial stability within a dynamic economic landscape in Turkey.

Keywords: Nowcasting, MIDAS, Turkey

JEL Codes: C22, C53, E21, E27

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DOES RESEARCH AND DEVELOPMENT (R&D) PROMOTE GREEN EFFICIENCY?
EVIDENCE FROM THE TEXTILE INDUSTRY IN INDONESIA

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This study investigates the effect of Research and Development (R&D) activities on green efficiency in Indonesia's textile industry—a sector recognized for its substantial contributions to greenhouse gas emissions and industrial wastewater. Utilizing firm-level data from the 2019 Annual Manufacturing Survey and adopting a Slack-Based Measure Data Envelopment Analysis (SBM-DEA) approach, the analysis reveals that textile firms in Indonesia demonstrate a relatively low average green efficiency score of 20.63 percent. Furthermore, employing Propensity Score Matching (PSM) to evaluate the causal impact of R&D, the study finds no statistically significant effect of R&D on green efficiency, thereby challenging conventional expectations regarding the role of R&D in advancing environmental performance. The results suggest that the absence of targeted green R&D and weak alignment with sustainable production practices may limit the effectiveness of R&D investments. These findings highlight the need for more tailored green innovation policies and integrated sustainability frameworks to enhance environmental outcomes in the textile manufacturing sector.

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GREEN BONDS AND THE ENERGY TRANSITION: A CRITICAL LITERATURE REVIEW IN EMERGING MARKETS

Wissal Gamraoui[1]

Green bonds have emerged as a crucial financial innovation for channeling proceeds toward environmentally responsible projects. Nevertheless, their adoption in emerging economies remains limited and studies regarding the key determinants of their performance in these contexts are relatively scarce. This article suggests a critical review of the literature and highlights four principal categories influencing the performance of green bonds: macroeconomic factors, financial and asset class dynamics, bonds characteristics and social and behavioral preferences. However, several obstacles continue to limit market development, such as the lack of standardized regulations, high cost of issuance, greenwashing risks, etc. The literature indicates that the public-sector intervention is crucial to enhance market confidence and boost the growth of green bonds as an instrument for sustainable development in emergcing countries.

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FORECASTING THE TREASURY YIELD CURVE SLOPE FOR TÜRKİYE

Yasemin Çolak[1]

The yield curve is crucial for monetary authorities to understand future expectations and economic activity. This study analyzes the treasury yield curve forecasting performance using the Facebook prophet forecasting approach and the ARIMA model using the slope component derived from the Nelson Siegel yield curve model. Turkish treasury bonds with 3,6 and 9 months and 1,2,3,5 and 10 years maturity between January- 2010 and May-2025 are utilized the forecast the yield curve. A 12-month-ahead forecasting exercise was performed using both Prophet and ARIMA models. The preliminary results indicate that the two models predict divergent future paths for the yield curve slope. This implies that the fundamental modeling assumptions and structures of Prophet and ARIMA may result in significantly different interpretations of short-term interest rate expectations.

Keywords: Yield curve, Prophet, ARIMA

JEL Codes: G12, E37

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BEYOND DEBT-TO-GDP: COLLATERAL BUBBLES, ZOMBIE FIRMS, AND THE POLITICAL ECONOMY OF DEBT RESTRUCTURING IN TURKEY

Erhan Aslanoğlu[1], Sinem Bağçe[2], Yasin Enes Aksu[3]

Turkey's debt-to-GDP ratios appear sustainable by international standards, yet rising defaults and hidden fragilities challenge this narrative. Despite low household debt levels, consumer loan defaults are increasing. This paradox reflects a broader issue: headline indicators often mask financial vulnerabilities. Drawing on Turkey's experience, this paper examines how debt restructuring and inflated collateral values create a fragile stability that conceals systemic risk. Since 2018, Turkish banks and regulators have relied on restructuring and regulatory forbearance to manage distressed assets, fostering the rise of "zombie firms." The widespread use of overvalued collateral has enabled continued lending, forming what we describe as a "collateral bubble." This bubble supports balance sheets in the short term but increases long-term financial fragility. Comparative cases from China and India show similar patterns, where evergreening and regulatory leniency have prolonged firm survival while undermining financial health. We adopt a qualitative, cross-country comparative approach grounded in political economy to trace how institutional incentives shape these outcomes. This paper contributes by challenging the reliance on aggregate debt ratios as indicators of health, introducing the concept of the collateral bubble, and highlighting institutional drivers behind persistent financial risks in emerging markets. It offers a cross-country political economy lens to understand how debt is managed, restructured, and obscured in systems under stress.

