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"Technology, Development and Sustainability in MENA Region"

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"TECHNOLOGY, DEVELOPMENT AND SUSTAINABILITY IN MENA REGION"

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Preface 1

Dear Colleagues;
Esteemed Readers;

Since its establishment, Topkapı University has been contributing to humanity in the fields of education, science, art, sports, and health.

The details of the international meeting you are currently reading represents a roadmap addressing solutions to numerous socio-economic, socio-political, and even diplomatic issues that concern not only Turkey but also the world. Naturally, our colleagues who have contributed with their presentations and papers offer diverse perspectives and remedies for these matters. Yet, the shared foundation remains rooted in science and practice.

This distinction is perhaps what sets social sciences apart from other disciplines. Ultimately, economics is not a science of limitations but one of alternatives. Among an infinite array of options, we aim to identify not the perfect solution but the most practical one.

We hope such efforts and studies will draw the attention of key decision-makers. In this way, efforts that benefit humanity can be accomplished without moving away from science and practice.

Sincerely,

Prof. Dr. Emre Alkin

Rector of Istanbul Topkapı University

Preface 2

We are very pleased to introduce the abstract book of the 20th International Conference of Middle East Economic Association in cooperation with Istanbul Topkapı University which was held in Istanbul by 13-14 September, 2024. The idea of organizing the 20th International Conference in Istanbul was first suggested by Prof Mine Çınar from Loyola University, Chicago at the ASSA - MEEA Conference held in San Antonio by 2-7 January, 2024. We discussed the possibility of organizing the Istanbul conference during MEEA sessions of ASSA meetings together with colleagues and board members from MEEA. Prof. Çınar encouraged us to organize the conference. On behalf of the Topkapı University, I have offered to the MEEA board that Istanbul Topkapı University would be ready to host the 20th conference.

We were very excited when the MEEA board announced that the conference would be held in Istanbul together with Topkapı University. We have started to work in cooperation with Prof. Çınar to organize the conference. Unfortunately, Prof. Çınar passed away by early June 2024. It is very difficult to express feelings. Our hearts are saddened by her loss, and our thoughts are still with her. We wish Prof. Çınar to stay in peace.

More than 120 papers having almost 230 authors from all over the world submitted to the conference. Each submission has been carefully reviewed to ensure it to meet the highest standards of academic excellence. Almost all papers maintained the high promise. The abstract handbook covers 108 papers announced in the conference program. The main theme of the conference was "Technology, Development and Sustainability in the Mena Region. Almost all papers contributed to our understanding and our field of economics on the main theme of the conference.

On behalf the organizing committee, I wish to thank to all keynote speakers, presenters and attendees of the conference. My special thanks to the Rector of the Istanbul Topkapı University, Prof. Emre Alkin for his invaluable support and encouragement to organize the conference. I would like to take this opportunity to thank the MEEA President Prof. Mahmoud Mohieldin and all board members of the MEEA. I wish to thank Executive Secretary of MEEA, Prof. Ahmed Elsayed, for his invaluable support during the preparation of the conference. I am very indebted to my colleagues at Topkapı University Dr. Bora Gündüzyeli (General Secretary of the Topkapı University), Prof. Berrin Ataman (Vice-Rector of the Topkapı University), Dr. Gül Dertli, Research Assistants Sena Göncüler, Elif Tekin and Nagihan Kartal. I wish to thank Assoc. Prof. Pınar Deniz (Marmara University) and Assoc. Prof. Oya Kent (Okan University) for their invaluable support for the preparation of the conference program. Finally, I thank to the director of the performance and organizations of Topkapı University, Mr. Gökmen Ertem for his efforts to do a perfect organization.

I hope that the conference experience ignited your passion for inquiry and fostered meaningful collaboration.

Prof. Dr. Erhan Aslanoğlu

Head of the Organizing Committee

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The Influence of Workforce Strategies, Employee Involvement and Role Crafting on Work Effectiveness

Abbiha Waqar[1] and Cetin Bektas[2]
[1,2]Tokat Gaziosmanpasa University

Abstract

The aim of this study is to explore the mediation role of employee involvement and role crafting between workforce strategies and task performance, by considering the "human resource management (HRM) process theory" and the "role crafting literature". The importance of this study is to provide in-depth insights on how various workforce strategies and employee involvement contribute to work effectiveness. SPSS was used to carry out the analysis. Reliability and validity test is used to check the questionnaire. Moreover, various other techniques were carried out to run the analysis, such as descriptive statistics, structural equation modelling etc. The theoretical model has been tested with the help of a questionnaire survey, by employing a sample of 200 employees engaged in 3 leading FMCG companies in Pakistan. The findings showed that "role crafting and employee involvement" not only individually but also jointly mediate the "relationship between workforce strategies and task performance". Line managers have different roles and are important in the implementation of HR policy, in the context of Pakistan. However, the research had a limitation in the sense that it did not investigate line manager roles in promoting employee involvement or role crafting. Therefore, future research can be implemented to study the attitudes and roles of these managers regarding role crafting. One essential managerial implication is that managers should utilize a powerful human resource system with unique and consistent workforce strategies to encourage employees and to enhance "employee involvement and role crafting behaviors".

Keywords: Employee involvement, Pakistan, Role crafting, Work effectiveness, Workforce strategies
JEL Codes: M5, M120

Black Market Exchange Rate, Currency Substitution and Demand for Money: An Other Evidence from Algeria

Abdelnacer Bouteldja[1] and Benbekhti Sifeeddine[2]
[1,2]University of Tlemcen

Abstract

Strict control on foreign exchange and successive devaluation of domestic currency adopted by Algerian government for nearly four decades resulted in black market for foreign currencies, high inflation rates and consequently, lost of confidence in Algarian dinar as a unit of account and store of value. The aforementioned consequences have given rise to the phenomenon of currency substitution. The aim of this paper is to provide evidence of the existence of currency substitution in Algeria. Using time series data covering the period 1990-2021 and an autoregressive distributive lag (ARDL) model combined with CUSUM and CUSUMQ, the demand for money in Algeria is estimated. Our results point out to the existence of currency substitution when the black market exchange rate is incorporated in the money demand equation. Our findings contribute to the existing litterature on currency substitution issue. As far as policy makers are concerned, the existence of CS could hinder the effectiveness of stabilization policies and thus, means of reducing currency substitution should be devoted.

Keywords: Black market exchange rate, Currency substitution, Demand for money, Algerian dinar, ARDL
JEL Codes: E41, F31, C22

Labour Market Segmentation in Egypt Over 2012-2018:

Rising Informal Employment Amongst Youths

Adrien Frontenaud[1], Oksana Nezhyvenko[2] and Philippe Adair[3]

[1,2]Centre d'Etudes de l'Emploi

[3]Université Paris-Est Créteil

Abstract

This paper examines the dynamics of youth employment (aged 15-34 years old) in Egypt using panel data surveys (2012-2018). We first identify employment segmentation and income gaps with respect to gender and job status, including the formal/informal divide upon wage employment and self-employment. Second, we analyse occupational mobility throughout transitions between employment statuses, unemployment, and inactivity. Third, we use logistic regressions upon individual characteristics (gender and education) and industries. Fourth, we apply a Mincer wage equation, which confirms labour market segmentation: formal employees earn more than informal ones, wage differentials being due to differences in human capital endowments. We test the wage equation on job quality indicators and disentangle supply-side and demand-side factors with an Oaxaca-Blinder decomposition. Last, we design quantile regressions in order to check the relationship of segmentation patterns with income distribution. Egypt displays the persistence of informal jobs and low occupational mobility, whereas shifts towards formality, self-employment, unemployment, and inactivity depend on gender. We briefly sketch a few policy recommendations.

Keywords: Decomposition model, Egypt, Employment segmentation, Gender; Income gaps, Job quality, Logistic regressions, Occupational mobility, Quantile regressions, Transition matrices, Wage equation
JEL Codes: E26, G21, J46, O17

Fintech and Firm Performance in Emerging Economies

Khusrav Gaibulloev[1], Ali Mirzaei[2], Mohsen Saad[3] and Tomoe Moore[4]

[1,2,3]American University of Sharjah

[4]Brunel University London

Abstract

Financial technology (fintech) has evolved alongside information and communications technology, offering a potential alternative to bank credit for firms needing external finance. Studies have shown that a lack of access to funding impedes firms from reaching their full potential. These constraints are particularly severe in emerging market economies, where businesses have less access to financing than those in industrialized. Fintech firms, with innovative financial instruments, have revolutionized the financial sector thereby reducing the financing gap created by traditional banks. This increased accessibility to funding and the potential reduction in the cost of borrowing may affect firm performance. Against this background, our paper examines whether fintech financing positively affects firms' performance. Specifically, we investigate whether firms in financially dependent industries perform disproportionately better financially and economically if domiciled in a country where fintech financing is more readily available than if they are in a country where it is less accessible. We use data from a large number of manufacturing firms from 20 emerging economies to analyze how fintech financing affects firm performance. We find a robust positive association of fintech financing with firm profitability in financially dependent manufacturing sectors. Specifically, return on assets and return on equity are relatively higher for firms more dependent on external financing in countries with higher digital financing. Furthermore, we observe positive effects of fintech on firm real performance. Value-added growth and employment growth increase disproportionately in sectors dependent on external finance when they are located in countries with higher fintech financing. These results are robust to numerous sensitivity tests.

Keywords: Fintech, financial dependence, firm performance, emerging economies
JEL Codes: G20, G23, O12

The effect of natural disasters on household consumption patterns using the EASI Demand System in Iraq

Running title: Natural disasters and household consumption patterns.

Ali Sayehmiri
Ilam University

Abstract

Natural disasters are one of the hazards that, in addition to causing physical and mental injuries, cause changes in economic and social components at micro and macro levels. One of the influential components is the change in the consumption demand pattern of households affected by these disasters. Therefore, this study aims to investigate the impact of natural disasters (floods, earthquakes, and storms) on the consumption patterns of urban and rural households in 4 recent Iraqi cities (Najaf, Karbala, Mosul, and Babil) for the period of 2000-2021 using the EASI demand system and the method 3SLS has paid. According to the estimated results, the effect of natural disasters on the demand for food groups has been negative. Among natural disasters, the effect of floods on food demand is significant. The estimation results for the non-food group showed that the effect of all three variables of floods, earthquakes, and storms on this group was positive and significant.

Keywords: Household consumption, natural disasters, EASI demand system

Circular Economy for Sustainable Plastic Waste Management in Oman: Reducing Plastic Impact on Marine and Terrestrial Environments

Amitabh Verma
Sohar University

Abstract

Plastic waste pollution is a pervasive environmental challenge that significantly impacts marine and terrestrial ecosystems globally. Oman, with its extensive coastline and diverse ecosystems, faces considerable challenges in managing plastic waste. The accumulation of plastic waste in natural environments not only disrupts ecological balance but also poses severe risks to human health and economic activities. To address this critical issue, this study proposes a comprehensive framework that integrates circular economy principles with advanced technological methods for the periodic inventory and reduction of plastic waste in Oman.

The primary objective of this research is to develop a sustainable and systematic approach for managing plastic waste by conducting periodic inventories and implementing effective reduction strategies. Utilizing cutting-edge technologies such as satellite imagery, GIS mapping, and robotic systems, this study aims to accurately identify and monitor plastic waste hotspots in marine and terrestrial environments. The integration of these technologies will enable precise mapping and continuous monitoring, providing robust data for informed decision-making.

The study will also explore into the driving forces behind plastic waste generation, examining factors such as economic growth, consumption patterns, urbanization, and industrial activities. By understanding these underlying causes, the research will provide valuable insights into the pressures exerted on the environment and the current state of plastic pollution. Field surveys and laboratory analyses will be conducted to quantify the extent of macroplastic and microplastic pollution, offering a detailed assessment of their distribution and impact across different regions of Oman.

An essential component of this research is the investigation of the ecological impacts of plastic waste on marine biodiversity and the potential health risks posed by plastic contamination in food and water supplies. Ecological studies will focus on assessing the health of marine species and ecosystems affected by plastic waste, while health risk assessments will evaluate the levels of microplastic contamination and their implications for human health.

In alignment with circular economy principles, this study will formulate and assess various strategies aimed at reducing and recycling plastic waste. Policy recommendations and regulatory measures will be developed to promote sustainable practices, including the reduction of single-use plastics, enhancement of recycling infrastructure, and encouragement of public participation through educational campaigns. The circular economy approach emphasizes the reuse, recycling, and regeneration of plastic materials, thereby reducing waste generation and promoting sustainable production and consumption patterns.

The expected outcomes of this research include the establishment of a comprehensive database of plastic waste hotspots, detailed reports on the driving forces and state of plastic pollution, and assessment reports on ecological and health impacts. Additionally, the study aims to produce policy recommendations and public awareness materials that foster behavioral change and support the implementation of circular economy strategies. By developing markets for recycled plastics and fostering collaboration among government, industry, and communities, the project seeks to create a sustainable framework for plastic waste management in Oman.

This study will provide a robust and replicable model for addressing plastic waste management, contributing to environmental sustainability and enhancing the resilience of Oman's ecosystems. The integration of advanced technologies and circular economy principles offers a transformative approach to tackling plastic pollution, positioning Oman as a leader in sustainable environmental practices and setting a precedent for global efforts in combating plastic waste.

Keywords: Circular economy; Plastic waste management; Sustainability; Environmental impact; Marine pollution; Recycling strategies.

Financial Inclusion and Digital Finance in the MENA Region

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Abstract

This study investigates the effects of digital finance on financial inclusion in the Middle East and North Africa (MENA) region. It measures financial inclusion with outstanding loans from commercial banks (% of GDP) and the number of automated teller machines (ATMs) per 1,000 km^2. Besides, digital finance is gauged by the number of ATMs per 100,000 adults and individuals using the Internet (% of the population). This study estimates dynamic panel regression models using the System GMM (Generalized Method of Moments) method from 2004 to 2022. The dataset includes annual data of the high-income countries in the MENA region (Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates) and the middle-income countries of that region (Algeria, Egypt, Jordan, Lebanon, Morocco, and Tunisia). The regression models use inflation rate and GDP per capita growth as control variables to consider the impact of macroeconomic fundamentals on financial inclusion. Empirical results suggest that a rise in the number of ATMs per 100,000 adults will decrease the ratio of outstanding loans from commercial banks to GDP. In addition, a positive association exists between the ratio of individuals using the Internet to the population and the ratio of outstanding loans from commercial banks to GDP. The results also show a statistically significant negative relationship between GDP per capita growth and the number of ATMs per 1,000 km^2. Besides, an increase in inflation rates leads to a decline in the ratio of outstanding loans from commercial banks to GDP—however, the higher the inflation rate, the lower the number of ATMs per 1,000 km^2.

Keywords: Financial inclusion, Digital finance, MENA region.
JEL Codes: C33, E44, G00.

International Migration Flows and Food Prices

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Abstract

This article demonstrates the impact of international migration flows on food prices. We investigate the causal relationship between migration and prices using static and dynamic methods and compare the results for food prices and prices of other goods for the period between 2012 and 2022 in Turkiye. The empirical results show mixed results on the impact of migration on prices. We find that the impact of international migration flows on the prices of food and other goods varies over time and is strongest after 2021. We document that a % increase in international migration flows reduced food prices as much as 0.8% during the pandemic era, while it increased prices by up to 1.2% in more recent periods. Conversely, we observe that migration affects prices of other goods only in the latest period. These findings are also robust when we use migration intensity in the population as an indicator of international migration flows.

Keywords: International migration flows, food prices, time-varying causality, Turkiye
JEL Codes: F22, E31

Effects Of Education On Days Hospitalized And Days Out Of Work: Evidence From Turkey*

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Abstract

The strong relationship between various health indicators and education is widely documented. However, the studies that investigate the nature of causality between these variables became available only recently and provide evidence mostly from developed countries. We add to this literature by studying the causal effect of education on days hospitalized and days out of work. We consider two educational reforms. One is the educational expansion of the early 1960s and the other is the 1997 increase in compulsory level of schooling from five to eight years. We focus on individuals in two cohorts namely, 1945-1965 and 1980-1980 and estimate Tobit and Double Hurdle models estimates with pooled samples of 2008, 2010, 2012, 2014, 2016, 2019 and 2022 waves of the THS, Türkiye Health Survey (THS) compiled by the Turkish Statistical Institute. The results suggest that an increase in years of education causes to reduce the number of days hospitalized for both men and women and the number of days out of work only for men while for women an increase in education causes to increase the number of days out of work.

Keywords: Education, Days hospitalized, Days out of work, Education reform, Tobit model, Double hurdle model, Turkey
JEL Codes: I15, I26, J18, C34, C36

The Impact of Credit Ratings on Foreign Direct Investments: Country Cases.

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Abstract

Integration into global value chains via access to new markets, lower production costs, and acquisition of natural resources and inputs can be counted as the primary motivations for multinational enterprises (MNEs) to invest abroud.

On the other hand, foreign direct investment (FDI) plays a significant role in an open and effective international economic system and is a considerable development accelerator. It also plays an essential role in contributing to access to global markets and technology, particularly for emerging and transition economies. That's why those countries liberalize their FDI regimes, design national policies, and arrange attractive investment ecosystems to attract FDI and reap the full development benefits of FDI.

From a profit-maximizing perspective, MNEs might find countries' efforts insufficient, considering their political conditions. Apart from their economics, one of the main motivating factors for MNEs is the host country's political ecosystem, where they seek confidence in investment security, profit maximization, and ease of capital transfer to their home country. MNEs can access this information through the reports of the host countries' credit rating agencies.

Credit ratings (CR) provided by CR agencies are indicators that measure countries' credit risks, where CRs provide MNEs with information about the host country. Although the assessments made by these agencies about the host country are based on opinions, they are among the factors that MNEs take into account during foreign investment, and most of those companies base their investment decisions on the ratings of these agencies.

Within this context, this paper examines the role of credit ratings on FDI decisions of MNEs in Egypt, Morocco, Russia, Tunisia, and Turkey via the Kónya Bootstrap Panel Causality Test and the relationship between the rating scores of these countries and the inflow of FDI was tested.

Keywords: Foreign direct investment, Credit rating agencies, Credit ratings, Kónya Boostrap Panel Causality Test.

JEL Codes: F31, F32, Z32, Z33

Connections of brokerage houses with M&A advisors and information transmisson

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Abstract

This paper examines how the relationship between target firms and investment banks leads to the dissemination of private information in electronic limit order markets around mergers and acquisition deals. We analyze broker-level limit order book data on M&A deals for all stocks traded in Borsa Istanbul (BIST) between 2005 and 2015. Our findings suggest that brokers affiliated with the advisors of the target firms initiate more buy trades on the target's stock before the official announcements of M&A deals, allowing them to exert higher price impact and exploit the positive announcement returns. On average, net buy trading flow submitted by the affiliated brokers significantly increases by 72% during the pre-announcement period, which starts 30 days before the official announcement and ends on the announcement day. The average price impact of buy trades initiated by affiliated brokers during this period is around 7.7 basis points, significantly higher than that for unaffiliated brokers (5 bps). Thus, our results suggest that the private information percolated through brokerage houses affiliated with the target firm advisors is statistically and economically significant. To the best of our knowledge, our results are first in offering potential economic mechanisms for the information leakage problem around corporate events in BIST.

Keywords: Information leaks, brokerage houuses, BIST, Information transmission
JEL Codes: G10, G14, G15, G24

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Energy Security, Energy Transition: Projectıons On The Algerian Case

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Abstract

The energy transition is first of all the transition from the current consumption model to another which uses less or less fossil fuels and more and more renewable energies and at the same time combines energy efficiency and energy sobriety (B Senouci University of Setif 2015). As for energy security, each country can have energy security objectives, depending on the endowment or not with energy resources, we define it as being to respond and satisfy, without interruption, the needs of all domestic economic agents (households, businesses, public administration), but also compliance with the country's international commitments (B Senouci ESE Oran 2022).

Despite what the Russian-Ukrainian conflict may suggest that energy security can hinder the energy transition, our opinion is different, at least as far as our country is concerned,

In our present communication, we will develop the constraints, but also the assets and potential that Algeria has, making it possible to ensure the complementarity and symbiosis of the "Energy Transition" and "Energy Security" tandem.

Keywords : Energy transition, Energy security, Economic agents, International economic relations.
JEL Codes: F02, H56, Q48

Wealth Inequality, Household Credit Shocks, and House Price Dynamics

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Abstract

We empirically explore whether wealth inequality amplifies the effect of household credit shocks on real house prices using a two-stage analysis. The first stage of our analysis utilizes country-specific VAR models to estimate how house prices dynamically respond to household credit shocks in each country. In the second stage, we employ cross-country analysis to investigate the role of wealth inequality in understanding the response of house prices to household credit shocks. Our results suggest that higher levels of wealth inequality increase the sensitivity of house prices to household credit shocks, even after controlling for other potential factors.

Keywords: Wealth inequality, credit constraints, household credit shocks, house prices, VAR
JEL Codes: E21, E32, E44, E51, R21

Economic Motıvations Of The Renewable Energy Transition: Empirical Evidence From Eu Countries

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Abstract

Transitioning to renewable energy is crucial for sustainability because using renewable energy reduces greenhouse gas emissions, mitigates climate change impacts, and helps preserve finite fossil fuel resources. Nevertheless, renewable energy conversion is a costly and multidimensional process. Besides, countries' foreign trade composition and energy trade may have an impact on the renewable energy transition. Thus, the impact of sustainability sensitivity and economic factors on the transition to renewable energy has a large literature. This study focuses on the foreign trade factor in the renewable energy transition. For this purpose, the impact of conventional energy prices, political stability, foreign trade data on renewable energy supply in European Union countries is analysed. Panel models are applied to the 2002-2021 data of the variables. The study identifies the motivations for the renewable energy transition by analysing the European Union members in three models according to trade deficit and energy dependence. Our findings have implications for policy makers on the economic motivations of renewable energy transition.

Keywords: Renewable energy transition, European Union, Foreign trade

Jel Codes: H10, Q20, Q30

Convergence of Employee Skills in Türkiye

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Abstract

This study analyzes whether employee skill levels have converged across Turkish regions from 2005 to 2022. The results show no evidence of global convergence, but two distinct skill clubs are identified: one with regions characterized by the share of employees with high skills and another with regions having employees with relatively lower skill levels. The analysis also reveals an East-West divide in the distribution of skill levels. There is no spatial homogeneity in terms of convergence in the share of skilled workers across Turkish regions. As a result, decentralized education and labor market policies are likely to be more effective than centralized approaches. Additionally, regional policymakers could evaluate local labor markets to identify skill gaps and specific needs across various employment categories. Lastly, they could collaborate on regional public-private training initiatives aimed at enhancing the skill sets of workers.

Keywords: Employee skills, Convergence, Türkiye

Investigating Contemporaneous and Lagged R2 Connectedness Among MENAT Stock Market Returns and the Global Energy Uncertainty Index

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Abstract

This study aims to investigate the decomposed relationship among nine stock market returns, including MENAT countries such as Israel, Egypt, United Arab Emirates, Jordan, Bahrain, Lebanon, Oman, Qatar, and Türkiye as well as global energy-related uncertainty index (EUI) using monthly data from February 2007 to October 2022. The model itself decomposes R2 into two, namely contemporaneous and lagged. Contemporaneous From and To results dominate the overall connectedness and thus indicate higher measures than lagged values except for EUI. According to overall connectedness results, the United Arab Emirates is the main net transmitter of spillover, followed by Oman. At the same time, Türkiye's stock market acts as the main net receiver, followed by Lebanon. The empirical findings show that events such as the GFC, Arab Spring, oil price volatility, pandemic, and geopolitical conflicts in the region (e.g., Syria, Yemen, Libya) have intensified the network connectedness. On average, the overall TCI explains 53.06% of the variation while the primary is found in the contemporaneous part with 36.33%, while the lagged part explains only the variance of 16.73%. The model is robust because we get quite similar findings from the Spearman correlation coefficient. The result of this study on the relationship between MENAT stock markets and EUI is expected to be valuable for investors, policymakers, and portfolio managers.

Keywords: MENAT stock market, Energy related uncertainty index, R2 decomposition
JEL Codes: F65; G15

Trade Liberalızation And Gender Inequality In Employment In The Selected Mena Countries

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Abstract

As a result of trade liberalization, whose influence and importance have increased in the last century, significant increases have been observed, especially in the trade of goods and services. On the one hand, while this liberalization leads to rapid acceleration of regional integration efforts, on the other hand, it has significant effects on the gender-based economy. This situation is even more striking considering the heterogeneous structure of the countries in the MENA region. In this study, we focus on the impact of trade liberalization-one of the building blocks of regional integration efforts- on gender equality in employment in the MENA region countries. The study will first focus on gender-based regional integration efforts to represent trade liberalization and then analyze the effects of increasing trade liberalization based on economic integration on gender employment equality. In econometric analysis, we evaluate the impact of increasing inter and intra-regional exports and imports on employment equality between males and females. For this purpose, to measure employment equality between males and females, we employ the number of female employees per 100 males. In order to test the effects of economic integration on employment outputs between women and men, the number of women employed per 100 working men in the selected MENA region countries for the period 2006-2019 was estimated as a function of inter and intra-regional exports and imports with panel data techniques.

Keywords: Trade liberalization, Regional integration, Gender inequality in employment

Quality of government Cohesion Across The EU Regions: Last Stop is Ankara

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Abstract

Government quality is perceived as the core of institutional development. Besides, there is an overall con- sensus that institutions whether directly or indirectly affect economic development. Among different outlays this study examines the evolution of local institutions for the European Union (EU) and questions the re- gional convergence in quality of government (QoG). Our results show a period of catch-up in institutional development across the EU regions. Next, we also incorporate the impact of EU enlargement process by observing the heterogeneous impact of institutional convergence. Results show that regions within the coun- tries accessing to the EU during the Central Eastern European enlargement process witness faster institu- tional convergence. Finally, we consider a candidate country to the EU, namely Turkey. Results show that including Turkey increases the heterogeneity in the sample in a way to suspect about potential institutional divergence. To better apprehend this pattern, we spatially decompose the local institutional convergence for the most augmented convergence model. Results show that it is the regions of Turkey that realize the diver- gence in institutional development. While the remaining EU regions witness varying level of convergence, with the exception of north-western geography, each Turkish region realizes continuous marginalization in terms of institutional development.

Keywords: Convergence, Institutions, Spatial Heterogeneity, Türkiye
JEL Codes: O43, R11, R12, R50

Achieving Carbon Neutrality in MENA Region: The Role of Innovation and Environmental Policies

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Abstract

This study explores the critical roles of global innovation and environmental policies in achieving carbon neutrality within the MENA region. It aims to investigate the impact of the Global Innovation Index and Environmental Policy Stringency Index, along with other potential factors, on the transition towards a carbon-neutral economy in the MENA region from 1990 to 2022. Employing a Panel Quantile ARDL approach, this study demonstrates that environmental policies and global innovation significantly contribute to carbon-neutral processes. The empirical findings indicate that robust innovation ecosystems and stringent and adaptive environmental policies markedly accelerate progress toward carbon neutrality. This study provides new insights for policymakers, highlighting the necessity of integrated strategies that simultaneously foster technological innovation and enforce comprehensive environmental regulations. These insights are crucial for shaping future policies aimed not only at reducing carbon emissions but also at enhancing overall economic and environmental resilience in the MENA region. Through this comprehensive analysis, the study underscores the importance of aligning innovation and policy measures to achieve sustainable development goals and a carbon-neutral future.

Keywords: Sustainable development, Carbon neutrality, Global innovation index, Environmental policies, P-QARDL method
JEL Codes: Q01, Q50, Q55, O30

Testing the Extended STIRPAT Model for Low-Carbon Economy in MENA Region

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Abstract

On global scale, the amount of waste and carbon created is increasing day by day because of the reasons such as increasing population, urbanization, consumption, industrial production and energy demand etc. Moreover, according to the World Economic Forum's global risks map, environmental problems and climate change have been among the most important risks since 2011. The fact that economic growth, one of the basic components of sustainable development, is limited to linear processes (rather than closed-loop/circular systems) threatens another component, environmental quality. Therefore, the importance of growth with a low-carbon economy model emerges both on a global and national scale. In this context, the study aims to provide a more comprehensive framework for investigating the main arguments for a low-carbon economy and environmental degradation in the Middle East and North Africa (MENA) region. Based on the principle of sustainability, the variables of trade openness and renewable energy are added to the main elements of the STIRPAT model (population, affluence and technology). The extended STIRPAT model is tested with the ARDL bounds test approach using data from MENA region for the period 1990-2020. According to the results obtained, while population, affluence and technology variables give statistically significant results in the long term, the effect of the trade openness variable is observed in the short term. 38% of the effect of the shock is eliminated after a period from deviation from long-term equilibrium following short-term shocks. In other words it is concluded that the adaptation process is slowly.

Key Words: Sustainable development, Trade openness, MENA region
JEL Codes: Q01, Q5, F00

The (Un)intended Consequences of Unconventional Monetary Policy in Türkiye: Inflation, Inequality, and Growth

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Abstract

The relationship between inflation, income inequality, and economic growth is a subject of intense debate among economic researchers and policymakers. This study aims to analyze this relationship in Türkiye. The unconventional monetary policy and artificial interest rate cuts implemented in recent years have exacerbated existing economic imbalances in the country.

The research will investigate the causal relationship between economic growth and income inequality, as well as between economic growth and inflation in the Turkish context. It is hypothesized that the expansionary monetary policy has disproportionately benefited wealthy individuals with access to financial resources, leading to increased income inequality. This concentration of wealth has fueled consumption, contributing to persistent inflation and demand-side pressures. Moreover, the study will explore the impact of tight monetary policy and increased interest rates on the behavior of wealthy individuals and its influence on inflation inertia.

By examining these interconnections, the study seeks to provide insights into the complex dynamics driving inflation, income inequality, and economic growth in Türkiye. Based on the findings, the research will propose policy recommendations aimed at mitigating the negative consequences of these imbalances. These recommendations may include redistribution policies, social safety nets, promoting inclusive economic growth, coordinating effective monetary and fiscal policies, implementing progressive taxation, and reforming the labor market. The objective is to develop a comprehensive policy framework that addresses the root causes of inflation and income inequality while fostering sustainable economic growth in Türkiye.

Keywords: interest rates, wealth inequality, demand-side inflation, inflation inertia
JEL Codes: E31, E62, O44, E58

The Impact of the Middle-Income Trap and the Erosion of the Middle Class on Inflation in Türkiye

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Abstract

This study investigates the intricate relationship between the middle-income trap, the decline of the middle class, and escalating inflation rates in Türkiye. Despite Türkiye's economic advancements and classification as an upper-middle-income country in 2007, the nation has encountered significant hurdles preventing its transition to high-income status. Factors such as political instability, structural economic imbalances, inadequate innovation, and a fragile financial system have collectively contributed to Türkiye's entrapment at this development stage.

This research posits that the middle-income trap has exacerbated the erosion of the middle class in Türkiye, creating a vicious cycle that intensifies inflationary pressures. By employing time series and panel data models, this study aims to empirically examine the causal linkages between these variables. The analysis will delve into how the decline of the middle class, characterized by income inequality and reduced purchasing power, influences aggregate demand, supply-side constraints, and inflationary expectations.

The paper will also explore the role of macroeconomic policies and structural reforms in either mitigating or exacerbating the impact of the middle-income trap and middle-class erosion on inflation. Policy implications derived from the findings will be crucial for Türkiye's efforts to escape the middle-income trap, revitalize the middle class, and achieve price stability. Ultimately, this research contributes to a deeper understanding of the complex dynamics between development challenges, social inequality, and macroeconomic outcomes in emerging economies.

Keywords: middle-income trap, middle class erosion, inflation, Türkiye, time series analysis, panel data models
JEL Codes: E21, E24, E31, E44

The Survival Of Firm-Destination Export Relation In Turkiye

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Abstract

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 both maintain existing trade networks and establish new ones, it is highly beneficial to identify the characteristics of firms and destinations 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 level for Türkiye. Although there are some studies on this topic for Türkiye, they either remain at the macro level or focus intensely on specific sectors by assigning different datasets. 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 assigns Kaplan-Meier estimator and Cox proportional hazard model to test possible determinants of the survival. The results show that both firm and destination heterogeneity are important for duration. Although the firm-destination relationship is short-lived for Turkish firms, the firms with previous export experience, older firms, and those that also import to the same destination tend to survive longer in the destination country. It is also observed that the duration is longer with countries that are closer, have a higher GDP, and have a trade agreement.

Keywords: Trade, Duration, Survival analysis
JEL Codes: C41, F10, F14

Impact of foreign aid on environmental quality in MENA non-oil exporting countries: The moderating role of institutional quality

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Abstract

Based on the outcomes of international climate accords such as the Kyoto Protocol (1997) and the Paris Agreement (2015), developed countries have provided substantial financial and technical assistance to developing nations. This support aims to assist these countries in their efforts to both mitigate and adapt to the effects of climate change. Similar to other developing nations, non-oil-exporting countries in the MENA region have received a considerable amount of foreign aid for development and clean energy production over the past few decades. However, carbon dioxide emissions remain high in the MENA region, primarily due to reliance on fossil fuels for energy generation. Moreover, considering the prevalence of corruption and political instability in MENA countries, weak institutions may influence the effect of foreign aid and energy assistance on environmental quality. Furthermore, despite the potential impact of official development assistance on environmental quality, there is a scarcity of research addressing the link between foreign aid, the environment, and institutional quality, especially in the MENA region. To the best of author's knowledge, no empirical study has examined this issue specifically in MENA non-oil exporting countries. Therefore, this study aims to fill this gap in the existing literature.

This study aims to examine the effects of foreign aid and institutional quality on environmental quality in the MENA countries. The specific objectives are follows: 1\ Investigating the direct impact of foreign aid on environmental quality, 2\ Examining the moderating impact on institutional quality on aid-environmental quality nexus 3\ Investigating whether the impact of aid varies across quantiles of carbon emissions.

The study uses panel data for seven MENA non-oil-exporting countries during the period (1991-2020). These countries are: Egypt, Jordan, Lebanon, Morocco, Syria, Tunisia, and Yemen. The study utilizes the method of moments quantile regression (MMQR) as a primary analysis method, supplemented by alternative estimators such as the fully modified ordinary least squares (FMOLS) and dynamic ordinary least squares (DOLS) techniques for robustness checks. The estimation model includes environmental quality as a dependent variable, measured by the carbon dioxide (CO_2) emissions (metric tons per capita). Our core explanatory variable is the official development assistance (ODA). The model also comprises some control variables such as economic growth, urbanization and trade openness. The moderating role of institutional quality is measured by the interaction between aid and institutional quality, focusing on four indicators: control of corruption, rule of law, government effectiveness and property right. The data for this study is obtained from the World Bank's development indicators (WDI) and Global Governance Index (WGI)

The study's findings indicate that ODA exerts positive and significant impact on CO2 emissions, implying that foreign aid mitigates environmental degradation in MENA countries. Furthermore, the results of MMQR reveal that the impact of aid is significant in the lower quantiles of CO2 emissions, but is not significant in the upper quantiles. This means that in countries with high emissions, foreign aid dose not play important role in reducing environmental degradation. Regarding the moderating effect of institutions, the results point out that institutional quality enhances the impact of foreign aid on environmental quality, particularly in the high quantiles of emissions. The findings from alternative methods such as FMOLS, and DOLS align with those obtained from the MMQR method. Therefore, it is concluded that aid flows linked to institutional quality are crucial in mitigating carbon emissions in MENA non-oil exporting countries. Finally, the study provides several policy recommendations aimed at enhancing the impact of foreign aid in combating climate change.

Keywords: Foreign aid, CO2 emissions, Institutional quality, MENA
JEL Codes: Q50, Q54, F35, D73

Analysis The Interaction Of Economy And Politıcs In Terms Of Opportunistic Political Business Cycle Theory

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Abstract

The study discusses the interaction between political decisions and the economy, especially during election periods, highlighting the tendency of governments to manipulate the economy using monetary and fiscal policies to increase their vote share. The Opportunistic Political Business Cycle Theory, introduced by Nordhaus, suggests that governments implement expansionary policies to stimulate the economy before elections and contractionary policies afterward to counter the effects of these policies. The study aims to analyze the validity of this theory by comparing macroeconomic variables such as policy interest rates, Consumer Price Index (CPI), Producer Price Index (PPI), exchange rates, BIST index, Central Bank reserves, and consumer confidence index in the context of the 2023 Turkish General Election and the 2024 Turkish Local Election.

Keywords: Theory of political business cycle theory, Türkiye, General election, Local election, Monetary policy
Jel Codes : E52, H50, P43

Job Satisfaction and Deviation From Desired Working Hours: A Cross-Country Examination

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Abstract

Job satisfaction is an overall assessment of a job, encompassing both its monetary and non-monetary dimensions, and reflects the utility that workers derive from their work. The neoclassical approach to utility suggests that utility is directly proportional to wages and inversely proportional to working hours. In perfect markets, individuals would be able to align their desired working hours with their actual hours. However, empirical research often reveals discrepancies.

This study aims to explore the connection between job satisfaction and working hours, focusing on underemployment and overemployment, defined as working fewer or more hours than desired, respectively. Deviations from the desired working hours have both positive and negative effects. For example, shorter working hours may improve work-life balance but lead to lower earnings, whereas longer hours may increase earnings but also cause anxiety and health issues.

Individual-level data on job satisfaction and deviations from desired working hours are obtained from the European Quality of Life Survey (EQLS) 2016 and 2012, which includes over 25,000 observations from European Union (EU) member states and EU candidate countries such as Albania, the former Yugoslav Republic of Macedonia, Montenegro, Serbia, and Turkey. To account for country-level differences, this data is merged with macro-level variables relevant to the literature. Data on labor market regulations, including hiring regulations and minimum wage, and the cost of worker dismissal, are sourced from the Economic Freedom Index of the Fraser Institute. Information on government expenditure, profit tax rate, taxes on goods and services, inflation, GDP per capita, GDP growth, and unemployment rate is obtained from the World Development Indicators.

Logistic regression was employed to account for the binary nature of the dependent variable. Preliminary findings indicate that both underemployed and overemployed individuals are less satisfied with their jobs compared to those who work their desired hours. This relationship remains consistent even when controlling for country-level variables. GDP growth, GDP per capita, and the unemployment rate are found to be insignificant after accounting for other macro-level variables. Inflation is negatively associated with job satisfaction. Higher government expenditures, higher profit taxes, and lower taxes on goods and services are linked to higher job satisfaction. Additionally, in countries where labor markets are regulated in favor of the labor force, job satisfaction tends to be higher. The findings suggest that understanding and incorporating individuals' preferences for working hours is crucial for enhancing job satisfaction. Furthermore, policies should aim to regulate labor markets and promote economic equity to improve job satisfaction.

Keywords: Job satisfaction, under/over employment, working hours
JEL Codes: J01, J18, 28
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Estimating The Human Opportunity Index for Children of Türkiye, 1993–2018

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Abstract

Ensuring universal access to basic opportunities is one of the most important goals of devel- opment. It is therefore crucial for every country to determine the distribution of opportunities in the measures to be designed for development. In this regard, the study aims to reveal how opportunities are distributed in Türkiye by using the unidimensional and multidimensional human opportunity index. In contrast to conventional measures, this method takes into ac- count both the number and the distribution of available opportunities, so that it can be used to analyse both the degree of coverage rates of opportunities and the inequality of opportu- nity. The data used comes from the Demographic and Health Survey, which is collected and provided by the Institute of Population Studies at Hacettepe University and covers the period 1993-2018. The sample for the analysis consists of children aged 0-59 months. The Shapley decomposition technique is also used to illustrate how children's circumstances, such as the sex of the household head, the age of the household head, the education level of the house- hold head, the place of residence, the position of the household in the distribution of wealth, the breastfeeding status of the child, the sex of the child, the birth order and the number of children under 5 in the household, influence their access to opportunities, namely the source of drinking water, the type of toilet facility, the place of delivery, antenatal care and the status of the child as stunted, underweight and wasted. The findings show that children's access to opportunities in Türkiye has improved over the period in question. According to the results of the Shapley decomposition, the most influential circumstances that explain the human opportunity index are the position of the household in the distribution of wealth, the place of residence (rural/urban) and the birth order of the child.

Keywords: child wellbeing, human opportunity index, inequality, Türkiye.
JEL Codes: D63, I30, O15

Investigating Stock Market Co-Movement with A State-Space Model: Evidence from MENA Countries

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[3]Nisantası University

Abstract

We examine the time-varying nature of the co-movement of excess stock returns in MENA countries over the period 1988:M01-2024:M01. In the literature, the variances of excess returns are used to examine financial co-movement and excess returns are characterized by conditional variance series. In this context, this study follows the literature and uses time-varying conditional variance series of country-specific factors and common factors within the framework of the State-Space model. According to the empirical findings (i) there is a time-varying structure of co-movement in MENA countries (ii) but there is no country that increases or decreases the degree of co-movement in the long run, concisely a mean-scatter co-movement dynamic reveals in MENA countries. (iii) The level of co-movement with the sample countries is highest in the United Arab Emirates, Qatar and Kuwait, and lowest in Tunisia, Jordan and Egypt. (iv) There is no complete co-movement at any point in time. (v) Return co-movement is synchronized for shocks to excess returns and is most affected by the COVID-19 pandemic. (vi) Finally, the degree of co-movement across countries is more affected by global effects than country-specific factors. Our findings provide signals to investors and policymakers investing in MENA equity markets to take into account the time-varying structure.