Keywords: Debt restructuring, Financial fragility
JEL Codes: E44, G33, H63

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THE ROLE OF EMERGING REGIONAL POWERS IN INTERNATIONAL ECONOMIC POLICIES: A COMPARATIVE STUDY OF IRAN, TURKEY, AND SAUDI ARABIA

Yeganeh Molavi

Over the past two decades, Iran, Turkey, and Saudi Arabia have increasingly emerged as influential regional powers with growing ambitions on the international economic stage. Each of these countries has adopted distinct strategies to enhance their economic sovereignty, integrate with global financial systems, and assert geopolitical influence. While their approaches differ significantly—rooted in their unique political institutions, resource endowments, and regional alliances—they share a common goal: to transform their economies and expand their roles in shaping the future of international economic governance.

This paper offers a comparative analysis of the economic and foreign policy trajectories of these three states, with particular focus on their engagements with global financial institutions, foreign direct investment trends, and participation in the energy transition discourse. Drawing on a qualitative methodology, the study examines official policy documents, multilateral economic agreements, and secondary research to explore how these countries balance regional power competition with global economic integration.

The findings highlight both convergences and tensions in their strategies, revealing how geopolitics, economic diversification, and institutional design shape each state's capacity to respond to current global shifts. The paper contributes to a deeper understanding of how regional powers from the MENA region can play a more assertive role in the evolving international economic order.

Keywords: Regional powers, International political economy, Middle East, Economic strategy, Energy transition

IRAN BETWEEN THE EMERGING GLOBAL ECONOMIC ORDER AND STRUCTURAL CRISES

Zahra Maleki Adarani[1], Majid Ostovar[2]

As the world enters a new phase of transformation in the global economic order—driven by geopolitical rivalries among major powers, the emergence of new economic blocs, and the relative decline of economic liberalism—Iran, as a regional actor, finds itself in a paradoxical position. On the one hand, it seeks to seize opportunities arising from the emerging order; on the other hand, it remains entangled in chronic structural crises in its political economy. The central question of this study is: How does Iran attempt to redefine its position through geopolitical policymaking and securitization in the face of the evolving global economic order, while its internal structures simultaneously push it toward reproducing patterns of dependency?

Drawing on dependency theory, critical geopolitics, and the conceptual framework of securitization, this paper examines the hypothesis that Iran—due to institutional centralization and a security-oriented foreign policy—is reproducing a form of "security-driven dependency" rather than actively engaging with the opportunities of the new order. This dependency neither leads to meaningful integration into the emerging system nor facilitates effective resistance against it.

Adopting a critical perspective, the article demonstrates how the Islamic Republic's dominant security discourses, by perpetuating a persistent sense of threat, have constrained structural reforms and limited the country's ability to capitalize on geopolitical opportunities. Furthermore, it analyzes how, instead of building a market-based economy rooted in domestic and regional capacities, Iran has increasingly gravitated toward new forms of technological and financial dependency on powers such as China and Russia. The study aims to provide a multilayered portrayal of Iran's geopolitical and economic position—one that reveals an entanglement of structural dependency and identity-based securitization, posing a significant obstacle to Iran's potential for active participation in the emerging global order.

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THE IMPACT OF GEOPOLITICAL RISK, FOREIGN TRADE, AND RENEWABLE ENERGY CONSUMPTION ON CARBON EMISSIONS: THE CASE OF TURKIYE

Zeliha Semra Kılınç[1]

This paper examines the key determinants of carbon emissions in Turkiye using data from the period 1990–2021. The main objective of the research is to reveal the effects of factors such as the geopolitical risk index, net foreign trade balance, and renewable energy consumption on total carbon emissions. The empirical analysis employs the Autoregressive Distributed Lag (ARDL) model to evaluate both short- and long-term relationships. The findings indicate that the geopolitical risk index has a positive and statistically significant effect on emissions in the short term. This suggests that rising geopolitical uncertainties increase concerns about energy security, thereby encouraging fossil fuel consumption. The net foreign trade variable exhibits both positive and negative effects at different lags, implying that trade activities influence emissions directly and indirectly through production, transportation, and energy use. The lagged effects of renewable energy consumption are also found to be statistically significant, contributing to a reduction in emissions. These results highlight the importance of increasing investments in renewable energy and transforming trade policy into a more environmentally friendly structure within the scope of Turkiye sustainable development goals. Furthermore, the findings emphasize the necessity of incorporating geopolitical risks into energy security policymaking. Overall, the study underscores the need for environmental policies to be designed through a holistic approach that integrates economic and political variables.

Keywords: Geopolitical risk index, Renewable energy consumption, Carbon emissions
JEL Codes: Q54, Q42, D74

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FARMING THE FUTURE: THE IMPACT OF TECHNOLOGICAL ADOPTION ON FARMERS' INCOME

Zühal Özbay Daş[1], Esin Cumhur Yalçın[2], Gülşah Özşahin[3], Demet Gediz Aydoğdu[4], Duygu Boyraz Erdem[5]

This study aims to examine the impact of various new technologies on farmers' income. These technologies include disinfestation with drones, drip irrigation in irrigated areas, sprinkling irrigation systems, and innovations in soil tillage machines. In addition to technological factors, the study also considers demographic and related variables such as education level, household size, cooperative membership, and the presence of a successor to take over the farm. The analysis is based on survey data collected from 371 sunflower producers in Kırklareli province, a region that plays a significant role in sunflower production within the Thrace Region. A log-linear regression is used in the analysis and the preliminary results reveal that drip irrigation, sprinkler irrigation systems, and drone applications have a statistically significant positive impact on farm income, while other techniques such as general tillage innovations show no significant effect. Among the socio-demographic variables, larger cultivated land area, the presence of a farm successor, and having a postgraduate education level are consistently associated with higher income levels, whereas lower education levels negatively affect income. These findings highlight the critical role of both technological adoption and long-term human capital in improving agricultural profitability.

Keywords: New technology adoption, Income, Agriculture

JEL Codes: Q15, Q12

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HETEROGENEOUS IMPACT OF THE PANDEMIC ON DEFAULT PROBABILITIES OF MANUFACTURING FIRMS

Mehmet Selman Çolak [1], Oğuzhan Ergin[2]

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 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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LET IT COMMENCE: STRENGTHENING DEVELOPMENT BANKS WHILE GREENING THE MONETARY POLICY

Burcu Ünüvar[1]

Development banking has been a commonly used financing practice in under-developed countries for more than a century and grew stronger in developed parts of the world after the Great Depression and the Second World War. Yet throughout years development banks lost ground to fast financial markets, limited by their rigid architecture based on the idea that development banks exist only to address well-identified market failures. Currently, development banks and development finance institutes finance only 10% of total world investment. Yet the polycrisis of our contemporary world calls for urgent financial support for development practices, some of which are slowed down not only due to market failures but also state failures, staying behind climate targets being one example. This paper aims to suggest a new architect for development banking to raise their effectiveness and contribution to the green transformation as well as new industrial policies. The new design starts with refueling the old discussion regarding the ownership of development banking while also utilizing some of the tools suggested in the green central banking debate. Strengthening the role of development banks through a better architect thus serves both industrial and green transformation while also easing the pressure on central banks to go green at the expense of their mandates.

Keywords: Development banks, Monetary policy, Industrial policy, Central banks

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THE IMPACTS OF ENERGY AND ENVIRONMENTAL POLICIES ON THE LOW-CARBON TRANSITION OF MEDITERRANEAN COUNTRIES

Sevil Acar[1]

The Mediterranean region continues to support fossil fuels through extensive state incentives and subsidies. While fossil fuel subsidies (FFS) are often justified as tools to reduce energy costs, they are increasingly criticized for accelerating resource depletion, increasing greenhouse gas (GHG) emissions, worsening local pollution and health impacts, and weakening the competitiveness of clean energy technologies. At the same time, economic policy instruments such as environmentally related taxes, feed-in tariffs (FiTs), and green finance mechanisms are central to facilitating a transition to a low-carbon economy. However, empirical evidence on their combined effects in the Mediterranean region remains limited.

This study adopts an integrated economic perspective to assess both fossil fuel support and green policy instruments. Using the OECD inventory on FFS and panel data methods, it examines whether FFS hinder the transition to a low-carbon economy in Mediterranean countries. In addition, the study investigates the impacts of environmentally related taxes, climate taxes, and FiTs on per capita GHG emissions in Mediterranean countries.

The findings indicate that FFS tend to increase GHG emissions regionally, posing a significant barrier to climate mitigation efforts. Environmentally related taxes alone show limited effectiveness, but their impact strengthens when combined with stringent environmental policies and earmarked use of revenues for climate action. FiTs reduce emissions only under specific conditions, with higher tariffs for certain renewable sources leading to lower emissions. Overall, the results highlight the need for coherent policy frameworks that phase out FFS while strengthening green taxation, renewable energy support mechanisms, and green finance to accelerate the transition to a low-carbon economy in the Mediterranean region.