Keywords: Stock market, Financial co-movement, MENA countries, Time-varying Factor models
JEL Codes: G15, C32

Investigating the Relationship Between Bank Loans, Foreign Investments and Economic Growth: A Study of G20 Countries

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Abstract

Since bank loans encourage economic activity and add liquidity to the economy, it is widely acknowledged that they promote economic growth. Banks aid businesses and entrepreneurs by funding them. This allows them to satisfy their financial needs, encourage their investment in new ventures, and foster growth by allowing technological development. On the other hand, banks have a stimulating effect on economic activities by supporting demand with their loans. The costs and accessibility of bank loans vary depending on economic conditions and financial markets. While high interest rates can reduce credit usage, low interest rates increase credit usage. On the other hand, high interest rates encourage foreign portfolio investors to invest. Therefore, there is a relationship between credit usage and interest rates. Undoubtedly, interest rates can also affect many macro variables. This study investigated the link between economic indicators and bank credits in G-20 nations using data from 2008 to 2018. A one-way causal association between loans and economic development was discovered in this context, adding credence to the body of research. Furthermore, a causal association between loans and portfolio investments was found.

Keywords: Bank loans, Foreign investments, Economic growth
Jel Codes: G21, P33, F43

Searching for a Better Life: Irregular migration in the central Mediterranean[1] route

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Abstract

Irregular migration is a phenomenon that cannot be solved through prevention policies but through a profound understanding of migration decision-making. Migration is driven by push factors from origin countries and/or pull factors from host countries. Push factors include economic turmoil, persecution, war, violence, and environmental crises. Pull factors include economic opportunities, freedom, and cultural factors. The main objective of this investigation is to identify the individual factors behind the decision to migrate irregularly. This research also identifies trends in trafficking in persons, migrant vulnerabilities, protection risks, and the driving factors behind the routes of irregular Egyptian and Sudanese migrants across Mediterranean routes. Moreover, it aims to understand the main drivers of these migration flows and route changes.

A self-reported questionnaire was developed to assess the decision behind irregular migration and the quality of life for Egyptian migrants and other nationalities. Built on a literature review and previous fieldwork in Italy with irregular migrants, the questionnaire covered topics such as migrant demographics, determinants of migrant vulnerability, and Quality of Life (QoL) indicators. Respondents were presented with 35 items regarding their decision to migrate, with the option to select multiple factors.

This study uses the "How's Life?" framework to evaluate migrants' quality of life, covering material conditions, economic and social dimensions, physical and psychological status, and other well-being factors. The selection of indicators was informed by the World Health Organization Quality of Life (WHOQOL) criteria, adapted for the migrant context.

The research employs a mixed-method approach, combining secondary data analysis and field data collection. The data is examined using Structural Equation Modelling (SEM), an exploratory mixed-method technique to build a culturally sensitive measure of decision-making factors. Exploratory factor analysis was used to compute composite scores for the push-pull, macro, meso, and micro factors.

Key words: Irregular migration, migration decision-making, Mediterranean routes, Egyptian, Quality of Life (QoL)

JEL Codes : C30, C38, F22

*Report for International Organisation for Migration IOM-Egypt.

Digitalization in Trade And Its Impact On Foreign Trade: The Example Of Turkiye

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[2]Tekirdağ Namık Kemal University

Abstract

The period we live in has caused major changes in many aspects all over the world, and has also necessitated the restructuring of commercial rules and systems in commercial life. Digitalization and new technologies do not change why we trade, but they change how we trade. In this context, technological innovations and transformations have played a shaping role in international trade. The most important innovation that has affected world commercial life since the industrial revolution is the effects of internet-based digital technologies. The costs of trade, the ways of communicating, consuming, producing and the ways of doing trade have changed. The rise of digital technologies shows that the field of international trade will be affected much more by this digital transformation. The economic growth of countries depends on the developments in this field. In this study, the reflections of digitalization in trade on Turkey's foreign trade and its possible contribution to the country's economy are evaluated.

Keywords : Digitalization, Digital economy, Foreign trade, Türkiye

The Impact of Exchange Rates on Turkish Trade in Services: An Asymmetric Analysis

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Abstract

This study aims to provide the first empirical evidence on the link between real effective exchange rates and service trade using Turkish data from 2005Q1 to 2022Q4. Eight non-tangible service trade sectors are selected to evaluate the impact of currency depreciation or appreciation. This research contributes significantly because the existing empirical literature has just flourished.

This research forms two econometric models (linear and non-linear) for inpayments and outpayments in the selected eight trade-in services and the aggregate trade-in services. The econometric results of ARDL and NARDL estimations indicate that changes in the effective exchange rate of the Turkish lira impact trade in services in both the short and long runs.

Keywords: Trade-in service, Real effective exchange rate, Asymmetric analysis, Turkey
JEL Codes: C22, F14, G20

The Nexus between Poverty and Employment Dependency: An Empirical Analysis on OECD Countries

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Abstract

Poverty, one of the most important socioeconomic challenges throughout the world, can be reduced if its main roots are revealed. Employment-related factors and household dependency may considerably explain poverty. In this study, we merge the concepts of employment and dependency, and generate a variable called employment dependency. We define employment dependency as the ratio of total population to the employed population and observe a notable variation between countries. This variable demonstrates how many people an employed person maintains on average. Then, we define poverty as the ratio of population who have difficulty in making ends and investigate the connection between poverty rates and employment dependency ratios in 27 OECD countries for the 2004-2021 period. By applying fixed effects and fractional probit models, we find that an increase in employment dependency rate significantly exacerbates poverty rates. This finding remains unchanged even after controlling for average wage levels, social expenditures, and median wealth levels in the countries. Consequently, policies towards reducing employment dependency would help alleviate the poverty rates.

Keywords: Poverty, employment, dependency
JEL Codes: I32, O11, O15

Stocks as a Safe Haven or Speculative Asset? Inflation Hedging in Borsa Istanbul During Turbulent Times

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Abstract

This study investigates the intricate relationship between inflation and stock prices on the Borsa Istanbul, particularly within the context of the post-COVID-19 period characterized by unprecedented economic and geopolitical turmoil. While historically, real estate has often served as a reliable inflation hedge, the Borsa Istanbul has emerged as a viable alternative, particularly during the period between 2019 and 2023.Employing a robust econometric framework, we examine whether the Turkish stock market can effectively function as an inflation hedge. Our analysis extends beyond broad market indices to explore sector-specific responses, shedding light on the heterogeneity of inflation hedging across different asset classes. To capture the dynamic interplay between inflation and stock returns, we utilize a combination of time series and volatility models. We incorporate macroeconomic control variables and employ robust estimation techniques to account for potential structural breaks induced by the COVID-19 pandemic and unconventional economic policies. By uncovering the extent to which Borsa Istanbul stocks act as inflation hedges, we aim to contribute to the ongoing discourse on the effectiveness of equity investments as a portfolio diversification tool in inflationary environments. Our findings have implications for investors, policymakers, and financial market participants seeking to understand and manage inflation risks in emerging markets.

Keywords: Inflation, Stock market, Borsa Istanbul, Hedging, Volatility, Economic policy

JEL Codes: G10, G15, C32, E44, E31

The Importance of Concentration Risk in Terms of Liquidity Risk Management

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Abstract

Liquidity generally refers to the ability of an asset to be converted into cash. However, for financial institutions, the mere ability to convert an asset into cash may not be a sufficient indicator. The acceleration in fund movements, especially with digitalization, has made the concentration risk important for liquidity. Concentration often appears in the context of credit risk and inequality. Bank bankruptcies witnessed in the USA and Switzerland at the beginning of 2023 also drew extra attention to the concentration in terms of liquidity risk.

Idea behind banks holding liquid assets against their liabilities is to ensure that they survive an adverse period, either bank specific or marketwise, without defaulting on their customers' withdrawals until central bank or other related authorities step in to take necessary actions. That's why almost all bank supervisors around the world require banks to have certain amounts of liquid assets and/or meet certain liquidity ratios. These requirements assume that liquid assets, which mostly include government securities or placements with central banks, complying with the conditions depicted in regulations can be successfully converted into cash to meet the customers' demand in stress periods. Then, the more is the better for banks in terms of liquidity adequacy, or is it so?

There is an extensive literature on banking's liquidity transformation and creation capacity. Also, there have been studies on liquidity risk management in banks recently. However, in order to assess liquidity, more emphasis is needed on the nature of liquid assets in banks' balance sheets and their share in the balance sheet. For this reason, it is useful to look closely at the course of liquid assets in banks' balance sheets and the nature of these liquid assets. The concentration risk which is of great importance for almost every type of risk, is also critical for liquidity risk and liquid assets. Therefore, it is thought that a concentration-oriented view, independent of the nature of liquid assets, is essential for assessing liquidity risk. Overdependence even on assets that are assumed to be risk-free or very liquid can cause serious vulnerabilities. Additionally, it would be beneficial to monitor level of these liquid assets system wide. Relying mostly on holding liquid assets representing a claim from only one counterparty for liquidity management creates concentration risk. Also, prudential authorities should be aware of concentration risk dimension of liquidity management at the individual bank level especially for contingency planning.

In this study, firstly, the relevant literature on the formation, source and management of liquidity risk in banking was examined. The capacity of banking to transform and create liquidity was mentioned. Particular attention was paid to the concentration discussions triggered by the bank failures that occurred in March 2023. Subsequently, the liquidity risk management principles developed by the Basel Committee on Banking Supervision over the years were evaluated. Then,

the possible effects of the concentration issue on liquidity risk are shown by the historical data of the Silocon Volley Bank, US and Turkish Banking Sectors. As a result, it is emphasized why concentration risk is so important in terms of liquidity.

The concentration indicates a risk, regardless of the intrinsic nature of assets. This refers a weight, which means excessive dependence on something. No matter how good and solid the quality of an asset is, excessive dependence on that eventually involves serious vulnerability. In fact, this is the reality that concentration risk fully reflects. This situation may be more dramatic in terms of liquidity risk. Liquidity transformation ability and providing liquidity are one of the most fundamental qualities and advantages of banks. These features are directly linked to the liquid assets on banks' balance sheets. Therefore, even sole the distribution of liquid assets in banks' assets is very important, regardless of how qualified they are. For instance, it is noteworthy that most of the liquid assets on bank balance sheets are in the form of investments in public entities. The banks need to manage the concentration issue prudently in every aspect in terms of liquidity risk management.

Keywords: Liquidity, Concentration, Risks, Banks, Financial stability
JEL Codes: G20, G21, G28

The Relationship Between Economic Growth and Carbon Emissions in Mena Countries: Panel Data Analysis

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Abstract

The aim of this study is to test the relationship between carbon dioxide emissions and economic growth in MENA (Middle East and North Africa) countries for the period 1990-2020 using panel data analysis. In the analysis, the relationship between carbon emissions and economic growth is examined using Westerlund (2007) ECM cointegration estimator and the Augmented Mean Group (AMG) estimator developed by Eberhardt & Bond (2009). The panel cointegration estimator reveals that there is a long-term relationship between the variables. The AMG coefficient estimation results indicates that the effect of economic growth on carbon emissions is significant and positive across the panel. On a country basis, the effect of economic growth on carbon emissions is found to be insignificant for four countries and significant and positive for the other countries. Consequently, it can be said that increases in economic growth in MENA countries lead to an increase in carbon dioxide emissions, thereby negatively affecting environmental quality.

Keywords: Carbon emissions, Economic growth, MENA countries

Jel Codes: C23, Q43

A Bibliometric Analysis of Sustainable Development in MENA Region

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Abstract

In 2015, with the publication of the sustainable development goals by the United Nations, countries are trying to achieve goals such as combating hunger, reducing inequalities, access to clean water, quality education, sustainable energy while ensuring development. It is very important to ensure sustainable development for the MENA region, which includes relatively disadvantaged countries in terms of Human Development level. In this regard, supporting state policies with academic research is one of the keys to achieving more successful results. In this context, in this study, a bibliometric analysis of the studies on sustainable development in MENA countries was conducted. A total of 95 publications were found in the Web of Science database with the words 'MENA region' and 'sustainable development' together. VOSviewer program was used for bibliometric mapping. According to the findings, the 5 countries with the highest number of studies on sustainable development in MENA countries are China, England, USA, Pakistan, and France, respectively. Turkey ranks 15th in this ranking with 3 publications. When this ranking is based on the number of citations, Turkey ranks 12th with 157 citations. In the keywords of the studies on sustainable development in MENA countries, there are only 4 keywords repeated more than 10 times and they are 'sustainable development', 'Middle East and North Africa', 'Environmental Sustainability', 'sustainability' and 'foreign direct investment'. The authors with the highest number of publications in the field were identified, and a visual network was obtained for the 10 authors with the highest link strength. The top 10 journals with the highest number of publications containing the relevant keywords were identified. Thus, it is aimed to summarize the academic studies on sustainable development in MENA countries from many dimensions and to shed light on future research on the subject.

Keywords: Sustainable development, MENA region, Bibliometric analysis
JEL Codes: C19, O53, Q01

The Validity Of The Displacements Hypothesis In Military Expenditures Of Selected Mena Countries: Evıdence From Fourier Unit Root Tests

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Abstract

According to the Displacement Hypothesis developed by Peacock and Wiseman (1961), there is a rapid increase in public expenditures during periods of economic and social crisis. When the crisis disappears, public expenditures return to their previous level. The aim of this study is to test the validity of the Displacement Hypothesis for selected MENA countries (Egypt, Iran, Israel, Tunisia). The data set of the study is determined as the share of countries' military expenditures in GDP. Fourier Unit Root Tests that allow for soft breaks are used as the methodology in the study. The data range covers the years 1962-2022. All data are obtained from the World Bank database. The fact that the series is found to be stationary indicates the validity of the Displacement Hypothesis. The presence of a unit root in in the military expenditure/GDP series of any country indicates that the Displacement Hypothesis is not valid. In other words, the fact that military expenditure/GDP values tend to return to the average over time means that the Displacement Hypothesis is valid. According to the results obtained from the study, the Displacement Hypothesis is valid for Egypt, Iran and Tunisia. For Israel, the Displacement Hypothesis is not valid.

Keywords: Peacock-Wiseman Displacement Hypothesis, MENA countries, Fourier Unit Roote Tests.

Impact of Technological Innovation on Financial Markets in MENA: An Econometric Analysis

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Abstract

The rapid pace of technological innovation has significantly influenced global financial markets, reshaping investment strategies, market dynamics, and economic growth. This study examines the impact of technological innovation on financial markets in the Middle East and North Africa (MENA) region using advanced econometric techniques. The research utilizes a panel data set comprising various financial indicators, technological innovation metrics, and macroeconomic variables from MENA countries over the past two decades.

Employing a combination of cointegration analysis, vector autoregression (VAR), and generalized method of moments (GMM), this study investigates the short-term and long-term relationships between technological advancements and financial market performance. The findings reveal a positive correlation between technological innovation and financial market efficiency, characterized by increased market liquidity, reduced transaction costs, and enhanced investor confidence. Additionally, the analysis highlights the role of government policies and regulatory frameworks in facilitating the adoption of new technologies and their subsequent impact on financial stability and economic growth.

This study contributes to the existing literature by providing empirical evidence on the significance of technological innovation in shaping financial markets in the MENA region. It offers valuable insights for policymakers, investors, and financial institutions aiming to leverage technological advancements to foster sustainable economic development. The results underscore the necessity for continuous investment in technology and innovation to achieve resilient and inclusive financial markets in the MENA region.

Keywords: Technological innovation, Financial markets, MENA region, Econometric analysis, Economic growth.

Food Price Increase, Export Restrictions and Social Unrest in the Middle East and North African Countries

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Abstract

According to the IMF report, social unrest in the world has been rising after the spread of COVID-19. It coincides with the continuous increase in food prices. During worldwide inflation after the recovery from COVID-19 and the prolonged war in Ukraine, the countries vulnerable to food security in the Middle East and North Africa (MENA) have been negatively affected by food prices soaring. In response, some countries that heavily depend on importing stable agricultural products introduced export bans and quotas to stabilize the domestic food supply. Yet, the effect of such export restrictions on maintaining food security is questionable. Mostly, despite the implementation of export restrictions, food prices continue and it may have affected social unrest. The stabilization of food prices is one of the critical factors in maintaining social stability; however, continuing food price inflation may cause social unrest. Given the above, the objective of this paper is to quantify the impact of food price hikes and export restrictions on social unrest in the MENA countries. We use the data from the Armed Conflict Location and Event Dataset (ACLED), which contains information on conflicts such as political violence and demonstrations within the location. We constructed governorate/provincial level panel data of 11 MENA countries over the period from January 2016 to December 2023. The dependent variable is monthly conflict events including political violence and demonstrations, while a key independent variable is monthly food price and export restrictions. To measure the heterogeneous impact of increases in food prices at the country level, we identify the treatment and control of the governorate/provincial by agricultural intensification, which is measured by the Normalized Difference Vegetation Index (NDVI) of wheat production. Monthly, climate data at the regional level such as temperature and rainfall which may affect social unrest were included as control variables. We examine the effect of the current price increase during the spread of COVID-19 and the Ukraine crisis. The expected results imply price hikes indeed cause social unrest. Our empirical evidence underscores that food prices are detrimental to the social stability in MENA countries.

Keywords: Food price soaring, Export restrictions, Conflicts
JEL Codes: D74, Q11, H56

A Criminal is a Wolf to Another Criminal

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Abstract

This study develops the Malthusian theory of extralegal appropriation. The model presupposes a dualistic universe: in the domain of legal world, the representative firm decides on factor employment, and the representative consumer, on leisure and spending. In the domain of extralegal world, there is no production activity; instead, to finance their consumption, criminals victimize the legal consumer or the legal producer. The work shows the validity of the adage criminalis criminalini lupus est under three different scenarios. The population of criminals serves as a boundary for a criminal activity, much like in a Malthusian economy.

Keywords: Crime theory, Economic crime, Labor-leisure choice, Crime time supply function, General equilibrium
JEL Codes: D73, K42, E10, D50

The Current Account and Exhaustible Resources

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Abstract

This study aims to identify the key factors that determine the current account deficit of a small open economy where an exhaustible resource is an essential element of production. In order to achieve this, I use a two-period small open economy framework, cf. Obstfeld and Rogoff (1996), and demonstrate that, under the logarithmic preference assumption, such an economy, whether resource-rich or resource-scarce, will incur a current account deficit if the subjective rate of discount is sufficiently high and/or the world real interest rate is sufficiently low. Because both are beyond the control of domestic policymakers, I call this situation "impossible duo". I also demonstrate that a policymaker can lower the current account deficit by taxing consumption to make it more expensive, as opposed to the exhaustible. I conclude that the primary cause of the current account deficit is domestic demand exceeding domestic production, rather than the availability of exhaustible resources.

Keywords: Current account, small open economy; exhaustible resources; optimal resource extraction; subjective rate of discount, world interest rate, two-period model, fiscal policy.

JEL Codes: F11; F20; F32; F41; Q56

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Declarations of interest

None

Migration-Adjusted Regional Development Index And Convergence Dynamics In Turkey

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Abstract

This study explores the convergence path of regional development dynamics in Türkiye to contribute to the understanding of Turkey's recent regional development policy. For this aim, we calculate benchmark and adjusted development indices based on the United Nations Human Development Index (HDI) commonly calculated at the country level in the literature. Departing from the literature we construct development indices on a regional basis i.e., at the NUTS-3 level, for the 2009-2021 period. As a benchmark index, we generate the human development index in its conventional form following the reports issued by the United Nations Development Program (UNDP) and, thus, by using the per capita income level, schooling rate, and life expectancy indicators. We discuss the extent to which social welfare accompanies the high economic growth rates in Turkey based on the provincial data and how the economic development is distributed across different regions. Also, we construct an inequality-adjusted human development index by incorporating the GDP-based income inequality measure into the benchmark index. This study also aims to contribute to the literature by generating an immigration-adjusted human development index by adjusting HDI with the migration index. The index is calculated for the period 2012-2021 based on the official records of regular Syrian refugees in Turkish provinces. The index is used to evaluate if immigrants and asylum-seekers impair the regional economic development in Turkey and decelerate the regional convergence of regions. The study employs the convergence club analysis based on Phillips and Sul (2007, 2009) to allow endogenously determined convergence clubs based on regional development figures. With this analysis, it is examined if regions converge to a unique path of development, it arises development clubs and the migration impairs the convergence across regions. We conduct ESDA (Exploratory Spatial Data Analysis) and spatial analysis to control the spatial ties in the provincial-level data.