Keywords: Climate change, Environmental tax revenue, Feed-in tariffs, Fossil fuel subsidies, Green finance

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SPATIAL NEXUS: RENEWABLE AND NONRENEWABLE ENERGY CONSUMPTION AND CO2 EMISSIONS

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Extensive research has explored the relationship between energy consumption, GDP per capita, and carbon dioxide CO2 emissions per capita. Building upon this substantial body of literature, our study employs a dataset of 127 globally selected countries spanning from 1995 to 2022, using a spatial Durbin model to revisit this nexus from a spatial perspective, emphasizing interdependencies of the economies and spatial dynamics of CO2 emissions. First, our results uncover the spillover effects of CO2 emissions among geographical, institutional, and economic neighbors. Second, the direct effects of renewable energy consumption suggest that increasing renewable energy consumption in a country reduces its CO2 emissions. The indirect effects of renewable energy consumption indicate that increasing renewable energy consumption in one country also reduces CO2 emissions in neighboring countries. Third, most of the direct effects of non-renewable energy consumption suggest that increasing non-renewable energy consumption in a country increases its CO2 emissions. Similarly, the indirect effects show that increasing non-renewable energy consumption in one country leads to an increase in CO2 emissions in neighboring countries. Thus, international environmental policies are critical in addressing global climate change and achieving the 2030 Sustainable Development Goals (SDGs).

Keywords: Renewable energy consumption, Non-renewable energy consumption, Energy consumption, Climate change, Spatial Durbin model

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PARTNERSHIPS FOR SUSTAINABLE DEVELOPMENT: OFFICIAL DEVELOPMENT ASSISTANCE AND REGIONAL PARTNERSHIP IN THE MENA REGION

Ebru Yalçın[1]

Limited fiscal space and institutional capacity in low-income countries prevent the achievement of SDG 1, SDG 2, and SDG 10 independently, underscoring the importance of global partnerships and sustainable financing mechanisms. SDG 17 emphasizes the need to establish strong partnerships in order to achieve development goals at the global scale. Sub-target 17.2 set out quantitative indicators for this purpose. Under this target, developed countries are expected to transfer 0.7% of their GNP to developing countries and 0.15–0.20% to least developed countries as Official Development Assistance (ODA). However, current global data show that these commitments are significantly falling short. According to OECD-DAC (Development Assistance Committee) data, the average ODA/GNP ratio of developed countries is only 0.37% by 2023.

MENA region provides a striking example in this context, as it is home to rich countries with abundant natural resources and countries experiencing chronic poverty. For example, as of 2023, Kuwait, one of the highest-income countries in the world, had a per capita GDP of 51,561.4 US dollars. In contrast, Yemen, which has been struggling with civil war, political instability, poverty, and hunger for many years, had a per capita GDP of only 492.81 US dollars in the same period. The majority of ODA provided to the region is of a humanitarian and emergency nature; long-term capacity building, institutional development and productive sector investments are relatively neglected. Aid directed to crisis regions such as Yemen in particular overlaps with strategies to maintain stability and limit migration pressure rather than having developmental goals. The distribution of ODA appears to reflect geopolitical interests more than developmental criteria. Yemen, which is in the category of least developed countries, receives significant financial support from the member countries of the DAC of the OECD. However, given their geographical proximity, cultural ties, and economic capacity, Gulf countries—especially Kuwait, Qatar, the United Arab Emirates, and Saudi Arabia—need to participate more actively and systematically in these support mechanisms. Among the Gulf countries, the United Arab Emirates provided a high level of aid, at $1.42 billion in 2015, but there were serious decreases in the amount of support in the following years, with only $29.2 million in aid provided in 2023. Qatar and Kuwait's aid, on the other hand, remained at a lower level in general; Qatar's aid followed a fluctuating but increasing course between 2019 and 2023, reaching $16.19 million in 2023, while Kuwait's contribution was only $2.5 million in 2023. This distribution reveals that the amount of aid provided by the Gulf countries to Yemen is quite limited compared to the DAC countries, and that these regional actors need to strengthen their regional responsibilities by increasing their humanitarian and development aid. In this context, regional partnerships based on fair and long-term partnership that will close the development gap between high-income and low-income countries in the MENA region are of critical importance. Consequently, reducing development disparities in the MENA region within the framework of the Sustainable Development Goals will be possible not only with national strategies but also by strengthening regional and global partnerships.

Keywords: MENA Region, Official development assistance, Sustainable development, Fiscal space

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EXPORT DIVERSIFICATION AND CO_2 EMISSIONS IN GCC COUNTRIES: EVIDENCE FROM THE ENVIRONMENTAL KUZNETS CURVE

Athanasia Stylianou Kalaitzi[1]

Environmental degradation is mainly driven by rapid output growth and intensified natural resource extraction, with trade expansion further accelerating both economic growth and environmental pressure. However, in some cases, trade expansion can lead to slower economic growth, particularly in economies heavily reliant on natural resource production. To address this, resource-rich countries such as the oil-producing GCC nations aim to diversify their production and export base, not only to reduce their vulnerability to economic shocks but also to support a transition toward more sustainable growth strategies. However, if the export-led growth hypothesis holds, especially in the case of manufacturing exports, expanding exports is expected to drive GDP growth, which may, in turn, increase pollution. This raises an important question: will export diversification lead to greater environmental degradation, or will moving away from oil dependence reduce pollution in the long run?

This study examines whether export diversification causes CO_2 emissions in five GCC countries, using an augmented Environmental Kuznets Curve (EKC) model and time series analysis over the period 1980-2023. The Johansen cointegration test is used to examine the long-run relationships, while short and long-run causality is tested using the Granger causality within a VAR framework and the Toda and Yamamoto (1995) procedure. Empirical results show that the model variables are cointegrated in all countries ($p < 0.05$), except for Bahrain ($p > 0.10$). The causality results show no evidence of short-run direct causality from export diversification to CO_2 emissions in any country, except Kuwait ($p < 0.05$). Moreover, in Kuwait, an indirect causality runs from export diversification to pollution through imports, further accelerating environmental pressure. Regarding the long run, there is no evidence of causality in any country ($p > 0.10$), confirming that export diversification does not contribute to pollution in the long run.

It should be noted that only the UAE model estimations provide evidence that export diversification causes economic growth, both in the short and long run. However, economic growth does not cause pollution in either the short or long run, indicating that export diversification in the UAE promotes further economic growth without accelerating environmental pressure. Based on these findings, the current export and import structure, particularly in Kuwait, should be assessed to promote export diversification and economic growth without increasing environmental pressure.

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EXPORT DIVERSIFICATION AND CO₂ EMISSIONS IN GCC COUNTRIES: EVIDENCE FROM THE ENVIRONMENTAL KUZNETS CURVE

Erhan Aslanoğlu[1]

This study aims to identify the main trends and structural transformations shaping the global economy in an age of heightened uncertainty. In recent years, nearly all major uncertainty indices have surged. The combination of Donald Trump's first presidency, the COVID-19 pandemic, and his second term has reminded the world that business is no longer "as usual." The Financial Times captured this shift with its 2018 headline, "Capitalism: Time to Reset," while the central theme of the 2021 Davos Summit was "The Great Reset."

Although numerous and complex factors influence the global economy, this paper focuses primarily on the hegemonic rivalry between the United States and China. A growing body of literature suggests that China may become the world's largest economy within the next 25 years. At the same time, demographic trends indicate that nearly 90 percent of the global population will reside in Asia, Africa, the Middle East, and Latin America. In light of these developments, the United States appears determined to preserve its global influence, even if it no longer remains the largest economy.

The study identifies three key domains—defense, technology, and money—in which the United States and China are likely to compete for global dominance. This rivalry is expected to have far-reaching implications for technology (productivity, inflation, unemployment), financial markets (digital currencies and payment systems), labor markets (productivity, employment, and organization), climate change (production systems, consumption patterns, and regulation), and global trade routes (including the Belt and Road Initiative and the India–Middle East Economic Corridor). Each of these dimensions is examined in detail.

Within this framework, the paper links the resilience of global economic growth and the persistence of low inflation—despite ongoing trade tensions—to technological transformation and a productivity-driven expansion. Finally, the study analyzes the seemingly unstoppable rise in precious metal prices, particularly gold and silver, interpreting this trend as a reflection of the "great reset" and growing global uncertainty.