Keywords: Human development index, Migration index, Convergence clubs, Regional economics, Türkiye
JEL Codes: O15, O47, R11, R12

The Determinants of Profitability in Turkish Banking Sector

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Abstract

Profitability is the essential motivation for commercial banks to operate. In this article, we examine the determinants of profitability of Turkish banks over the period 2002-2018 by using yearly data and GMM method. Return on asset (ROA) is used for the measure of profitability. Our findings show that CDS rates showing the country riskiness is significant in explaining bank profitability. An increase in the country risk premium decreases the profitability of Turkish banks. Additionally, our estimation results show that bank size, capital adequacy ratio and non-performing loans ratio affect the profitability of deposit banks. Our findings do not present evidence for volatility indexes of USA and EA affect the profitability of deposit banks during the analysis period.

Keywords: Return on asset, GMM (Generalized Method of Moments), Turkish banking sector, Credit default swap (CDS), Global volatility indexes

Impact of renewable energy on informal economy

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Abstract

The Middle East and North Africa (MENA) countries are characterized by a high rate of informality and by abundant natural resources in terms of solar and wind energy compared to other regions in the world. However, the share of renewable energy in the total energy supply remains small. In this study, we empirically investigate the assumption that the size of the informal economy sector can be collapsed in the presence of an important renewable energy sector. We use panel data for eleven MENA countries over the period 2000-2017. Our main results prove that a higher share of renewable energy in a country is associated with a lower size of the informal economy. In addition, several alternatives have been used for robustness checks in order to validate our principal findings.

Keywords: Informal economy, Renewable energy, MENA
JEL Codes: E26, Q20

Regional Integration and Inflation Connectedness: Evidence from Italy and Spain

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Abstract

This study examines the diffusion of consumer price inflation shocks across regions in Italy and Spain since World War II. Both countries experienced significant economic growth in the postwar period, with Italy advancing initially and Spain trailing by at least two decades. Utilizing the Diebold-Yilmaz connectedness methodology, the research assesses each country's regional inflation connectedness at both aggregate and detailed levels. The research employs the Diebold-Yilmaz connectedness methodology and focuses on each country's aggregate and granular measures of regional inflation connectedness. Consistent with its wider and longer highway network, Italy had greater regional inflation connectedness than Spain in the 1960s and 1970s. However, as Spain expanded its highway network across all regions after the 1980s, its systemwide inflation connectedness gradually caught up with and surpassed that of Italy in the 1990s and stayed above it. While the connectedness index for Spain shows an upward trend, Italy's index has occasionally declined. This paper also introduces the Regional Inflation Gravity Equation (RIGE) and provides estimates of distance elasticity for pairwise inflation connectivity. With the expansion of the highway network, transportation costs have decreased, leading to a reduction in both countries' distance elasticities. Notably, Spain's distance elasticity has declined to levels closer to zero since the early 2000s, suggesting that regional disparities in inflation connectedness are less pronounced in Spain than in Italy.

Keywords: Regional Inflation, Synchronization, Spillovers, Trade flows, Gravity equation, Vector Autoregression, Variance decompositions, Italian regions.

JEL Codes: E31, F14, C32, G21

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Central Banks and Financial Technology (Fintech): Review of Existing Literature

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Abstract

Central banks around the globe have recently faced many challenges affecting their role and mandate. Among these are the reemergence of inflation after the pandemic, climate change, central bank independence, artificial intelligence, and Financial Technology (Da Silva, 2023). Financial Technology (Fintech) refers to advanced technological innovations that aim at improving and automating both the delivery and use of financial services. It covers a wide range of applications like digital currency, electronic payments, and alternative funding (Amstad et al., 2019). The recent Fintech boom is a bit distinct from previous financial innovation due to its unprecedented speed, data abundance, and disruptions to the conventional financial sector triggered by new players outside the control and supervision of financial regulators (Hasan et al., 2024).

Thus, investigating the impact of Fintech along with its various applications on central banks and their mandate gained momentum among scholars and policymakers. Empirically, three forms of interventions have been identified in the literature. First, the impact of Fintech on central bank governance. Fintech might require central banks to reconsider the adequacy of the legal framework pertaining to currency issuance and payment systems. Also, it may define new statuary objectives and functions for central banks (Bechara et al., 2021). Second, Fintech affects monetary policy objectives, framework, and implementation. As Fintech applications like central bank digital currency (CBDC) and BigTech affect monetary aggregates, money supply, money demand, monetary policy transmission mechanism, and the effectiveness of monetary policy (Fullenkamp and Nsouli, 2004; European Parliament, 2017; Buchak, et al., 2018; Reiss, 2018; Cornelli et al., 2023; De Fiore et al. 2023; Hasan et al., 2024). Third, Fintech applications could undermine financial stability risks. Alternative finance could negatively affect conventional financial sector players' profitability and vulnerability. Moreover, they may raise risks and concerns related to cybersecurity, consumer protection, and the efficiency of existing payment systems (Freidman, 2000; Amstad et al., 2019; Restoy, 2021; World Bank Group, 2022a; World Bank Group, 2022b). Notwithstanding the crucial effect of Fintech on

Disruptions in the Energy Sector and the Potential Impacts on GCC Hydrocarbon Economies

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Abstract

Governments around the world have committed to decarbonizing their energy systems. On the global level, most future energy mix scenarios predict that the energy transition will be progressive, taking place over decades. However, disruptive technologies have the potential to alter that trajectory. This would have significant consequences for hydrocarbon-based economies of the MENA region. This presentation examines potential disruptive innovations and assesses their respective probabilities based upon feasibility, scalability and adoption potential. Focusing on the Gulf Cooperation Council (GCC) countries, this paper explores what these changes could mean for the GCC economies. This explorative paper uses policy analysis approaches to assess governmental strategies and policies to evaluate the extent of consideration and preparation for these potential disruptions (this paper does not offer an economic model of the potential changes but provides examples of the economic impacts and the foundation for models to be undertaken). The findings have implications for industry (innovation and development), political economy (investment and patents), the sustainability transition (heterogenous impacts of disruptive technologies), and economics (altering revenues and exports). Specific recommendations are made for regional intergovernmental organizations, national governments, national research donors, researchers and research institutions.

Keywords: Energy, Hydrocarbon economies, Disruptions, Strategy, Policy

JEL Codes: F01, F53, P48

Rent-seeking, Income Inequality and Brain Drain: An Empirical Investigation for the MENA Region

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Abstract

According to Grogger and Hanson (2011), most international migrants leave home bound for rich nations. The United Nations (2006) estimates that in 2005, 40.9% of the global emigrant population resided in just eight rich economies, with 20.2% living in the US alone. Kratou and Khlass (2022) highlight that the MENA region witnesses a key challenge with the rise in the level of brain drain to high-income OECD countries. Political tensions, anti-freedom policies, and socioeconomic conditions are among the incentives which result in migration of the highly skilled. Among socioeconomic conditions, income inequality is a key variable. The Roy-Borjas model claims that the most talented workers will choose to migrate to countries exhibiting high income inequalities to achieve the highest earnings. The originality of this article is to highlight that, for MENA countries, income inequalities at home, and in particular, the nature of inequalities will affect high-skilled migration towards OECD countries. The most talented workers do not only seek to migrate to the most unequal countries, but they are also sensitive to the nature of inequalities at home, the latter being affected by the nature of institutions. However, the nature of talent has a different impact on high-skilled migration. Indeed, following Murphy et al. (1991), who use college enrollment in law as a measure of talent allocated to rent-seeking, and college enrollment in engineering as a proxy for talent allocated to entrepreneurship, Marianni (2007) has suggested that specialization in productive career is positively correlated with skilled migration and specialization in rent-seeking fields is negatively correlated with skilled migration. Following the contribution of Facchini et al. (2023) which discuss the effect of institutions quality on the nature of income inequality, this paper supports Marianni (2007)'s argument and argues that unproductive inequalities at home driven by rent-seeking institutions is negatively related to high-skilled migration. We test this hypothesis by relying on panel data of migrants originated from 9 MENA countries, of which their work destination is 30 OECD countries for the period 1995–2020. Two econometric technics are used: the ordinary least squares (OLS) and two-way fixed effect. The results show that when income inequalities are conditioned by rent-seeking institutions there is a negative relationship between inequalities and high-skilled migration, suggesting that unproductive inequalities are detrimental to migration. Stylized facts also suggest that specialization in rent-seeking fields is negatively associated with high skilled migration. Although, it is well-established that unfavourable institutional environment and socioeconomic conditions boost high-skilled migration from the MENA regions (Kratou and Khlass, 2022), the effect of the nature of talents of the high skilled has not been investigated thus far. Our results confirm Marianni (2007)'s intuition and suggest that rent-seeking institutions in MENA countries generates unproductive inequalities which incentivize young talents to pursue career in rent-seeking fields and stay in the country of origin. There is thus a negative relationship between unproductive talents and migration. Institutional reforms is thus needed to affect allocation of talents towards more productive career, the latter being the main driver of entrepreneurship and economic growth.

Keywords: brain drain; income inequality; rent seeking; allocation of talents

JEL Codes: F22, J61; D72

Preferences and the Puzzle of Female Labor Force Participation

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Abstract

Women in the Middle East have had significant achievements in the last four decades. Their educational attainment had continuously increased while their fertility rate declined. Nevertheless, their labor force participation has remained stubbornly low. This phenomenon is known as the puzzle of female labor force participation (FLFP) in the Middle East. In this study, I provide evidence on one of the most important but least studied hypotheses to explain this puzzle: the role of preferences in the household. Using discrete choice experiments, I solicit preferences of women and men toward three aspects of jobs: 1) full-time vs. part-time, 2) government sector vs. private sector, and 3) being in an all-female vs. mixed-gender work environment. I document that men, who have veto power over women's decision to work, are willing to pay a 63% wage penalty if a job is in an all-female environment vs. a mixed-gender environment. They are willing to pay a 30% wage penalty for full-time vs. part-time jobs. However, they are indifferent about whether to work in the government or private sector. Men also correctly predict other men's preferences toward these job attributes. Women strongly prefer full-time jobs and are willing to pay a 38% wage penalty for them. Unlike men, they slightly prefer mixed-gender environments over all-female environments but are willing to pay a 5% wage penalty for government sector jobs. They also underestimate how much their husbands prefer all-female work environments over mixed-gender ones and overestimate how much their husbands like government sector jobs. The paper discusses how these results explain why women do not participate in the labor market.

Keywords: Labor supply, Preferences toward job attributes, Middle East and North Africa
JEL Codes: J21, J29, J49

Income Inequality And Poverty In Mena Region

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Abstract

The main objectives of countries are to reduce the level of poverty, to ensure fairness in income distribution, and to provide an equal and peaceful environment by increasing the welfare level of the country and individuals. One of the most important problems that countries face in achieving these goals is income inequality and poverty. As in the goal of "Ending Extreme Poverty and Hunger", the first of the Millennium Development Goals, which has a great emphasis in international discourse, the problems of poverty and income inequality, which have become a global issue for the welfare, peace and security of individuals, should be minimized and, if possible, eliminated.

Policies on income distribution and poverty are still inadequate in the world and in the MENA region, and progress is limited. In order to prevent poverty, it is important to prioritize improving the living conditions of the poor and eliminating income inequality. Moreover, economic and social policies based on economic growth, improving social welfare, reducing regional disparities, creating equal opportunities for education and health, and improving income distribution should be implemented simultaneously and consistently. In the fight against both inequality and poverty, not only the individual but also the state, the private sector, non-governmental organizations and international organizations need to cooperate as a whole. In line with all the results found, new, reliable, effective and stable policies should be implemented to solve poverty and income distribution problems.

In the MENA region, one of the regions with the lowest income distribution in the world, half of the population earns 9% of national income, with the richest 10% earning almost 57% of national income. The 2023 update of the World Inequality Database confirms that income inequality remains very high in the Middle East and North Africa (MENA) region.

In this context, firstly, the basic concepts of income distribution and poverty are discussed and then the income inequality and poverty problem in the MENA region are analyzed theoretically and the policies implemented are presented.

Keywords: Poverty, Income inequality MENA Region

JEL Codes: D63, I30, I32

Does Energy Security Promote Economic Growth? The Direct and Indirect Relationship Between Energy Security and Economic Growth: The Role of Capital, Energy Consumption and Trade Openness

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Abstract

Energy security is imperative for countries aiming to build resilient economies and critical tosustainable economic growth. Energy security affects productivity, competitiveness, and performance of economies. While the existing literature examined the direct effects of energy security on economic growth, the relevance of energy security for the economic returns of input factors and trade openness has not been examined. Unreliable energy supply and low energy security lower productivity as lack of energy security hampers capital utilization and leads to idle use of input resources. This article uses a panel data set consisting of 66 countries between 2001 and 2018 and examines the direct and indirect effects of energy security risk on economic growth using system generalized methods of moments (GMM). In particular, the effects of capital, energy consumption and trade openness on economic growth for countries with high and low energy security are examined. The findings highlight that energy security risk hampers economic growth directly. More importantly, countries with high energy security risk experience lower returns to capital, energy consumption and trade openness, suggesting that the impact of capital, energy consumption and trade openness on economic growth is relatively lower in countries with high energy security risk.

Keywords: Energy security, Economic growth, Capital, Trade openness, Energy consumption
JEL Codes: O13, O47, Q43

Green Aid and Environmental Quality in Developing Countries: The Role of Donor-Recipient Institutional Differences

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Abstract

Green aid aims to increase the capacity of countries to mitigate climate change impacts by improving energy efficiency and deploying green and renewable energy technologies in developing countries. While various donor and recipient country characteristics for the effectiveness of foreign aid are examined, the role of donor- recipient institutional quality proximity for the effectiveness of foreign aid is not investigated. This paper analyzes the role of donor-recipient institutional quality proximity for the effectiveness of green aid in improving environment quality in developing countries using bilateral green aid flows from 29 donors to 97 recipient countries between 2002 and 2018. The findings of this paper demonstrate that green aid helps recipient countries to improve their environmental quality; however, the effectiveness of green aid reduces when the donor-recipient institutional quality differences increase. Aid allocation considering the donor-recipient institutional quality differences could improve the effectiveness of green aid in improving environmental quality.

Keywords: Aid effectiveness, Green aid; Environmental quality, Institutional differences, Institutional proximity

JEL Codes: O17; Q53; Q54; P48

The Impact of Economic Challenges on Iran-Saudi Arabia Rapprochement

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Abstract

Military sector ties up a large proportion of scare resources which can potentially have a negative impact on economic growth in most developing countries. Involvement in costly conflicts and wars is therefore at the expense of the population's prosperity. In the Middle East region, military spending as a percentage of gross domestic product is one of the highest in the world. Although the military budgets of Iran and Saudi Arabia are not transparent, they spend a great part of their revenues on the military sector. The two powerful Muslim countries, which want to expand their influence in the region, support opposing factions in Iraq, Syria, Lebanon and Yemen and are involved in proxy wars that are very costly for Iran and Saudi Arabia. Both countries face the challenge of stagnant economy and rising dissatisfaction among their own people, especially in the past decade. The results of our research show that rise in oil revenues simultaneously stimulate investment and economic growth in Iran and Saudi Arabia and enable them to increase the military expenditures as well. However military spending suppress their economic growth. As it has become clear that there will be no victory in the very costly proxy wars in the near future, Iran and Saudi Arabia welcomed the peace negotiations proposed by Iraq and Oman in 2021. After a few rounds of negotiations, China, which is an important trading partner for most Middle Eastern countries, concluded the rapprochement process in March 2022, which is in line with the interests of Iran, Saudi Arabia and also China.

Keywords: Iran, Saudi Arabia, Political relations, Military expenditure, Economic growth
JEL Codes: F5, H5,O1, P0

The Relationship Between Banking Sector Indicators and Exchange Rate Volatility: Evidence from Türkiye

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Abstract

The main objective of our study is to shed light on the relationship between exchange rate volatility (volatility, henceforth) and key banking indicators. Beginning from the adoption of the floating exchange rate regime in 2001, Türkiye has experienced significant volatility. While volatility affects several macroeconomic and banking indicators, the opposite association may also be the case. Given the significance of banking sector for the whole economy, it is beneficial to understand the association between volatility and banking indicators for many authorities and market players.

We examine the causality relationship between certain banking indicators and CPI-based real effective exchange rate volatility of Türkiye over the period 2013:01-2023:12. We select the following six banking indicators to proxy for different risk and profitability measures: i) non-performing loans-to-total loans ratio as a proxy for credit risk, ii) for the maturity of 3 months, rate sensitive assets-to-rate sensitive liabilities ratio as a proxy for interest rate risk, iii) foreign exchange net general position-to-regulatory capital standard ratio as a proxy for foreign exchange risk, iv) liquidity requirement ratio as a proxy for liquidity risk, v) capital adequacy standard ratio as a proxy for capital risk, and vi) net interest revenues-to-average total assets ratio as a proxy for profitability.

To measure volatility, we perform ARCH-GARCH analysis to the natural logarithmic return of the CPI-based real effective exchange rate. Our analyses indicate that the most convenient model for measuring exchange rate volatility is GARCH (1,1). After obtaining volatility, we employ Toda-Yamamoto causality analysis to examine the causal relationship between banking sector indicators and the volatility.

Our findings suggest a causality relationship running from interest rate risk, credit risk, liquidity risk, capital adequacy risk, and profitability to volatility. On the other hand, the causality running from volatility to banking sector indicators is obtained for interest rate risk, foreign exchange risk, liquidity risk, and capital adequacy risk. Overall, our outcomes imply the existence of a causality relationship between banking indicators and volatility. Therefore, efforts to mitigate exchange rate volatility and manage banking sector risks & performance should be in harmony and coordinated.

Keywords: Exchange rate volatility, Bank risk, Bank profitability, Causality analysis, Toda-Yamamoto.

JEL Codes: E44, F31, G21

Gender Equality in Turkey
From Tradition to Transformation in Women's Roles and Rights

Women ought to show their faces to the world and they ought to look at the world with their own eyes.
Mustafa Kemal Atatiirk (1925)

Çağla Oduncular[1], Eylül Kabakçı Günay[2] and Meltem Ince Yenılmez[3]

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Abstract

Turkish women have historically been vital to the preservation of family customs and cultural values, mostly as caregivers and legacy keepers. Nevertheless, despite improvements in education and economic engagement, deeply ingrained gender stereotypes have frequently restricted women to the home, restricting their access to public life and professional prospects. Turkey's modern gender norms are a complicated tapestry shaped by sociopolitical, religious, and historical influences. Remember that Turkish women were granted civic rights and the ability to vote in elections at the beginning of the 20th century. Gender differences in political representation, employment, and education are maintained by societal beliefs, nevertheless. Traditions of femininity are frequently pushed on women by cultural expectations, which might affect their professional choices and uphold patriarchal systems. Changes in Turkish gender norms have been sparked by external factors such as international human rights frameworks and economic globalization.

A comprehensive strategy that includes educational programs, legal reforms, and cultural changes is required to solve these issues. To build an inclusive society where women can prosper on an equal basis, such initiatives are crucial. The history of women's rights in Turkey offers a compelling illustration of both the tenacity of patriarchal systems and the possibility of revolutionary transformation through persistent lobbying and legislative initiatives. Therefore, it appears that the development of women's roles in Turkish society is influenced by regional cultural contexts and continuing societal issues, and also mirrors larger worldwide moves towards gender equality. Sustained advocacy and creative legislation to break down obstacles and guarantee that women's rights are maintained and protected in all spheres of life will be necessary to achieve gender parity.

Keywords: Women's rights, Human rights, Social movements, Cultural alteration, Turkey

JEL Codes: H55, J41, J83, K31

The Effect Of Rental Prıces On Student Mobılıty

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Abstract

Between 2020 and 2023, Turkey experienced a significant rise in housing prices, with inflation-adjusted rents tripling in some regions, marking it as a standout case of house price inflation globally. This study exploits the regional and temporal variation in rental prices as a natural experiment to explore the impact on students' educational migration within a developing country context, where annually one million high school graduates face the critical decision to stay local or relocate for university education. The analysis combines comprehensive panel data from the Higher Education Council's Atlas on more than 10,000 higher education programs with rental price index data from 81 provinces based on asking rents from online real estate listings. Employing a fixed-effects regression model that accounts for time-invariant characteristics of each program, university, province, and year, this study isolates the effect of rental prices on the openness rates of higher education programs. The findings indicate that a 100 TL increase in rental prices—akin to recent trends in Istanbul and Antalya—results in a 4.4 percentage point decrease in the openness rate of public universities and an even steeper 14.1 percentage point decline in private universities. The adverse effects are especially pronounced among programs with lower entry scores, suggesting that escalating accommodation costs exert selective pressure on student mobility, discouraging those with lower academic achievements from relocating to provinces with higher living costs.

Keywords: Student mobility, educational migration, rental price, housing shock, accommodation cost.
JEL Codes: I23, R21, R23, R31

Modeling the Interplay between CO2 Emissions, GDP, and Energy Mix in MENA Oil Countries: A Non-linear State Space Approach

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Abstract

This study presents a novel non-linear Gaussian state space system, termed the E3S2 model, to analyze the interplay between CO2 emissions, GDP, and the energy mix in MENA oil-producing countries. The E3S2 model encompasses three modules: energy, emissions, and economy. The energy module incorporates consumption quantities of various energy sources and models trends in renewable energy. The emission module accounts for CO2 emissions as a weighted combination of fossil fuels, with time-varying emission conversion factors. The economy module defines GDP as the product of energy productivity and the aggregate consumption of primary energy sources.

Utilizing a data-driven model selection approach, we adapt the E3S2 model to MENA oil countries' data and estimate it using maximum likelihood via the extended Kalman filter. Our findings reveal trends in emission conversion factors aligning with existing literature benchmarks. Long-term projections, conditioned on fuel mix pathways from relevant scenarios, demonstrate the E3S2 model's consistency with global emission projections. However, GDP projections based on linear energy productivity trends present challenges, suggesting a need for alternative models like the E3S2-g model, which incorporates geometric growth in energy productivity.

Our results underscore the necessity for rapid and transformative changes in energy productivity to align economic growth trajectories with sustainable development goals outlined in global scenarios. The findings emphasize the importance of adopting ambitious strategies to decouple economic growth from carbon emissions in MENA oil-producing countries.

Keywords: CO2 emissions; GDP; Energy mix; MENA oil countries; Non-linear modeling

JEL Codes: Q43, Q54, O13, F47

Economic Impact of Automobile Industry in MENA Region

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Abstract

In 1946, Peter Drucker dubbed it "the industry of industries." Today, automobile manufacturing is still the world's largest manufacturing activity, with nearly 95 million new vehicles produced each year during the last decade. After World War I, Henry Ford and General Motors' Alfred Sloan moved world manufacture from centuries of craft production—led by European firms—into the age of mass production. Largely as a result, the United States soon dominated the global economy.

After World War Il, Eiji Toyoda and Taiichi Ohno at the Toyota Motor Company in Japan pioneered the concept of lean production. The rise of Japan to its current economic preeminence quickly followed, as other Japanese companies and industries copied this remarkable system. More examples will be outlined throughout the paper to prove that the auto industry represented the starting point of flourishing economies. Auto industry was the spark for the largest two economies in the world. The paper will show how the auto industry impact the economy and the society. Auto industry provides professional and labor expertise that instigates the creation of other industries.

Historically, North America used to be the largest auto producer. However, for the last two decades, China became the largest producer. China produces one third of the automobiles consumed annually. This means China produces around 30 million vehicles every year. The Middle East region used to produce 2% of annual vehicle production. 2022 statistics showed that the Middle East production grew into 3% of world production. This is a very low number compared to other regions.

The paper will start with an overview on how auto industry impacts society, economy, and other industries. Then, it will cover the current status of auto industry globally and in the Middle East with a focus on the Turkish, Egyptian, and Moroccan experiences. Successes and setbacks will be outlined. Measures of success will be defined as number of automobiles produced versus the number imported/exported. Another measure will be the number of jobs created compared to the overall population.

The paper concludes with scenarios of having an incremental growth of auto industry in different Middle East countries. Based on current practices and the Morocco case, an extrapolation of the results will be calculated to predict the impact on society and economy. The paper presents a strategic vision for the institution of auto industry supply chain within most Middle East countries. Different countries can specialize in different components and an integrated supply chain can help in moving parts to multiple assembly plants. The paper suggests technologies that best fit the region and not necessarily copying the manufacturing technology from other countries. The paper proposes extensions and development of current practices in auto industry to add capacity and technology.

Keywords:

- L6 Industry Studies: Manufacturing, Manufactures,
- D2 Production and Organizations,
- D24 Production; Cost; Capital; Capital, Total Factor, and Multifactor Productivity; Capacity

The Effect of International Sanctions on the size of the Middle Class in Iran

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Abstract

This study examines the impact of international economic sanctions, imposed on Iran due to its nuclear program, on the development of the middle class. Specifically, it investigates how the middle class in Iran would have developed in the absence of these sanctions post-2012. To address this question, we employ a synthetic control model to create a counterfactual scenario for Iran, using a weighted average of other comparable countries that mirror pre-sanction Iran, but did not experience significant international sanctions. By comparing the middle-class size of this counterfactual Iran with the actual Iran that faced major economic sanctions, our results indicate that the annual middle-class size would have been approximately 11 percentage points larger, on average, without the post-2012 sanctions. Our findings are robust across various tests, including placebo tests and synthetic difference-in-difference analyses. The latter analysis shows that the estimated average effect of sanctions on the middle-class size of Iran from 2012 to 2019 is highly statistically significant. Finally, we provide evidence on the relevance of real GDP per capita and merchandise imports as key selected channels through which sanctions negatively affect the size of the middle class.

Keywords: Sanctions; Iran; Middle class; Poverty; Inequality; Synthetic control method; Counterfactual
JEL Codes: F51; I31; P36

International Sanctions and Internal Conflict: The Case of Iran

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Abstract

In this study, we examine how sanction intensity shocks affect the level of internal conflict in Iran. Estimating a vector autoregressive model with quarterly data on internal conflicts (and its subcomponents: civil disorder, terrorism, and civil war) and a sanction intensity index from 2001q2 and 2021q3, we find that an unexpected increase in sanction intensity results in an increase in civil disorder and terrorism. In contrast, after this unexpected increase, the risk of civil war declines.

Keywords: Sanctions, Internal conflict, Civil disorder, Terrorism, Civil war, VAR model, Iran.
JEL Codes*:* D74, F51, F52

Do Large-Scale Events Enhance Total Factor Productivity and Sustain Economic Growth? Evidence from the Qatar 2022 FIFA World Cup

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Abstract

This study explores the expanding literature on Total Factor Productivity (TFP), focusing on its role in economic growth and sustainability. TFP measures the impact of technological innovations on production, capturing output growth not attributed to capital and labor inputs. Various studies have investigated the relationship between labor, capital, technological changes, and economic growth using different methodologies. Notable findings include:
Mega-events, such as the FIFA 2022 World Cup, can spur economic, social, and human development but may also concentrate resources in specific regions, neglecting others. For oil and gas exporting countries like Qatar, which hosted the FIFA 2022 World Cup, understanding TFP's impact is crucial due to vulnerability to energy price fluctuations. Qatar's extensive preparations for the World Cup, alongside significant challenges (e.g., oil price shocks, economic blockade, COVID-19 pandemic), provide a unique context for studying TFP's role in economic diversification and resilience.
This research investigates the factors driving TFP and their role in sustaining economic growth in Qatar from 2000 to 2023, emphasizing the non-hydrocarbon sector. Employing nonlinear Autoregressive Distributed Lag (ARDL) and time-varying Granger causality tests, the study aims to assess the asymmetric responses of GDP to changes in production elements and the dynamic relationships between capital, labor, and economic growth. The findings will offer insights into Qatar's economic performance and inform future projections of TFP and growth.

Keywords: Large-Scale events, Productivity, Economic growth
JEL Codes: O4, J4

Bridging the Gap: Income Inequality and Sustainable Development in the MENA Region

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Abstract

Income inequality poses significant challenges to sustainable development, particularly in the Middle East and North Africa (MENA) region, where economic disparities are profound and persistent. This paper explores the intricate relationship between income inequality and sustainable development within the MENA context, examining the socio-economic and environmental impacts of inequality. The study includes a panel data analysis based on MENA countries. Income inequality is included in the model as an independent variable, while the rule of law, quality of education, and environmental sustainability are included as dependent variables. A multidimensional panel data analysis is used to evaluate the impact on sustainable development indicators. GDP per capita, public expenditure on education, and environmental policies are included as control variables to strengthen the model. The findings reveal that high levels of income inequality hinder progress towards several SDGs, including poverty reduction, rule of law, quality education and environmental sustainability. Moreover, the research underscores the importance of inclusive economic policies and targeted social programs in mitigating inequality and fostering sustainable development. By bridging the gap between economic disparity and sustainable growth, this study provides actionable insights and policy recommendations aimed at promoting equitable and sustainable development in the MENA region.

Keywords: Income inequality, Sustainable development, MENA region
JEL Codes: O15, Q01, D63

Netting the Truth: Exploring Europe's Fish Imports and Their Impact on the Turkish Marine Fish Biodiversity

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Abstract

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: Q: natural resources and environmental economics.

Logistics Performance and Agricultural Exports: Evidence from Sub-Saharan Africa

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Abstract

This paper investigates the relationship between logistics performance and agricultural exports in Sub-Saharan Africa. Using dynamic panel data analysis and focusing on the period from 2012 to 2022, we examine the impact of different components of logistics performance on aggregate agricultural exports. We also analyze how logistics performance affects exports in agricultural subsectors. Our results show that improvements in logistics infrastructure, customs procedures and international shipping services significantly increase agricultural export performance. In particular, the food and live animals sector benefits the most from these improvements, followed by crude materials and animal and vegetable oils and fats subsectors. In addition, we find that key macroeconomic factors such as financial development, foreign direct investment and world demand are important drivers of agricultural exports in Sub-Saharan Africa. These findings highlight the importance of targeted investment in logistics and complementary economic policies to harness the region's agricultural export potential and promote sustainable economic development.

Keywords: Logistics performance, Agricultural exports, Trade facilitation, Sub-Saharan Africa
JEL Codes: F1, Q17, O18, C33

Optimizing Sustainability Decisions: The Role of TOPSIS and AHP in Climate Change Management

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Abstract

One of today's most critical global issues, climate change, brings the concept of sustainability to the forefront due to its adverse impacts such as resource depletion and environmental degradation. Sustainability aims to meet the needs of the present without compromising the ability of future generations to meet their own needs. In this context, it is crucial for decision-makers to conduct comprehensive analyses that consider environmental, economic, and social dimensions.

Two Multi-Criteria Decision Making (MCDM) methods, TOPSIS (Technique for Order Preference by Similarity to Ideal Solution) and AHP (Analytic Hierarchy Process), are powerful tools for making effective decisions regarding sustainability and climate change. TOPSIS ranks alternatives by calculating their distances to the ideal and worst solutions, while AHP breaks down complex problems into a hierarchical structure, allowing for the weighting of criteria and sub-criteria.

In this study, the use of TOPSIS and AHP methods to evaluate different scenarios related to sustainability and climate change is examined. Analyses are conducted to compare the effectiveness of various sustainability strategies aimed at reducing environmental impacts and increasing resource efficiency. The TOPSIS method evaluates the proximity of alternatives to the ideal solution, while the AHP method organizes comparisons between criteria hierarchically. The results obtained indicate that both methods can play a guiding role in complex decision-making processes. Consequently, businesses can make more informed and effective decisions to achieve sustainable development goals.

Keywords: Sustainability, Climate change, Topsis, Ahp
JEL Codes: Q5, Q54, Q56, F64, L11

Understanding the Interplay of Technological Leadership and Information & Communication Technology Utilization

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Abstract

This paper aims to comprehensively model and analyze the interconnection between technological leadership and the utilization levels of Information and Communication Technologies (ICTs) across diverse contexts. The primary objectives are to understand how countries or organizations with established technological leadership influence the adoption and integration of ICTs and to explore the implications for economic development and global competitiveness.

The study adopts a methodological approach utilizing a panel regression framework to examine the relationship between technological leadership and ICT adoption across ten countries from 2008 to 2020. Key variables include Innovation (IN), measured by the number of patents granted; Entrepreneurship (E), quantified by the number of new enterprises established annually; High-technology exports (HT_exp) as a proportion of total exports; GDP per capita (GDPPC); Start-up activities (STUP) measured by the number of business registrations; Secure Internet servers per 1 million people (SIS) index measures the number of secure internet servers, which are servers that use encryption technology to protect data, per one million people in a given country. It indicates the level of secure internet infrastructure and online security available to the population. Data sources include the World Bank's World Development Indicators, International Monetary Fund, Eurostat, and OECD.

The choice of regression model—Fixed Effect, Random Effect, or Pooled Regression—is determined using Hausman and Wald tests, complemented by dummy variables representing different countries. By leveraging reputable data sources and constructing a consistent time series dataset, the study establishes a robust foundation for analyzing how these variables collectively influence technological leadership and ICT adoption, particularly in emerging and developing economies striving for global competitiveness and innovation.

The study finds a positive relationship between technological leadership and ICT development, with GDP and entrepreneurship emerging as primary predictors of innovation. However, the share of high-tech exports in total exports was found to be insignificant during the analyzed period. Additionally, internet penetration plays a significant role in fostering innovation, although its effect diminishes over time. These findings are validated through multiple models and variable measures, highlighting nuanced differences in ICT adoption patterns across sectors and regions. The study underscores the essential role of ICT in technological progress and the varying potential for profit between manufacturers and exporters of technological products.

Key findings reveal significant correlations between technological leadership and higher levels of ICT utilization, suggesting that countries or organizations at the forefront of technological advancements tend to exhibit greater ICT adoption rates. Moreover, the analysis highlights nuanced differences in adoption patterns across different sectors and regions, influenced by factors such as regulatory frameworks, infrastructure development, and educational policies.

Keywords: Technological leadership, ICT adoption, innovation.
JEL Codes: E22, O33, O31

Evaluating Qatar's Food Import Demand Elasticities Pre- and Post-Blockade: Policy Implications for Food Security

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Abstract

This study estimates Qatar's food import demand elasticities, focusing on the period before and after the 2017 blockade. A rigorous econometric approach was employed to select the most suitable model for coefficient estimation, considering Pooled Ordinary Least Squares (POLS), Fixed Effects (FE), and Random Effects (RE) models. The Breusch-Pagan LM test was used to determine whether a homogenous (POLS) or heterogeneous (FE and RE) model was more appropriate. The Hausman test was conducted to differentiate between FE and RE models, with results supporting the use of the RE model due to the lack of correlation between individual effects and independent variables.

Our analysis revealed significant findings regarding the price and income elasticities of food imports in Qatar. A 1% increase in real GDP leads to a 5% increase in the quantity of imported food, indicating a strong income effect. The overall price elasticity of food imports is 0.7, highlighting the inelastic nature of food import demand and Qatar's dependency on imports for its food sector. For specific food categories, the import price elasticity for fish is 1.1, indicating that a 1% increase in fish prices results in a 1.1% decrease in the quantity imported. This suggests a moderately elastic demand, where price changes can significantly impact the import quantity. Dairy products have an elasticity of 0.91, showing relatively inelastic demand with a 1% price increase leading to a 0.91% decrease in import quantity. Vegetables exhibit an elasticity of 0.73, indicating inelastic demand, where a 1% price increase results in a 0.73% decrease in imports. Fruits have an even lower elasticity of 0.63, reflecting very inelastic demand, with a 1% price increase causing only a 0.63% reduction in imports.

These initial findings provide valuable insights for policymakers in enhancing Qatar's food security and reducing vulnerability to external shocks by diversifying import sources and investing in domestic agricultural capabilities.

Keywords: Import Demand Function, International Trade, Food Security, Qatar.

Financial Inclusion and Gender Issues in MENA Countries prior and during the Pandemic

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Abstract

In MENA countries, almost one quarter of the population is aged 15-29 and unemployment is the highest worldwide, whereas female labour force participation is the lowest. Youths lack financial inclusion with respect to account holding and the use of financial services, both traditional and digital (fintech). This paper aims to address the following research question: Are financial inclusion patterns similar or distinct, according to gender issues, age and job status?
We analyse the determinants of financial inclusion, including gender, age and job status, prior and during the COVID-19 pandemic in five MENA countries (Egypt, Jordan, Lebanon, Tunisia and Palestine). Three pooled samples are drawn from the Global Findex Database (2014, 2017 and 2021). Probit regressions test five hypotheses without and with interaction variables regarding the relationship between gender and financial inclusion, and between job status (wage employment and self-employment) and financial inclusion, according to age.
Five main results are noteworthy: (i) Exogenous reasons (discrimination) predominate over endogenous reasons (self-selection) fuelling financial inclusion. (ii) The gender gap as regards financial inclusion rose during the pandemic. (iii) There is an age gap prior the pandemic, with respect to account holding and traditional services use, but fintech use increased during the pandemic. (iv) Although female account ownership improves with youth age, women remain less financially included. (v) Employment and job status promote financial inclusion.
Young women become better educated and challenge young men, education proves necessary but not sufficient a condition to shrink the gender gap. Supply-side gender disaggregated data should focus on average banking conditions according to gender. Policies for closing the gender gap require financial tailored services.

Keywords: Financial inclusion; Fintech; Gender; Job status; MENA countries; Probit regressions; Youth.
JEL Codes: D14; G21; G5; O33.

Revisting Endogeneity In The Relationship Between Co2 Per Capita Emissions And Income Per Capita

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Abstract

This study uses a variety of different methods to deal with the potential endogeneity in modeling the main drivers of the environmental Kuznets curve (EKC) that describes the relationship between CO2 per capita emissions and income per capita. We propose (i) Bayesian Model Averaging (BMA) analysis as a remedy for omitted variable bias due to model uncertainty, (ii) convergence club analysis to endogenously classify a large size of panel of countries as a remedy for unobserved heterogeneity, (iii) inclusion of lagged regressors as a remedy for simultaneity. The empirical findings show that EKC is holding for all except for the first group with the highest (or fastest) long term income trajectories. We also pay particular interest in financial, institutional variables and renewable energy. Findings suggest a clear negative impact of renewable energy consumption, a general positive impact of financial development and no impact of institutions on emissions.

Keywords: Endogeneity, Renewable energy, CO2 emissions
JEL Codes: O13, O44, Q20

Options and Challenges of Financial Development through Microfinance Institutions: A case study of Palestine

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Abstract

This study aims to identify the options and challenges of financing development in Palestine, with a particular focus on the significant role played by Microfinance Institutions (MFIs). The study primarily relies on a qualitative methodology, employing in-depth interviews with a sample of MFIs in Palestine, along with various other relevant stakeholders. The research findings presented in this section elucidate the multifaceted rationales and significance of microfinance in Palestine, encompassing economic, social, and political dimensions intricately intertwined with the context of Israeli occupation. Notably, the discussion explores the foundational justifications for MFIs, emphasizing their role in poverty alleviation, serving marginalized groups, and fostering comprehensive development while navigating the challenges posed by the occupation. Furthermore, the study delves into the evolving priorities of MFIs and their alignment with national development objectives, alongside the impediments faced by these institutions in advancing development initiatives within the Palestinian territories. Through comprehensive analysis, this research offers valuable insights into the dynamics shaping the microfinance landscape in Palestine, highlighting the imperative of addressing challenges and harnessing opportunities to realize sustainable economic growth and social development in the region.

Keywords: Microfinance institutions, Developmental banks, Marginalized groups, Poverty, Palestine
JEL Codes: G21, G38, O11, O16

The Impact of Regional Tax Incentives on Household Incomes in Türkiye

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Abstract

This paper analyzes the effects of regional tax incentives on household incomes in Türkiye. Regional tax incentives aim to increase the welfare level of households in underdeveloped regions by supporting investments in these regions. In Türkiye, a comprehensive regional tax incentive law was introduced in 2009 and was reorganized in 2012. This new tax incentive law includes additional incentives for investments to be made in the Southeastern Anatolia region. This paper analyzes the effects of these tax incentives on household incomes in the Southeastern Anatolia region of Türkiye. We used a difference-in-differences regression approach as our methodology. The households of the Southeastern Anatolia region were taken as the treatment group, whereas the households of the neighboring regions were taken as the control group. We estimated household incomes in the regions using the Income and Living Conditions Survey conducted by Turkstat from 2006 to 2018. In conclusion, it is estimated that incomes of households living in Southeastern Anatolia have increased significantly as a result of tax incentives. When the analysis is repeated for households whose main income source is earnings income, it is seen that the earnings income of the households in the Southeastern Anatolia region increased more than that of households in neighboring regions after 2012. However, there is no significant effect of the tax incentives on entrepreneurial incomes.

Keywords: Household income, Tax incentives, Region
JEL Codes: H31, I38, R11

The Intersection of Technology, Development, and Sustainability in the MENA Region

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Abstract

This study explores the pivotal role of technological innovation in driving sustainable development within the Middle East and North Africa (MENA) region, a territory endowed with vast natural resources and significant economic disparities. The MENA region, characterized by its abundant natural resources like oil and gas faces unique challenges and opportunities in sustainable development. Despite high per capita incomes in certain Gulf Cooperation Council (GCC) countries, there exists a stark divergence within the region due to demographic surges, youth unemployment, and economic dependency on natural resources.

Technological innovation is highlighted as a cornerstone for advancing sustainability in the MENA region. The study delves into the role of technologies, including artifical intelligence (AI), in addressing local and global challenges. It underscores the necessity of an expansive innovation framework that promotes collaboration among researchers, entrepreneurs, educators, and policymakers. Furthermore, it discusses the critical role of sustainability-driven technological advancements in fostering economic growth, enhancing international competitiveness, and addressing environmental issues.