Keywords: Global Uncertainty, Hegemonic Rivalry, US–China Competition, Global Economic Order

JEL Codes: F02, F51, O33

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THE ROLE OF RENEWABLE ENERGY IN REDUCING IMPORT DEPENDENCY IN OIL-PRODUCING COUNTRIES: EVIDENCE FROM ALGERIA

Hadjer Boulila[1], Mohamed Benbouziane[2], Rabia Meriem Benbouziane[3], Seyf Eddine Benbekhti[4]

Algeria, as a major oil-producing nation, faces structural vulnerabilities from heavy reliance on hydrocarbon exports amid global oil price volatility and geopolitical risks. Despite exporting crude oil and natural gas, the country paradoxically imports significant refined petroleum products and energy-related equipment due to limited domestic refining capacity and technological gaps. Recent government initiatives promote renewable energy, particularly solar power, to drive economic diversification, yet renewable penetration remains low, and its impact on reducing energy import dependency stays underexplored. This study evaluates the role of renewable energy expansion in mitigating Algeria's energy-related import dependency, focusing on refined products and capital goods to enhance trade balance and economic resilience. Employing the Quantile Autoregressive Distributed Lag (QARDL) model on annual data from 2000-2023, it examines short- and long-run asymmetric effects across import dependency quantiles, controlling for GDP, oil prices, and exchange rates. Variables include energy import share (IMP), renewable production (RE in GWh), sourced from UN Comtrade, IEA, World Bank, and national data, all in natural logs for elasticity interpretation. Preliminary analysis suggests a negative long-run relationship, with stronger renewable energy effects at higher import dependency quantiles, indicating greater macroeconomic benefits during vulnerability periods. Short-run effects may be limited due to initial import needs for renewable infrastructure. This research shifts focus from climate benefits to macroeconomic autonomy, offering novel evidence for oil-dependent economies pursuing energy sovereignty through renewables.

Keywords: Renewable Energy, Import Dependency, Algeria, Energy Transition, Quantile ARDL, Trade Balance

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INTERGENRATIONAL LABOR MARKET TRANSITIONS IN MENA: EXPLORING THE IMPACT OF CLIMATE SHOCKS

Yasmine AbdelFattah[1], Shireen AlAzzawi[2], Vladimir Hlasny[3]

This paper examines how climate shocks influence intergenerational labor market transitions in the Middle East and North Africa (MENA), with a focus on Egypt. Using panel data from the Egypt Labor Market Panel Survey (1998–2023) combined with district-level temperature anomalies from NASA POWER, we investigate the extent to which climate shock disrupt the occupational trajectories between fathers and sons, particularly transitions in and out of agricultural employment. Employing a Difference-in-Differences event-study framework with two-way fixed effects, we estimate the dynamic impact of climate anomalies on intergenerational mobility elasticities. Preliminary findings indicate that heat shocks reduce persistence in agricultural occupations across generations and modestly weaken intergenerational occupational mobility ($p \approx 0.08$), especially in Upper Egypt governorates. These effects suggest that climate shocks may exacerbate structural labor market rigidities and deepen intergenerational inequality. Policy implications include the need for climate-adaptive labor policies, targeted educational investments, and resilience-building measures for vulnerable households. The study contributes novel evidence on the long-term repercussions of climate change on intergenerational labor dynamics in developing country settings, highlighting the urgency of integrating climate resilience into labor market strategies in the MENA region.

Keywords: Labor market transitions, Climate shocks, Occupational persistence, Agriculture, Difference-in-Differences (DiD), Event-study, MENA region, Egypt

JEL Codes: J62, Q54, C23, O55

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DOES FOOD PRICE SOARING AFFECT FOOD SUBSIDY? EVIDENCE FROM AN EXPERIMENTAL STUDY ON BREAD CHOICE IN EGYPT

Kenichi Kashiwagi[1], Hisato Shuto[2], Kiyokazu Ujiie[3]

Increasing food prices soaring after the recovery from COVID-19 and the prolonged war in Ukraine is detrimental to the food security situation in food-importing countries. Most Middle East and North Africa (MENA) countries have been negatively affected by the current food price hike. Historically in the MENA, a food subsidy system that allows food to be procured at lower than market price has been implemented as one of the policy options to mitigate such a price shock. Since its introduction under Arab socialism, this food subsidy in particular with subsidy on bread functions as a safety net for domestic consumers. While this system contributed to maintaining social stability, it placed a heavy burden on the finances. The financial burden has been further accelerated by the current food price soaring. Given the above, the objective of this research is to investigate factors that affect consumers' decision to choose subsidized bread in response to the changes in the market price of unsubsidized bread in Egypt. We conducted a choice experiment (CE) targeting Egyptian consumers, in which respondents were presented with hypothetical choices between subsidized bread (aish baladi) and unsubsidized bread characterized by several attributes. These attributes include price, bread taste, distance to tamween stores (outlets where subsidized bread is sold), and the time required to purchase bread. The CE was implemented through an online survey entitled "A Survey on Food Insecurity and the Food Subsidy System in Egypt", conducted in March 2025. A total of 435 respondents from several governorates of Egypt participated in the survey. FAO Food insecurity experience scale, i.e., moderate or severe food insecurity was used to capture consumer heterogeneity. A random-parameter logit model was employed to estimate the probability of choosing each type of bread. Results suggest that higher prices, greater distance to tamween stores, and longer waiting times for purchasing subsidized bread are associated with a lower probability of choosing subsidized bread. In contrast, a soft texture of subsidized bread increases the likelihood of its selection. An increase in the market price of unsubsidized bread raises the probability that consumers choose subsidized bread, whereas an increase in the price of subsidized bread reduces this probability. Consumers who are food secure exhibit the highest probability of choosing unsubsidized bread, while the probability of choosing subsidized bread is higher among consumers with moderate or severe food insecurity. Overall, the findings imply that rising food prices increase reliance on subsidized bread, thereby intensifying demand pressures on the food subsidy system. These findings highlight potential challenges for the fiscal sustainability of the bread subsidy system under prolonged food price volatility.