The region faces multifaceted challenges including political instability, economic diversification hurdles, and socio-economic inequalities. However, there is potential for a demographic dividend and the strategic importance of high-level education and a business- ready workforce. The importance of international trade, investment, and aid in unlocking the region's potential is emphasized, along with the socio-political complexities that impede sustainable progress.

Through various case studies, successful technology-driven sustainability initiatives in the MENA region are showcased. Highlighting projects like Dubai's solar energy programs illustrates how technological solutions are being implemented to promote sustainability. This case study serve as benchmarks for best practices and provide valuable insights into the region's efforts to harness renewable energy and sustainable technologies.

The study offers policy recommendations aimed at fostering sustainable development through technological innovation. It stresses the importance of integrating AI into education, enhancing digital infrastructure, and addressing the technological divide. It also advocates for robust public policies that support continuous innovation and secure digital environments. The study concludes with strategic considerations for policymakers to ensure that technological advancements translate into equitable and sustainable economic growth across the MENA region.

In summary, this abstract provides a comprehensive overview of the interplay between technology and sustainability in the MENA region, highlighting both the challenges and opportunities that lie ahead. By leveraging technological innovations and implementing forward-thinking policies, the region can achieve its sustainable development goals and create a more prosperous and equitable future.

Keywords: Sustainable Development, Technological Innovation, MENA Region, Artificial Intelligence
JEL Codes: O30, Q01, Q55, O53, F63

The governance effect on the Relationship Between Public Debt and Growth: A Dynamic Panel Threshold Analysis

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Abstract

Over the last decades, several developing and advanced countries have envisaged an increase in their public debt. Moreover, after the financial crisis of 2008 and the pandemic crisis Covid-19, many countries are experiencing unsustainable current debt trajectories. The highest level of borrowing is for Japan with 257 percent of GDP in 2021 where for the United States it is around 133 percent of GDP. In Europe, the highest level is for the Greece with 207 percent of GDP in 2021 followed by Italy with 159 percent of GDP in 20211. This unprecedented increase has reminded of the serious question about the impact of public debt on economic growth.

Several studies are interested in the linear relationship between public debt and economic growth. The question of whether public debt is a burden or a means on economic performance is largely investigated in the economic literature, but the results present many controversies. Recently, the analysis of a nonlinear relationship corresponds to the trend among the emerging empirical literature. The aim of this study is to investigate whether the relationship between public debt and growth depends on the institutional quality.

This paper is novel in two points. First, it joins the few literatures relative to the nonlinear link between public debt and growth with respect to macroeconomic factors. Although the increasing number of these empirical studies, less attention has been attributed to institutional quality as a crucial explanatory factor (Kim et al., 2017). This limit reveals the objective of this paper that attempts to elucidate the heterogeneity of this relationship. Particularly, it examines the threshold level of governance to explain the mitigated result of the direct relationship between public debt and growth. Public debt is assumed to enhance growth if the country exhibits good governance while weak governance can be regressive to sustained growth. In fact, borrowing funds can stimulate the economy if they are used effectively.

Second, this paper adopts -for the first time as in our knowledge- the approach of Seo and Shin (2016) and Seo et al., (2019) to deal with the endogenous threshold variable as well as endogenous regressors for panel data. Many previous studies have used threshold regression or sample splitting models to take into consideration this problem of heterogeneity (Durlauf and Johnson, 1995; Papageorgiou, 2002 and Tan, 2010). However, these works ignore the threshold variable's endogeneity which leads to inconsistent estimated parameters for the regime-specific partial effects while there is strong evidence that many variables such as public debt, governance, trade, etc. are endogenous (Acemoglu et al., 2001; Frankel and Romer, 1999 and Panizza and Presbitero, 2012). Recently, Seo and Shin (2016) and Seo et al., (2019) have developed a dynamic panel threshold model that integrates the initial level of the dependent variable to overcome the endogeneity problems and to reveal the actual pattern of the relationship (kinked or discontinued) among the model' variables especially when the threshold level is reached.

More precisely, the objective is to determine the governance's threshold level through it the public debt has a positive effect on growth by using the approach of Seo and Shin (2016) and Seo et al., (2019).

Considering panel data from 1995 to 2020, the results prove that public debt is found to be determinantal to growth if the institutional quality is good. For this reason, many countries especially developing, or less developed ones have to improve their institutional environment by fighting against corruption, bureaucracy, insecurity, and political instability, promoting public

participation in governance, and increasing the government efficiency. A healthy institutional environment is necessary for good use and management of the public debt which may boost growth and economic development in the long run.

Keywords: Public debt, Economic growth, Governance, Dynamic panel threshold model
JEL Codes: C24, F34, F43, O43

Consequences of Monetary Expansion in an Inflationary Environment: Turkish Experiment Between 2021 and 2023

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Abstract

In September 2021, CBRT started monetary expansion in an inflationary environment which was followed by even higher inflation rates, depreciation of the Turkish Lira, deterioration of current account balance, increase in country risk and dollarization. This paper discusses the consequences of this deviation from the New Keynesian monetary policy framework and undertakes a counterfactual analysis for inflation and property prices using synthetic control method. The counterfactual analysis suggests that the reduction in the policy rate increased average CPI and property price inflation respectively by 50 and 140 percentage points. In the broader context, the counterfactual analysis confirms that absence of credible commitment to a nominal anchor causes high inflation rates and deterioration in the overall macroeconomic performance.

Keywords: Monetary policy, Inflation, Property prices, Turkey, Central banking, Synthetic control
JEL Codes: E2, E31, E52, E5

How Do Disruptive Technologies Affect Sustainable Development in Türkiye?

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Abstract

In line with the achievement of the Sustainable Development Goals, the importance of the changes brought about by technology that enable development in society is emphasized. Among the various technologies developed in recent years, disruptive technologies are considered to be the most revolutionary ones. It is stated that these technologies have a great potential to lead humanity towards sustainable development. In this context, this study aims to determine the relationship between disruptive technologies and sustainable development goals for Türkiye. This relationship is examined within the scope of sustainable development goals 9 (industry, innovation, and infrastructure) and 13 (climate action).

Therefore the hypotheses of this study are formulated based on the existence of a significant relationship between disruptive technologies and sustainable development in Türkiye. In the applied analysis, disruptive technologies are measured by variables including patents in ICT, computer, electronic and optical industry imports, medium and high-tech exports, and individual internet usage, while sustainable development is represented by CO2 emissions. Using these variables, the model is estimated with Autoregressive Distributed Lag (ARDL) analysis for the period 1990-2022. The data used in the analysis are annual and all variables are transformed into logarithmic form to reflect geometric growth patterns.

The findings indicate that there is a valid cointegration relationship between the lagged values of variables representing disruptive technologies and CO2 emissions. According to the results, increases in variables indicative of disruptive technologies, such as patents in ICT, medium and high technology exports, and imports of computer, electronic, and optical industries, are leading to higher CO2 emissions in Türkiye, thereby negatively impacting sustainable development goals. On the other hand, the effect of individual internet usage is quite low. These findings are consistent with studies in the literature that demonstrate the negative impacts of disruptive technologies in various fields.

Keywords: Disruptive technologies, Sustainable development, ARDL

JEL Codes: O33, O34, Q01, Q55, Q56

Ecological Deficit/Reserve Analysis In Mena Countries And Turkiye

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[3] Independent Researcher

Abstract

MENA is the abbreviation of the words Middle East and North Africa and describes a wide region covering all Middle Eastern countries extending from Morocco to Iran. Although MENA countries are generally close to each other in religious and cultural terms, they have different levels of economic development. The fact that some countries, which are not leading in terms of national income, have high per capita national income is a remarkable feature of the region.

Ecological deficit/reserve is the difference between the ecological footprint representing consumption and the amount of biological capacity representing production. In other words, they are demands that are above or below biological capacity. Ecological footprint, a basic sustainability indicator used to measure our effect on the planet, is simply defined as how much of the biological capacity we consume to re-provide everything we use and eliminate the impact we create. Biological capacity or biocapacity is an indicator of the capacity of a geographical region to produce renewable natural resources.

In order to ensure a sustainable future, it is necessary to reduce the ecological deficit or increase the ecological reserve, that is to reduce the ecological footprint and/or increase the biocapacity. Since it is difficult to increase the amount of biocapacity in the short term, it is especially important to reduce the ecological footprint. The aim of this study is to analyze the ecological deficit/reserve in MENA countries and Turkiye in the period of 2018-2022. As a result of the analysis, ecological deficits rather than reserves are expected in these countries. After determining the current situation of the countries, to give ideas to the public and authorities on the measures to be taken is another aim of the study.

Keywords: Ecological deficit/reserve, ecological footprint, biological capacity
JEL Classfications: Q01, Q56, Q57

A Research on the Countries in the Middle East and North Africa Region with which Turkey Trades Foreign Trade

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Abstract

Middle East and North Africa (MENA) Region has a complex structure in terms of socioeconomic and political aspects. According to World Bank sources, MENA Region includes Egypt, Jordan, Lebanon, Morocco, Tunisia, Algeria, Djibouti, Iran, Israel, Jordan, Palestine, Yemen, Syria, Iraq, Saudi Arabia, Qatar, Oman, United Arab Emirates, Malta, Kuwait, Bahrain and Libya. It has significant reserves in terms of natural gas and oil resources, and some studies describe the region as a world energy center. Nevertheless it can be said that the human development level and macroeconomic indicators of the region are low, and problems such as corruption and poverty are encountered in the region.

According to Turkish Statistical Institute foreign trade statistics; Iraq, Iran, Saudi Arabia, Morocco, Algeria and Egypt, which are located in the MENA Region where Turkey exports 1 billion dollars or more in 2023 and whose population is over 10 million people, constitute the scope of this study. Countries in this region have development potential in renewable energy, manufacturing, tourism and service sectors. The population of the countries subject to the study constitutes more than half of the total population of the MENA Region, and this situation brings structural problems such as unemployment and low labor force participation rate.

This study investigates how the MENA Region countries with which Turkey conducts foreign trade react to crises. In this context; Gross domestic product, per capita income, foreign direct investments, net migration, growth, unemployment and inflation rates were compiled using the International Monetary Fund and World Bank databases. Descriptive statistics were created using the data and crisis periods were determined based on this. An evaluation is presented for the sample in question, taking into account the data before and after the crisis period.

Keywords: Regional resilience, MENA region, Economic crises, Foreign trade

JEL Codes: F40, G01, R11

Economics vs. Politics: Economic Adversity and Political Behavior in Iran

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Abstract

It is always a question of whether Iranian voters cast ballots in non-competitive elections where there is little meaningful choice is a persistent one. Current theories for voting under Iran's authoritarian regime place a strong emphasis on the roles that patronage, clientelism, and machine politics play. In contrast, I go beyond the explanations based on machine politics and argue that economic indicators stimulate the turnout level, and against the predictions voting under authoritarianism, political machines cannot cause turnout in Iran's elections. The regional statistics from Iran's presidential polls from 2000, until 2021 on the provincial level, and series of panel regressions and spatial regressions are employed to indicate that economic adversity shapes the patterns of turnout mobilization. Even though oil revenue plays a significant role in empowering political machines, and it is used to fund patronage networks, the prevalence of clientelism in Iran's political system has contributed to feelings of political apathy and disillusionment among the broader population and caused a decrease in the turnout level.

Keywords: Economic adversity, Iranian politics, Voter turnout,
JEL Codes: P00, P4, P47, P48, N45, D72

The Analysis of Export and Innovation Relation for Turkey on Province Level

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Abstract

In the economic growth literature, the relation between export expansion and economic growth of a country had been analyzed widely and stated positive correlation alongside with the other macroeconomic indicators. The increasing importance of innovative activities affects the export of countries as well.

The objective of this study is to find the relation between export value and innovative performance on the province basis for Türkiye for the period between 2004-2023. By using patent applications as a proxy for the innovative output on province level, this study aims to explain the impact of regional innovation on provincial exports, using spatial econometric techniques. The main motivation to use spatial econometric is that the geographical proximity of innovative activities may create a spillover effect to facilitate knowledge transfer.

The preliminary findings suggest that there is a positive and significant relation between innovative performance and export performance.

Keywords: Export, innovation, Patents, Spatial econometrics

JEL Codes: F13, O3, R12

Navigating the Ripple Effects of Oil Price Dynamics on UAE's Tourism Industry: A Comprehensive Time-Series Exploration

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Abstract

This research paper aimed to evaluate the impact of world oil prices on tourism arrivals in the United Arab Emirates (UAE). The objective of the study was to determine the transmission mechanism of the influence of changing oil prices on the tourism sector of the UAE. We analyzed the impact of world oil prices and the crude oil sector on tourism arrivals in the UAE for the period of 2001–2020 by applying Augmented Dickey-Fuller (ADF) tests, Ordinary Least Squares (OLS) regression, Autoregressive Distributed Lag (ARDL) models, and Granger causality techniques. Our findings indicate that fluctuations in oil prices have both direct and indirect effects on tourism arrivals in the UAE. Specifically, a rise in oil prices can lead to increased government revenues, which may enhance infrastructure and tourism services, thereby attracting more tourists. Conversely, a decline in oil prices may reduce government spending on tourism development, negatively impacting tourism arrivals. The results also showed a significant short-term and long-term impact of oil price changes on tourism. To mitigate potential adverse effects of oil price volatility, we emphasize the importance of diversifying the UAE's economy and investing in sustainable tourism development. This approach could help stabilize tourism arrivals despite fluctuations in oil prices.

Keywords: Oil Prices, Tourism Arrivals, UAE Economy
JEL Codes: Q43, L83, C32, O53

Analysing The Asymmetric Structure in MENA Stock Markets

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Abstract

This study analyses the dynamics of stock price shocks by taking into account non-normal distributions, structural changes and nonlinearity in MENA stock markets. Using stock price data for 11 MENA countries over the period August 2014-June 2024, the study highlights the substantial of the asymmetric structure in stock price shocks. When considering smooth shifts and normal errors, 18% of the shocks in stock prices are transitory, while 36% of the shocks are transitory under consider smooth shifts and non-normal errors. Respect to the results of the FNQKS unit root test developed by Bahmani-Oskooee et al. (2020), which simultaneously considers smooth shifts, non-normal errors and non-linearity, shocks to stock price tend to mean reversion process for MENA countries. Furthermore, the FNQKS unit root test, which allows to see the impact of shocks at low, medium and high quantiles, shows that each country responds differently to shocks at different quantiles. This finding provides fresh information for investors who will diversify their portfolios in the stock markets of MENA countries.

Keywords*:* MENA countries, Stock markets, Non-normality, Smooth breaks, Nonlinearity
JEL Codes: C22, F31

Survey-based Measures of Risk Attitudes and Portfolio Risk: Evidence from Pension Participants

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Abstract

We use a unique data set of pension participants in Turkey to evaluate the effective- ness of a risk questionnaire developed by the regulatory authority. Our analysis includes a reliability assessment (Cronbach's α = 0.73) and a factor analysis that reveals two la- tent constructs: risk attitude and financial situation/literacy. Although both factors show a significant positive relationship with participants' portfolio risk, the overall explanatory power remains low, with an R^2 of 0.134. Comparing these factors in terms of their con- tribution to predictive validity, we demonstrate that the risk attitude factor—formed from questions directly addressing financial risk-taking—exhibits significantly greater predictive power than the financial situation/literacy factor, which pertains to questions about the financial situation and self-assessed financial literacy. Our results imply that demographic factors like gender, education level, marital status, and age show weak predictive power for portfolio risk, suggesting that observed behavior in risky choices is more influenced by domain-specific attitudes.

Keywords: Risk attitudes, Pension fund, Portfolio risk
JEL Codes: G11, G40

Predicting Oil Prices: A Comparative Analysis of Machine Learning and Image Recognition Algorithms for Trend Prediction

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Abstract

This paper investigates the effectiveness of machine learning algorithms, including logistic regression, artificial neural networks, support vector machines, gradient boosting algorithms (XGBoost, ExtraTrees), random forests, and convolutional neural network (CNN)for daily spot oil price forecasting across horizons of 1 to 8 days. We utilize a comprehensive set of features, including technical indicators, financial data, and volatility measures, to predict trends in closing prices. Our results reveal that the CNN model significantly outperforms other algorithms. This superior performance likely stems from CNN's ability to capture visual patterns in price movements, potentially mimicking how traders identify trends.

Keywords: Artificial neural networks, Support vector machines, Random forest, XGboost, Extreme trees classification, Convolutional neural networks (CNN)
JEL Codes: G17, C53, C45

Behavioral Economics Approach to Sustainable Development

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Abstract

This study aims to explore the potential role of behavioral economics in sustainable development. It focuses on integrating insights from behavioral economics into key sustainability challenges, such as resource conservation, tackling climate change, and encouraging sustainable consumption patterns. The study evaluates the effectiveness of behavioral interventions designed to encourage environmentally conscious behaviors and examines the potential of nudge and incentive mechanisms to promote environmentally friendly choices. Additionally, it considers the psychological and social factors influencing decision-making processes in the Middle East and North Africa (MENA) region and discusses practices that can support more sustainable economic growth from a behavioral economics perspective. In this context, the paper offers recommendations for policy design and implementation. Overall, this study highlights the potential of behavioral economics insights in shaping sustainable development policies and contributes to theoretical discussions in this field.

Keywords: Sustainable development, Sustainability, Behavioral economics
JEL Codes: D03, QO1, O12

Twisting Ties: Analyzing the Impact of Shifting Diplomatic Relations on FDI Flows Using an Instrumental Variable Approach

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Extended Abstract

Introduction: Alongside several external disruptors such as COVID-19 and the advent of AI, internal disruptors from within the region, such as the diplomatic rift between Qatar and a number of Arab countries, can also significantly influence economic variables.
Economists often overlook political dimensions when analyzing the economic re- lationships between countries, particularly the influence of diplomatic relations on Foreign Direct Investment (FDI).

Objective: The study aims to explore the impact of changing diplomatic relations between Egypt and Qatar on FDI inflows from Qatar to Egypt for the period of 2012 to 2024.

Expected Scientific Contribution of the Paper: This research is expected to fill significant gaps in the literature, providing em- pirical insights into the effects of geopolitical conflicts and internal regional dis- ruptors, like the diplomatic rift between Qatar and a number of Arab countries, on economic variables such as FDI.

Research Questions: How do shifts in diplomatic ties affect Qatari FDI flows into Egypt? Could FDI be strategically deployed as an instrument of economic diplomacy and potentially manipulated according to political dynamics?

Methodology Used: The study employs an innovative instrumental variable approach using the death of state leaders and the timing of Ramadan for robust causal inference and utilizes quarterly data sourced from the Egyptian Central Bank.

Key Elements of the Proposed Research Paper: The research traces the evolution of bilateral relations and examines the con- sequent fluctuations in FDI, considering the strategic deployment of FDI in economic diplomacy.

References and Data Sources List: The paper will draw on data from the Egyptian Central Bank and utilize archives of diplomatic events to construct an index of bilateral diplomatic relations, in addition to consulting existing literature on the impact of diplomatic relations on FDI.

Keywords: Economic diplomacy, Foreign direct investment, Political relations, Egypt, Qatar
JEL Codes: F21, F51, F53

Debt Relief and Inequality

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Extended Abstract

1. Motivation and Objectives: Rising national debt is a major subject of concern at the global level, with debt and debt service straining national budgets. Debt crises are particularly pronounced in developing economies in the global south. In an address in the summer of 2023, the UN Secretary-General sounded the alarm on the global debt risk and its implications on developing economies, calling for deep financial system reforms. This paper studies the relationship between debt relief and inequality. Debt service reduces the fiscal space of governments, limiting their ability to support the vulnerable groups in their population and providing opportunities for social mobility. Debt relief should reduce this stress and help alleviate inequality. Conversely, a high level of debt could be a sign of structural economic issues and fiscal mismanagement, which are characteristics that are often associated with high level of inequality. In such case, debt relief would have no or limited impact on inequality, as the observed association between debt and inequality may be confounded by the structural causes of both phenomena. This papers aim is to evaluate the impact of debt forgiveness on national inequality. To answer this broad research objective the paper will address three issues:

1. Evaluate and quantify the causal impact of debt relief on short- and long-term national income and wealth inequality.

2. Investigate government fiscal response to a debt relief by examining subsequent composition of fiscal spending.

3. Study the impact of debt relief on inequality of opportunity.

2. Data: We rely on multiple data sources to collect and construct the different variables needed for the purpose of this study.

Data on sovereign debt: Debt data will be constructed from several sources including IMF and OECD data on national debt.

Outcome variables: The main outcome variable of interest is the Gini coefficient for both wealth and income. Other measures of income and wealth concentrations, such as decile ratios and Palma ratio will be constructed as well.
Macroeconomic Controls: To control for confounding variables we include macroeconomic variables.

3. Methodology and Analysis: Using panel variations in debt across countries and over time, we

produce reduced form evidence on the impact of debt relief on inequality. To do so, we first construct measures of debt relief following the methodology outlined in Johansson (2010). We adopt various empirical specifications to estimate the causal effect of debt relief on inequality, relying on country fixed effects and controls for observable confounders.
In addition to investigating the impact of debt relief on standard inequality measures, we investigate its impact on fiscal policies and composition of public spending. The aim of this exercise is to investigate potential mechanism for the relationship between debt and inequality.
Finally, the work will involve a structural model of debt relief and inequality, that will be calibrated using data from various developing economies in the MENA and other regions.

4. Conclusion and Policy Implications: This project fills an important gap in the academic literature and has significant policy relevance. The work will improve the understanding of the relationship between public debt and income and wealth inequalities. The work will focus on government response, through fiscal policy composition, to debt relief as a potential mechanism of the debt- inequality relationship.

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Johansson, P. (2010). Debt relief, investment and growth. World Development, 38(9):1204– 1216.

Keywords: Debt relief, Fiscal policy, Inequality
JEL Codes: D3, E6, H6

Socio-Economic Determinants of Unmet Health Needs in the MENA Region: A Logistic Regression Analysis

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Extended Abstract

Objectives: The objective of this study is to identify the socio-economic determinants of unmet health needs in the MENA (Middle East and North Africa) region and to examine how these needs affect access to healthcare using logistic regression analysis.

Data: The dataset has been collected from reliable international sources such as the World Health Organization (WHO), the World Bank, and the United Nations (UN). The dataset includes socio-economic indicators and healthcare access status from various countries in the MENA region. The dependent variable is the healthcare access status (0 = access available, 1 = access not available). Independent variables include income level, education level, unemployment rate, political stability, healthcare infrastructure, gender, and age.

Methodology: Using logistic regression analysis, the effects of independent variables on healthcare access were examined. This method is appropriate due to the binary nature of the dependent variable. The model is defined as follows:

$$\text{logit}p = \beta_0 + \beta_1 \text{Income} + \beta_2 \text{Education} + \beta_3 \text{Unemployment} + \beta_4 \text{PoliticalStability} + \beta_5 \bullet \text{HealthcareInfrastructure} + \beta_6 \text{Gender} + \beta_7 \text{Age}$$

In this model, p represents the probability of healthcare access.

Results: The results of the logistic regression analysis revealed the following findings:

- **Income Level**: As income level increases, the probability of accessing healthcare significantly increases.
- **Education Level**: Higher education level positively affects healthcare access.
- **Unemployment Rate**: Higher unemployment rate negatively affects the probability of accessing healthcare.
- **Political Stability**: Countries with higher political stability have a higher probability of healthcare access.
- **Healthcare Infrastructure**: Better healthcare infrastructure increases the probability of healthcare access.
- **Gender and Age**: Gender and age are also significant factors affecting healthcare access.

Keywords: Health economics, Unmet healthcare needs, Health and inequality
Jel Codes: I12, I14, I18, O15

Technology Shifts and Investment Trends: Analyzing the impact of Digitalization on FDI in Developed versus Developing Economies

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Extended Abstract

Background: Research papers have overlooked analyzing the controversial and indispensable impact of digitalization on FDI in developed versus developing countries. Digitalization enhances FDI attractiveness by reducing information costs for cross-border investments, allowing investors to easily access and analyze accurate data from emerging markets, leading to more efficient decisions (George & Schillebeeckx, 2022; Luo, 2021; Zhang et al., 2024). It also enables international businesses to quickly understand the market and social conditions of the host nation (World Economic Forum, 2021). Additionally, digitalization lowers the cost of talent searches and, combined with technological advancement, provides ample human resources for multinational companies (Grimpe et al., 2023; Zhang et al., 2024). It also helps businesses integrate into the host nation's market by reducing communication costs and distances.

Objective: This paper aims to investigate how digitalization affects Foreign Direct Investment (FDI) in both developing and developed countries. Using the DIGIX index, which integrates various dimensions of digitalization—like infrastructure, adoption rates, regulatory environment, and affordability—the study offers a more comprehensive analysis than traditional metrics such as internet penetration or broadband access (Camara & Tuesta, 2018). This approach provides clearer insights into the relationship between digitalization and FDI, addressing the research question: "Does digitalization positively impact FDI in both developing and developed countries?"

Methodology: The authors empirically assessed the impact of digitalization on Foreign Direct Investment (FDI) across developing and developed countries. Using cross-sectional data for years 2016, 2018, 2019, and 2020, across a diverse group of nations as classified by the United Nations (UN, 2024). The paper includes 36 developed countries and 59 developing countries, however Bahrain which is a developing country was included only in 2016 due to lack of data availability.

Data analysis is conducted through STATA, transforming variables into natural logarithms to ensure reliable results (Feng et al., 2014). Descriptive statistics provide insights into data characteristics. Furthermore, an OLS regression analysis is performed to explore the fundamental relationships between variables. Diagnostic tests, such as the Breusch-Pagan test and Variance Inflation Factor (VIF) test are conducted to ensure the assumptions of the OLS model are met (Breusch & Pagan, 1979; Stock & Watson, 2020). Finally, robustness checks are also conducted ensure results hold firm under different conditions.

Results/findings: The authors found that digitalization is positively and significantly impacting digitalization in developing countries across all years included in the study. However, digitalization has insignificant impact on FDI in developed countries across all years included in the study except

for 2020 and this is due to the Covid-19 pandemic. Finally, across all years and all models data were homoscedastic, robust, and mullticollinearity was not a problem.

Conclusion: This paper analyzed such relationship by utilizing an index called DIGIX that contributed in reaching out more concrete results and analysis for the nexus between digitalization and FDI, due to its holistic view. Additionally, this paper is suggesting the integration and inclusion of digitalization in Dunning's OLI Framework as one of the main factors that attracts FDI along with the original ones; ownership, location & internalization factors. The results of this paper would also contribute in providing some policy recommendations across diverse aspects. Governments specially of developing countries should pay more attention to investing in major enhancements in digital infrastructure, as well as supporting ICT development, also enhancing digital literacy, moreover, promoting public-private partnerships through offering training programs and workshops for improving digital skills, additionally, developing regulatory frameworks to Simplify administrative procedures, protect digital transactions, and encourage digital entrepreneurship, the government could also provide excessive promotion for innovation and entrepreneurship by creating innovation hubs and technology parks to help startups thrive and attract foreign investors interested in digital ventures, also by providing funds for foreign digital startups via venture capital and government-backed loans. Besides, private institutions as well as governments can invest in digital education, by partnering with schools as well as universities to offer digital syllabus as well as programs with credible certifications. Lastly, institutions could also create partnerships between academia, industry, and government to foster research and development (R&D) practices in current as well as expected and emerging digital technologies, to be always prepared for the digital changes that may happen in the future.

Keywords: Digitalization, Foreign direct investment, Developing and developed countries
JEL Codes: F21, F23, O33, O14, F43, O10, O50

A One Step Further: Integrating Trade Elasticity into Product-Level Smart Specialization Framework

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Extended Abstract

Introduction: Smart specialization, a concept introduced by the Knowledge for Growth expert group established by former European Commissioner for Research, Janez Potočnik, at the start of the 21st century, has rapidly become a key regional development strategy in Europe (Gianelle et al., 2020). The primary reasons for adopting smart specialization are the inadequacies of previous regional development policies, which lacked a thorough analysis of regional assets and often mimicked the strategies of the best-performing regions without considering the specific context of each region. Unlike traditional methods that target broad sectors, smart specialization focuses on "specific activities." For instance, rather than aiming to develop the entire manufacturing industry, the strategy might focus on developing nanoengineered textiles.

The cornerstone of a smart specialization strategy is a comprehensive analysis of the current state and potential of the regional economy, assessing existing assets and future growth prospects (OECD, 2013). In this context, recently introduced concepts such as economic complexity, relatedness, and density measures offer valuable analytical tools. Balland et al. (2019) provide a framework for smart specialization using the concepts of relatedness density (Hidalgo et al. 2007) and economic complexity (Hidalgo and Hausmann 2009). Balland et al.'s (2019) framework plots relatedness density and complexity on an x-y axis and divides the x-y plane into four quadrants (low risk-high benefits, high risk-high benefits, high risk-low benefits, low risk-low benefits). This division helps policymakers assess the feasibility of developing new products in a region relative to the gains in economic complexity. The four quadrants highlight the cost-benefit balance foundational to smart specialization policy. An effective smart specialization approach supports potential products in the northeast quadrant. However, when many products fall into this quadrant, the framework does not provide an analytical method for prioritizing them. Therefore, this study aims to extend Balland et al.'s (2019) framework by incorporating trade elasticities and using data envelopment analysis (DEA) to minimize trade elasticity while maximizing product complexity and density, enabling an efficient ranking of products even when numerous products are in the northeast quadrant.

For this purpose, an analysis will be conducted for Konya province in Turkey, which, as will be shown in the study, has approached the complex production capabilities of Turkey's traditional industrial centers like Istanbul, Ankara, and Izmir, and has even surpassed Adana in recent years. First, approximately 1000 product groups exported by Konya will be plotted on the x-y plane based on complexity and density values. Then, the products in the northeast quadrant will be ranked using DEA based on their trade elasticity, complexity, and density.

Methodology: Economic complexity reflects the diversity of exported products and their ubiquity, indicating the productive capabilities and income-generating potential of a country, region, or province. Density, on the other hand, is based on cognitive proximity, which suggests that products requiring similar infrastructure and inputs are more likely to be produced together. Density measures how close a new product is to the existing production structure in a geographical area through cognitive proximity. By combining economic complexity and density measures, we can analyze which high-complexity products not yet produced in a province, or not competitively produced, are most likely to gain a comparative advantage.

The complex systems approach has been integrated into economic analysis, providing new perspectives on the economy's functioning. The economic complexity approach of Hidalgo and Hausmann (2009), characterized by empirical innovation, offers an operational definition of productive capabilities by applying dimension reduction techniques to an adjacency matrix constructed from export data. Criticizing the linear nature of the economic complexity approach, Tacchella et al. (2012) developed the economic fitness measure based on nonlinear fixed-point iteration. This study will use both Hidalgo and Hausmann (2009) and Tacchella et al. (2012) methods (later developed by Servedio et al., 2018) to measure product complexity.

For the density measure, the related and unrelated variety methodology by Boschma et al. (2013), which is calculated based on the proximity measure introduced by Hidalgo et al. (2007), will be employed. Once the complexity and density measures are obtained, Data Envelopment Analysis (DEA) will be conducted for Konya province, using trade elasticities of products as inputs and complexity and density as outputs. The fundamental idea is for provinces to boost the export of products with high complexity and high added value, as well as those with a strong competitive potential. In this process, provinces will aim to export products with the lowest possible trade elasticity, as a high trade elasticity indicates a product's high sensitivity to price changes. Conversely, a low trade elasticity implies that the product's export is more stable against global market fluctuations.

Data: The analyses will encompass 81 provinces of Turkey from 2007 to 2020, calculating economic complexity, proximity, and density for nearly 1000 products at the provincial level each year. After this initial analysis, the focus will narrow specifically to Konya, rather than continuing to assess all 81 provinces. To determine provincial economic complexity values, the study will first derive global product complexity values. Additionally, global proximity values between product groups will be obtained using product-level export data from the BACI dataset (Gaulier and Zignago, 2010). These global product complexity and proximity values will then be used to calculate provincial economic complexity and density for Turkey, based on provincial export data classified according to the 4-digit SITC rev.3 from TurkStat. Furthermore, product-level trade elasticity data (Fontagne et al., 2022) from CEPII will also be utilized in the study.

Results: Our findings indicate that Istanbul, Ankara, and Izmir lead in economic complexity within Turkey, while Konya has made remarkable strides in its production capabilities, nearing the levels of Izmir and Ankara in recent years. Consequently, our focus shifts to Konya's smart specialization strategies, exploring its rapid development in production capabilities. We evaluate local capacities

to identify the most competitive products with the highest income potential. The results show that by combining the density metric with economic complexity values for products where Konya has yet to achieve competitiveness, product group 7251 (Machines for the manufacture of paper and cardboard) exhibits significant density. This suggests a strong potential for Konya to become competitive in this category. These findings offer policymakers a valuable toolkit to identify high-value-added products that Turkish provinces or regions can efficiently produce, providing a competitive edge in the global market and fostering the development of smart specialization strategies.

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Keywords: Economic complexity, Relatedness, Smart specialization, Data envelopment analysis
JEL Codes: R11, R58, O25

The Role of Financial Professionals in Promoting Sustainable Development: Evidence from the GCC countries

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Extended Abstract

1. Introduction: Sustainable financing involves a comprehensive approach to allocating financial resources, which helps achieve sustainability development with its different forms of economic, social, and environmental (Barua, 2020). This is considered an important and critical method for addressing several global challenges, regarding minimizing poverty, social equity and protecting the environment (Padilla-Rivera et al., 2020). The Gulf Cooperation Council (GCC) countries are considered wealthy countries, as they have good oil and gas reserves (Bandeira-Morais et al., 2023). However, they recognize several challenges in achieving sustainable development. Some of these are the overreliance on oil and gas revenues, inefficient use of resources, climate change, economic uncertainty and several other challenges that become barriers to achieving sustainable financing development (Chen et al., 2022). GCC countries have recognized the growing importance of sustainable financing, as evidenced through recent initiatives like the UAE's 2021 Sustainable Finance Declaration and Saudi Arabia's sustainability goals under Vision 2030.

This research addresses such challenges and how the financial sector in GCC could enhance sustainable development financing from a behavioral perspective. The research aims to fill a gap in the literature by examining the awareness and understanding of sustainable financing among financial sector professionals, the sustainable financing products offered, the challenges faced by financial institutions, and the actions taken to promote sustainable development in the GCC region.

2. Research Questions and Objectives: This study aims to investigate the factors influencing the adoption of sustainable finance within the GCC, specifically focusing on the roles of awareness, product offerings, and perceptions of feasibility. We seek to answer the following research questions:

1. How do financial professionals in the GCC perceive the importance and feasibility of sustainable financing?

2. What are the key factors, including awareness, product offerings, and challenges faced, that influence these perceptions?

3. What is the relationship between these factors and the actual level of sustainable financing in the region?

The study aims to:

- Empirically assess the perceptions of sustainable financeamong financial professionals in the GCC.

• Identify the key factors influencing these perceptions, including awareness, product offerings, challenges, and actions.

• Determine the mediating role of perceptions of feasibility in the relationship between financial sector factors and the level of sustainable financing.

• Provide actionable recommendations for policymakers, regulators, and financial institutions to accelerate the adoption of sustainable finance in the GCC.

3. Methodology: The research employed a quantitative approach using a structured questionnaire administered to finance professionals in the GCC region. A convenient non-random sample of 237 respondents was collected, ensuring adequate representation across various financial institutions. The questionnaire included statements measuring the following variables:

Independent Variables:

○ Awareness/Understanding: Participants' understanding of the principles, benefits, and applications of sustainable finance.

○ Sustainable Financing Products Offered: The extent to which financial institutions offer a range of green financial products, such as green loans, green bonds, and sustainable investment funds.

○ Challenges Faced and Actions Taken: Financial institutions' perceptions of the challenges and opportunities related to implementing sustainable finance, and the actions they are taking to address these.

Dependent Variable: Level of Sustainable Financing: The extent to which financial institutions are actively engaged in sustainable financing practices, including green lending, green investments, and responsible investment strategies.

Mediator Variable: Perceptions of Sustainable Development Financing Feasibility: Financial professionals' perceptions of the viability, practicality, and ease of implementing sustainable financing strategies within their organizations.

Data analysis was conducted using structural equation modeling (SEM) to test the hypothesized relationships between variables and assess the mediating effect of perceptions of feasibility.

Expected Outcomes and Implications: By empirically assessing the perceptions of sustainable finance among finance professionals in the GCC, the study will illuminate the factors that drive or hinder the adoption of green financing practices. This understanding will be crucial for policymakers seeking to design and implement effective policies that encourage sustainable investments and responsible business practices. The findings will reveal the specific challenges and opportunities that financial institutions face in promoting sustainable finance, allowing them to develop more effective products, strategies, and risk management frameworks.

The study's focus on the mediating role of perceptions of feasibility will contribute to a deeper understanding of how trust, confidence, and risk aversion influence decision-making processes related to sustainable finance. This insight is particularly important in a region like the GCC, where traditional economic models and financial practices may require significant shifts to embrace sustainability.

Furthermore, the study will contribute to the broader discourse on sustainable finance, highlighting the unique challenges and opportunities presented by the GCC region. This research will serve as a valuable foundation for further academic exploration of the region's specific needs and challenges, ultimately fostering a more robust understanding of the complex relationship between finance and sustainable development.

The anticipated outcomes of this research hold significant practical implications for both the GCC region and the global community. By shedding light on the crucial factors influencing the adoption of sustainable finance, the study will facilitate a more impactful and informed approach to promoting sustainable development and a more sustainable future.

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Islam as a formal institution:

Introducing Islamic Constitutions Index Dataset (1861-2020)

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Extended Abstract

Introduction: Over the past century and a half, the relationship between Islamic law and constitutions has developed from a concern for the educated and economic elite to a fundamental political topic, addressed across many Muslim-majority societies (Brown & Revkin, 2015). This is not surprising given that polls have been consistently showing that most Muslims demand more role for Islam in shaping politics and laws (ASDA'A BCW Arab Youth Survey, 2023; Pew Research Center, 2022; 2013). With the introduction of constitutions in several Muslim majority countries in the nineteenth century, some intellectuals and policy makers in the Muslim world made significant effort to establish possible parallels between Islamic legal heritage on the one hand, and emerging European ideas about constitutionalism on the other. This was not an easy task given the substantial differences between development of constitutional principles and Islamic law at that time.

Although it could be argued that certain elements in the Islamic tradition can be perceived as early expressions of an indigenous approach to constitutionalism in Islam and have indeed been interpreted by some scholars in this manner, they owe their prominence in contemporary debate more to recent attempts to reinterpret and accommodate Islamic law in light of the requirements of constitutionalism than to any rigid historical precedents (Grote & Röder, 2011, p. 3). In fact, Kamali (2012, p. 19) argues that "constitutional law is one of the most under-developed areas of Islamic law and jurisprudence".

The effort to harmonize between Islamic law and constitutional principles was occasionally reflected into western scholarship on Islamic law as that field was still emerging, though it was not a major concern until very recently. Supported by the growing scholarly interest in understanding and analyzing constitutional texts, the literature on incorporation of Islam in constitutions, or "Islamic constitutionalism", has been significantly growing in the past few decades (Abou El Fadl, 2011; Brown & Revkin, 2015).

This academic interest has been coinciding with the significant rise in incorporating Islam into the constitutions of Muslim majority countries. In fact, March (2015) states that almost all Muslim-majority states have some formal commitment to Islam and Islamic law in their constitutions. In some cases, this was a result of strong ideological commitments to Islamization (Pakistan, Sudan, Iran); in most, however, it is either merely symbolic or has been tactically adopted to pre-empt the goals of Islamist opposition movements (Egypt).

Many scholars have focused on the fact that Muslim states have been gradually "Islamizing" their constitutions and developing jurisprudential theories of sharia compatibility (Brown 1997, Fadel

2013, Lombardi 2006, Moustafa 2007). Ahmed and Ginsburg (2014, p. 635) show that Islamic constitutional clauses have been widely spreading since the second part of the twentieth century and were featured in the constitutions of about forty percent of Muslim-majority countries in 2014. Stahnke and Blitt (2005) find that, out of 44 Muslim majority countries, twenty-two recognize some constitutional role for Islamic law, principles, or jurisprudence. This includes 18 of the 22 countries where Islam is the religion of the state, as well as four predominantly Muslim countries where Islam is not the declared state religion, albeit declare themselves to be Islamic states. Taken together, these 22 states account for 58 percent—or just over 600 million—of the 1 billion Muslims living in predominantly Muslim countries in 2005. In countries where a constitutional role for Islam is established, that role significantly varies and, in some cases, may be restricted to specific matters, such as personal status issues or the creation of religious councils designed to review sharia compliance of laws, as well as advise the government concerning questions related to religion and religious life (Stahnke & Blitt, 2005).

The prevalence and impact of Islamic constitutional provisions is supremely important for constitutional design in Muslim countries. For instance, a clause that declares that "the principles of Islam are a chief source of legislation", as in the case of the Egyptian constitution, is expected to have a milder impact on the "Islamization" of legislation and judication than a clause that declares any law contrary to any tenet of Islam to be void, as in the case of the constitution of the Maldives. Yet, both types of constitutional clauses may have substantial consequences for societies governed by such constitutions. Constitutional drafters understand the relevance of and subtle differences between such rules and consider them carefully in designing constitutions for Muslim societies. For example, in explaining why Tunisia did not adopt "Islam as a source of law"-clause in its 2014 constitution, the founder of the local Islamist party Ennahdha, Rachid al-Ghannouchi, referred to Afghanistan's high level of Islamic constitutionalism as a negative example (Stilt, 2013).