Keywords: Food price soaring, Subsidized bread, Choice experiment, Egypt

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MARKET INTEGRATION IN THE OTTOMAN BALKANS AND THE MIDDLE EAST FROM THE SIXTEENTH CENTURY UNTIL THE FIRST WORLD WAR

Pınar Ceylan[1], K. Kıvanç Karaman[2], Şevket Pamuk[3]

Using a large body of mostly archival price data, this study examines wheat market integration across the Ottoman Empire and puts it in the context of broader European trends. We find that rates of Ottoman market integration fluctuated without a clear trend during the early modern era followed by greater international integration and geographically uneven domestic integration in the nineteenth century. Overall, Ottoman gains were slower than those in western Europe in both periods. Our regression analysis points to the role of geography and technological and institutional changes including changes in state capacity as the main determinants shaping integration patterns.

Keywords: Market integration, Trade, Price convergence, the Middle East, Economic development

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PATH TO SUSTAINABLE ECONOMIC DEVELOPMENT: THE ROLE OF FINTECH IN THE AFRICAN REGION

Chemseddine Tidjani[1], Abderazak Madouri[2], Esra Kabaklarlı[3], Zakaria Lacheheb[4]

The pursuit of the United Nations Sustainable Development Goals (UNSDGs) in Sub-Saharan Africa (SSA) is often hindered by the "resource curse," financial exclusion, and climate vulnerability. While FinTech is a recognized catalyst for development, existing literature often examines digital finance and natural resources in isolation. This study fills a critical gap by analyzing the individual and interactive effects of FinTech, Natural Resource Rents (NRR), and Financial Development (FD) on sustainable outcomes.

Using a refined panel dataset of 20 SSA economies (2014–2022), the research employs the Method of Moments Quantile Regression (MMQR). This advanced approach addresses endogeneity and captures unobserved heterogeneity across countries, offering a more flexible analysis than traditional linear models. Central to this study is the application of Hickel's (2020) Sustainable Development Index (SDI), which measures human development relative to ecological impact, alongside a composite FinTech index.

Empirical findings indicate that FinTech acts as a significant stimulus for sustainable development by enhancing financial inclusion and poverty reduction. However, FD and NRR currently act as constraints on the Sustainable Development Index (SDI). The negative impact of FD suggests a misalignment in credit allocation toward carbon-intensive sectors, while the negative effect of NRR reflects the high initial costs of transitioning to renewable energy, which can temporarily dampen SDI scores.

By employing the MMQR model, this study addresses a critical research gap, illustrating how the interaction between these variables determines development outcomes across different SDI quantiles. The results suggest that while FinTech's current effect is positive but modest, its potential remains vast. To optimize these benefits, African policymakers must prioritize robust digital infrastructure and gender-sensitive mobile money frameworks, ensuring that volatile resource wealth is strategically reinvested into green digital technologies to foster a resilient, ecologically efficient growth model.

Keywords: FinTech, Sustainable Development Goals, Natural Resource Rents, Combined effect, Method of Moments Quantile Regression, Sub-Saharan Africa

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THE UNEQUAL IMPACT OF PHARMACEUTICAL PRICING REFORM ON UNMET MEDICINE NEEDS: EVIDENCE FROM TÜRKİYE

Demet Topal Koç[1]

This research investigates how Türkiye's 2015 pharmaceutical pricing reform affected unmet medicine needs among individuals with chronic illnesses, using a difference-in-differences strategy applied to nationally representative microdata from the Turkish Health Survey (2014–2022). The reform, designed to align the official Euro exchange rate used in pharmaceutical pricing with market conditions, resulted in price increases for many medications, particularly affecting vulnerable populations.

To identify the causal effect of the policy, we focus on individuals requiring regular medication for chronic conditions and compare them to those without such needs. We examine heterogeneous effects by income, education, age, gender, and marital status, absorbing regional fixed effects and clustering errors at the NUTS2 level.

Findings show that the reform significantly reduced overall unmet medical needs, particularly among younger individuals and unmarried. However, improvements were disproportionately concentrated among high-income and highly educated groups, while low-income and less educated individuals received limited gains. These results indicate that while the reform improved access on average, it may have increased existing inequalities in medicine accessibility.

This study contributes to the literature on health equity, pricing policy, and access to care in middle-income settings. It highlights the need for inclusive pharmaceutical reforms that account for heterogeneous population vulnerabilities in the face of market-based cost containment strategies.

Keywords: Unmet medical need, Pharmaceutical pricing, Health inequality, Chronic illness, Difference-in-differences

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ANAEROBIC DIGESTION AS A CIRCULAR ECONOMY PRACTICE UNDER SUSTAINABILITY IN MUNICIPAL WASTE SYSTEMS: THE MAGDEBURG MODEL

Cumhur Dülger[1]

The research examines the anaerobic digestion (AD) system established in Magdeburg as part of the local waste management strategy in Saxony-Anhalt, Germany. This initiative aims to implement circular economy principles and sustainable development guidelines. The evaluation is based on the 2018 Magdeburg Waste Management Concept which emphasizes the conversion of organic waste into energy. A quantitative estimation model is developed that incorporates urban population size, biological waste collection efficiency, conversion efficiency and energy production coefficients. This model is utilized to calculate the electricity and heat production capabilities of Magdeburg's municipal waste system and evaluates the environmental and economic benefits of waste reduction. The research indicates that waste disposal functions as a powerful tool which simultaneously generates renewable energy and compost while advancing urban sustainability goals. The Magdeburg model serves as an example of scalable waste management which shows potential for adoption by cities in the MENA region. Overall, the research presents a data-driven and analytically grounded approach to operationalize advanced European waste management solutions within sustainable urban development frameworks.

Keywords: Anaerobic digestion, Circular economy, Municipal waste, Sustainability, Magdeburg, Biogas

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DISENTANGLING MONETARY POLICY'S ASYMMETRIC EFFECTS ON INCLUSIVE GROWTH: A FIVE-DIMENSIONAL NARDL ANALYSIS FOR EGYPT

Rasha Qutb[1]

This study examines the asymmetric transmission of monetary policy through Egypt's credit channels—interest and savings rates—between 1990 and 2023, focusing on its impact on inclusive growth across four dimensions: economic growth, poverty and income inequality, human accessibility, and governance.

Utilizing the Nonlinear ARDL framework, interest and savings rate changes are decomposed into positive and negative partial sums to capture asymmetric effects of expansionary vs. contractionary policies, controlling for FDI and Human Capital Index. Prior analysis includes Lee-Strazicich structural breaks unit root test and bounds cointegration test.

Monetary policy in Egypt exhibits significant asymmetries, with expansionary measures offering minimal benefits—slightly reducing poverty but failing to boost growth, employment, or infrastructure due to weak financial inclusion, high inflation, and low savings rates. Governance remains structurally unaffected, while contractionary policies severely impact SMEs, depress growth, and worsen unemployment. Financial inefficiencies and structural barriers, including negative real deposit rates and FDI concentration in capital-intensive sectors, further undermine policy transmission and stability.

Effective monetary policy requires targeted reforms. Differentiated tools like graduated reserve requirements and SME refinancing windows can expand credit access while ensuring stability. Financial system improvements, including inflation-indexed savings instruments and enhanced creditor rights, are essential to mobilize savings. Structural interventions—diversifying FDI through tax incentives, promoting labor-intensive sectors, and aligning education with labor market needs—can address skills mismatches and job creation.

This study is the first in Egypt to analyze the asymmetric effects of monetary policy on inclusive growth and its dimensions, moving beyond traditional aggregate approaches. It also highlights critical structural challenges—including financial exclusion, skills mismatches, and concentrated FDI—and proposes targeted solutions to enhance policy effectiveness and promote equitable economic development.

Keywords: Asymmetric credit transmission, NARDL, Inclusive growth dimensions

JEL Codes: E52, E44, C22, O11, I32

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