This rise in the role of Islam in constitutions often correlates with changes in social, political and legal outcomes. Gouda and Gutmann (2021) cite the case of an Afghan convert to Christianity as an example of the potential repercussions of Islamic constitutional clauses. Due to his conversion, Abdul Rahman was threatened with the death penalty in 2006. Although Afghanistan's criminal code does not prohibit conversion, the judge responsible for the case reasoned that, "In this country we have the perfect constitution, it is Islamic law and it is illegal to be a Christian and it should be punished" (The Times, 2006). That argument was supported by the prosecutor, who demanded the death penalty.

The case highlights the inconsistencies in Afghanistan's 2003 democratic constitution, which simultaneously guarantees both religious freedom and the supremacy of Islam. It should be noted that actual implementation of Islamic constitutional provisions is in fact dependent on a set of diverse factors, including level of state control, system of government, independence of the judiciary, democracy, individual access to the courts, and enforcement of judicial remedies (Stahnke & Blitt, 2005).

Considerable empirical literature shows that Islamic constitutional provisions have adverse consequences for gender equality (Gouda & Potrafke, 2016), rule of law (Gouda, 2013; Gutmann & Voigt, 2015; 2018), protection of rights of religious minorities (Gouda & Gutmann, 2021), as well as democracy (Gouda & Hanafy, 2022). Most of these studies focus on two aspects of Islamic constitutionalism: Is Islam a source of legislation? And, if so, what is the degree of supremacy of Islam within the constitution. Nevertheless, a significant caveat with this body of literature is that

the period investigated is considerably limited, usually between the years 1990 and 2014 (Gouda & Gutmann, 2021; Gouda & Hanafy, 2022). Due to this drawback, the two selected provisions do not change in almost all constitutions investigated, thus limiting robust examination of the causality between Islamic constitutional provisions and various outcomes.
Almost all the aforementioned studies that investigate the consequences of Islamic constitutionalism utilize the Islamic Constitutions Index, provided by Ahmed and Gouda (2015). Using the framework of the Comparative Constitutions Project by Elkins et al. (2009), the Islamic Constitutions Index measures the degree of Islamization of constitutions. This is done through utilizing a unique model Islamic constitution, developed in 1978 by Al-Azhar University (Gouda, 2013), as a point of reference to identify a set of 30 distinctive Islamic characteristics of constitutions.

The Islamic Constitutions Index remains the only dataset that offers a systematic coding of Islamic constitutional provisions. It covers the enacted national constitutions of the 56 countries that are members of the Organisation of Islamic Co-operation (OIC) in the year 2014 (Ahmed & Gouda, 2015). Perhaps the closest relevant study would be that of Stahnke and Blitt (2005). Focusing on Muslim majority countries, the authors analyse the constitutional provisions enacted concerning the relationship between religion and the state, freedom of religion or belief, and related human rights in the year 2005 only.

This study significantly expands the work of Ahmed and Gouda (2015) through investigating and codifying all historical and current constitutions of all OIC members, starting with the Tunisian constitution of 1861 which is considered to be the first constitution of a Muslim-majority country and reaching the constitutions in force in 2022. Aiming to produce a second version of the Islamic Constitutions Index, I modify and reorganize the 30 "Islamic clauses" identified by Ahmed and Gouda (2015) as capturing the universe of all Islamic clauses based on the Al-Azhar constitution and construct a survey instrument codifying the clauses. Thus, the extended dataset includes more than 267 thousand data entry points, since 30 benchmarks are investigated through the constitutions of around 56 countries in a period of around 160 years.

The new version of the Islamic Constitutions Index allows us to examine, rank and compare the Muslim world's constitutions for their degree of "Islamicity". Trends and patterns of Islamic constitutionalism can be traced through time and across countries and regions. In fact, we can trace the history of various Islamic constitutional clauses chronologically from their origins until the year 2020. Most importantly, the dataset allows us to study the different determinants of Islamic constitutionalism, as well as the consequences of Islamic constitutional provisions on legal, political, economic, and social outcomes.

Methodology: To identify the defining characteristics of Islamization in constitutions, Ahmed and Gouda (2015) utilize Al-Azhar Constitution as the template for this exercise. The authors identify and extract every "Islamic" clause from this constitution – that is, every clause that make some reference to Islam or had some religious underpinning.

They identify 30 "Islamic clauses" capturing the universe of all Islamic clauses found in the Al-Azhar. These were clauses that had an explicit focus of injecting the constitution with an Islamic feature. The authors categorize these clauses under 7 categories; general characteristics (14 clauses), rights (2 clauses), Executive (3 clauses), legislation (3 clauses), judiciary (3 clauses), Economy (3 clauses), and other issues (2 clauses) (Ahmed & Gouda, 2015) We utilize the same clauses that was represented in the previous version of the Islamic constitutions index. However,

we change the categorization of the clauses to be; General Characteristics (6 clauses), Rights (3 clauses), Executive (6 clauses), Legislative (4 clauses), Judiciary (4 clauses), Economy (3 clauses), and Islamic Social Norms (4 clauses). Table 1 presents a list of the 30 clauses/questions that we found to represent the universe of Islamic constitutionalism and the corresponding articles in Al-Azhar constitution.

Following Ahmed and Gouda (2015), our sampling pool consists of constitutions of the member states of the Organisation of Islamic Co-operation (OIC). The OIC, founded in 1970, is the second largest inter-governmental organization after the United Nations and has membership of "57 states spread over four continents." It includes virtually every Muslim majority country as a member and is "the collective voice of the Muslim world and ensuring to safeguard and protect the interests of the Muslim world in the spirit of promoting international peace and harmony among various people of the world" (Organisation of Islamic Cooperation, 2023).

To collect the constitutions of these countries for coding, we drew on constitutional texts from Constitute, an effort by Google and the Comparative Constitutions Project to catalogue the formal contents of the historic and in-force constitutions in the World (Elkins, Ginsburg, & Melton, 2023). We read and analyzed all the constitutions and amendments of each of the 56 OIC members (we excluded Palestine from the analysis since it is not recognized as a state internationally). While we use the English translation of all constitutions, constitutions originally written in either Arabic or Persian are also read and analyzed so as to ensure that all nuances regarding Islamicity were captured.

Using the 30 Islamic clauses as a benchmark, the OIC-member constitutions were then coded by two separate coders, cross checked and eventually comprised the new version of the Islamic constitutions index. Each country's score on the index is simply the total number of Islamic clauses in its constitution. All questions are coded on a binary scale with 1 point given to the existence of a specific Islamic feature in a given constitution and 0 otherwise.

The only exception would be the Islamic feature related to the degree of supremacy of Islam in the constitution, which falls under 'legislative' category. For this specific article, we developed a special scoring methodology. If the supremacy article refers to Islam/Islamic law/shari'a, 2 points are added. 1 point is scored if the article refers to "principles" of Islam/Islamic law/shari'a. We argue that a direct reference to Islam or Sharia would be valued more than a reference to "principles," which might refer to general principles in Islam like justice, equality, and modesty. In addition, an extra point is added if the supremacy article states that Islam (or its principles) is "a" source of law or if there is no other law governing a matter then Islamic law can be enforced. 2 points are added if religion (Islam in our case) is "a" primary or basic or foundational source of law. Finally, 3 points if the supremacy article states that Islam (or its principles) is "the" source (or the only source).

This categorical approach resembles that of Ahmed and Gouda (2015) and is aimed at counting for the nuances of making Islam a source of legislation. However, we subtract one point of the total sum of the supremacy category to adjust the distribution of this indicator, making "supremacy" category range from 0 (supremacy clause nonexistent) to 4 points (Islam/Islamic law/shari'a is the only source of legislation). The previous version ranged from 0 to 5 points, but the calculation method did not allow a supremacy clause to score one point.

The reason behind this scoring theme is that we perceive "supremacy" clauses that state that laws must comply with Islam or that privilege Islam as an important source of legislation are most powerful in terms of Islamicity, more so than any other clause – even state religion clauses. According to Feldman (2008, p. 123), supremacy clauses may allow courts to undertake an "Islamic judicial review," where the purpose of it will be "not merely to ensure [legislation's] compliance with the constitution but rather, to *guarantee* that it does not violate Islamic laws or values" and thus be fully consistent with it. Brown and Sherif (2004, p. 63) argue that even simply privileging Islam as "a" source of law – the weakest formulation of a supremacy clauses – in the constitution would imply that it becomes possible for many to argue that Islam authoritatively forms the fundamental legal framework.

Results and implications: Western scholars and policy makers have long debated the inclusion and effects of incorporating Islam during constitution-making. Similarly, some Muslim majorities, Islamists and militants have long demanded the Islamization of constitutional life. While popular perceptions about Constitutional Islamization have persisted on both sides, despite its rich potential, to date, there has been little empirical measurement and investigation of the universe of Constitutional Islamization. This article attempts to fill this gap. It explains the historical origins of Constitutional Islamization and elaborated on the theory of Islamic Constitutionalism. In doing so, its primary and novel contribution has been to undertake an empirical analysis of Constitutional Islamization, or the constitutional incorporation of Islamic clauses globally. Accordingly, it introduced the world's first ranking of constitutions based on Islamicity – the "Islamic Constitutions Index."

Using the index, I will assess whether more Islamic constitutions are correlated with various economic, social and political outcomes, including economic development, human rights, democracy, gender equality and political stability. This correlation needs to be empirically investigated. The new version of the Islamic Constitutions Index allows us to examine, rank and compare the Muslim world's constitutions for their degree of "Islamicity". Trends and patterns of Islamic constitutionalism can be traced through time and across countries and regions. Most importantly, the new dataset will allow us to examine the effect of various economic, political and social determinants on Islamizing constitutions of the OIC member states.

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Keywords: Islam, Islamic constitutions, Institutions
JEL Codes: C54, K10, N45, P50, Z12

Market Power in the Middle East

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Extended Abstract

The Middle East and Central Asia (ME&CA) are often perceived as regions with rentier economies and uncompetitive markets. The perception is explained by several factors, in- cluding: a large dependence on natural resources and commodities revenue (in particular in Gulf Cooperation Council (GCC) countries); and a large presence of State-Owned Enterprises (SOEs) that have weakened efforts to develop a competitive private sector (Chaudhry 1997).

In this paper, we ask a few main questions: Is ME&CA uniquely uncompetitive? How has market power in the region evolved in light of the multiple reforms phases? Has the region seen a marked trend of rising market power similar to the rest of the world? Did markups add to inflationary pressures in GCC and ME&CA? Additionally, we answer the question of whether, in a context with limited capacity to enforce anti-trust laws, VAT policy can act as a backstop to the limited antitrust capacity by placing a restriction on corporate market power. Answering these question has serious implications for the role and importance of antitrust, taxation, and product market reforms in the region. While research on market power has gained prominence recently, few studies have examined market power and its evolution in the ME&CA regions thus far (Robinson & Acemoglu 2012). In contrast, a growing body of research has identified a trend of increasing corporate market power both in the US and across the world (De Loecker et al. 2020, Diez et al. 2018, Autor et al. 2020).

Using comprehensive firm accounts from Compustat, we employ two state-of-art methods to estimate markups: the production function approach (pioneered by De Loecker & Warzynski (2012)) and the cost-share approach (as suggested by Bond and Gottardo, (Forthcoming)) to estimate firm-level corporate markups for the ME&CA region between 2004 and 2022.

Our findings are as follows:

1. We find that corporate market power among listed firms in the ME&CA is indeed higher than in the US, but it is on a downward trend. Like the rest of the world, ME&CA is experiencing a superstar firm phenomena, which explains two simultaneous trends the rise in market concentration and the fall in labor shares.

2. We do not find evidence of "greed-flation" in ME&CA region.

3. Using a staggerred difference-in-difference design, we document the potential of value- added tax (VAT) policy reforms to act as a deterrent of corporate market power. The introduction of VAT in some Gulf states from 2018 to 2022 has led to a reduction in market power, in addition to increasing fiscal space.

Our study provides valuable insights into the dynamics of corporate market power in the ME&CA region. The findings underscore the need for effective policies and regulations to ad- dress market concentration, promote competition, and ensure a level playing field for all market participants. By understanding the factors influencing market power and its implications, poli- cymakers can design targeted interventions to foster competitive and resilient economies in the ME&CA region.

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Unveiling Multidimensional Deprivation Over Time: Insights from Egypt

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Extended Abstract

Egypt's 2011 revolution was driven by profound socio-economic disparities. Following the assumption of power by the current political regime in 2014, a new social contract promised improved living standards, enhanced education, and better healthcare for citizens. This study explores long-term deprivation trends in Egypt across various socio-economic dimensions, identifying priority areas for targeted policy interventions to enhance well-being.

Since 2010, research has focused on measuring multidimensional deprivation using the Multidimensional Poverty Index (MPI) and the Alkire-Foster (2011) methodology. This approach is linked with the Global MPI introduced in the Human Development Report 2010 by the Oxford Poverty and Human Development Initiative (OPHI) and the United Nations Development Programme (UNDP), offering cross-country comparisons and global trends. The literature includes numerous studies on the evolution of multidimensional poverty at both national and international levels (Wang, Shu, and Lu, 2023; Andrianarison, Housseini, and Oldiges, 2022; Alkire, Roche, and Vaz, 2014). For example, Ozdamar and Giovanis (2021) found that youth multidimensional poverty decreased in Egypt and Tunisia but increased in Jordan and Iraq, with significant deprivation in living standards, housing, and education, particularly in rural areas and among females. As indicated in OPHI (2013) several countries, (e.g. Mexico, Colombia, Bhutan, and Nepal) have also conducted periodical evaluation or longitudinal studies employing multidimensional poverty measures. All these developments should encourage the government of Egypt to adopt the same approach of measuring MP, which Egypt has started recently by constructing its own national MPI, to have periodical assessments for different aspects of wellbeing in Egypt.

El-Laithy and S. Omar (2021) was the first to construct a customized national multidimensional poverty index (MPI) tailored to Egypt's socio-economic context, employing the Alkire and Foster dual-cutoff methodology. Yet the MPI was measured at only one point in time (2017/2018). Thus, this paper extends over El-Laithy and S. Omar (2021), and to the best of authors' knowledge, it is the first exploring the dynamics of multidimensional poverty in Egypt.

The Egypt-MPI comprises four equally weighted dimensions: health, education, living standards, and employment, each with indicators equally weighted to reflect their equal importance in explaining household deprivation. A household is classified as poor if its total weighted deprivation exceeds 25% of the maximum possible deprivation. In other words, a household is considered poor if its total weighted deprivations in all indicators is higher than one-fourth of the total possible deprivation. Using data from the 2014 and 2021 Demographic and Health Surveys (DHS), the paper evaluates the impact of governmental policies on the quality of life under the current political system.

This paper updates the indicators from El-Laithy and S. Omar (2021) to align with DHS data, replacing the HIECS used previously. Changes include adding schooling gap and adult educational attainment to the education dimension, and due to data unavailability in DHS, disability and illness indicators from health, and cooking fuel and kitchen facilities from living conditions are excluded. Additionally, the social insurance indicator was removed from employment for the same reason. These revisions ensure the MPI accurately reflects current data and better assesses deprivation and well-being in Egypt.

Preliminary findings indicate that from 2014 to 2021, Egypt has made progress in reducing multidimensional poverty nationally and regionally, with varying impacts across demographic segments. While overall poverty rates and intensity among the poor have decreased, urban areas have seen greater improvements compared to rural areas. However, there has been an increase in vulnerability to poverty, highlighting the need for proactive socio-economic policies, especially post continuous subsidy reforms and currency devaluation.

Notably, improvements have been notable in communication, livelihoods, and sanitation, whereas challenges persist in employability, mobility, educational disparities, child mortality, and child malnutrition overtime. These findings underscore the importance of targeted interventions and policy adjustments in the education and health sectors that in turn allow individuals to find decent jobs and have decent standards of living.

This research supports the Government of Egypt in optimizing public expenditure effectiveness and informing poverty-reduction policies. It provides critical insights for designing balanced development strategies and strategically allocating resources to foster poverty alleviation across regions and demographic groups.

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Keywords: Multidimensional poverty; Deprivation; Welfare; Egypt; Developing countries

JEL Codes: I31; I32; I38; D63

Drivers of climate change skepticism in wealthy countries of the Gulf Region

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Extended Abstract

Introduction: Countries address the risks posed by climate change by entering into formal agreements to adopt policies aimed at diminishing the consumption and reliance on non- renewable energy sources. Anthropogenic origin of climate change has been attributed to energy-generation based on fossil fuels. Public view regarding climate change is vital to shape national climate change policies. The lack of public support may originate from skepticism regarding the reality of climate change, its anthropogenic causes, or its detrimental impacts on the community. Research has indicated variations in climate change beliefs and apprehensions across nations but limited scholarly attention has been devoted to examining the degree of public skepticism towards climate change in the Gulf region. Gulf countries are distinguished by extended durations of some of the most extreme temperatures worldwide. At the same time, there is a significant link between greenhouse gas emission (GHG) and the energy industry is in these countries.

The energy sector is responsible for 75% of all GHG emissions worldwide. The Gulf Cooperation Council (GCC) possesses approximately 40% of the global oil reserves and 21% of the global gas reserves and three of its members are among the leading ten oil-producing nations, namely the Kingdom of Saudi Arabia, United Arab Emirates, and Kuwait. Hence, comprehending the correlation and ramifications of policy modifications is crucial, particularly in this geographical area. This study aims to address the knowledge gap by utilizing survey data obtained from the United Arab Emirates (UAE) and Kingdom of Saudi Arabia (KSA), two countries with large expatriate populations. The unique insights identify distinct profiles of climate change skeptics, accounting for expatriate population, useful in shaping climate change policies in region that affects global GHG emissions.

Estimation approach and data: We mainly focus on the potential impact of transiency of residency on perceptions regarding climate change through a nationwide comprehensive poll. This is particularly relevant given the distinctive demographic composition of both countries, which is characterized by a significant proportion of expatriate residents as opposed to citizens. Our study framework also distinguishes between different types of skepticism measures. For example, few deny the existence of climate change in its most basic form worldwide but there may be a segment of population, which may believe that the climate is changing, but remains skeptic about whether human activities are responsible or simply may expect the impacts of climate change to be felt in a distant future.

Accordingly, we developed different measures of climate change skepticism by using the framework by Rahmstorf (2004). The framework distinguishes between trend skeptics (disbelief in climate change), attribution skeptics (disbelief in anthropogenic origin of climate change), and impact skeptics (disbelief in the impact of climate change). The responses from questions using multi-step scales were dichotomised to 0 and 1 and used as dependent variables. Since the dependent variables were binary, this study employed the probit model to examine the

determinants of climate change scepticism and transiency of residence. The independent variables include demographic variables such as gender, age, marital status, employment status, nationality, energy preferences, and ecological views.
Data was collected by a market research company (YouGov) in 2021 from the UAE and KSA. The survey was conducted online between June and July 2021 with survey invitation sent via email to potential participants belonging to the target population. The survey contained questions about concerns regarding climate change, socio-demographic characteristics, income, and the extent of transiency of residence. Quotas on age, gender and nationality groups were set to be in line with the target population: UAE and KSA residents aged 18 and above.

Results: Results show that there are notable differences and similarities in attitudes on different measures of climate skepticism and socio-demographic and belief factors. Our results show that age, education, marital status, gender, income, religion, ethnic background, residency status, and views and beliefs regarding climate change and renewable energy play a significant role in climate change skepticism. The skeptic attitudes are influenced by the duration of stay of expatriates in the KSA and the UAE. We also conduct a few additional analyses to assess the robustness of our findings and results do not show significant differences and the findings are robust and not affected by potential data quality issues.
Conclusion: Multipronged public policies are necessary to overcome specific forms of skepticism regarding climate change in the two countries and the obtained skeptic profiles are invaluable in their design.

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Keywords: Climate change skepticism, GCC, Expatriate, Transient residency

JEL Codes: Q2, Q40, Q54

Assessing the Role of Fiscal Policy on the Water-Energy-Food Nexus: a Wavelet-based Analysis

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Extended Abstract

Aligning with sustainable development goals, the management of the water-energy-food (WEF) 116ort presents a significant challenge in Algeria, including water scarcity, energy dependence on fossil fuels, and food insecurity. Fiscal policy which encompasses spending and taxation plays a significant and multifaced role in addressing these challenges and shaping the WEF 116ort he116.

The aim of the study: This study aims to delve into the impact of fiscal policy measures on the WEF 116ort in Algeria and underscores the crucial role in shaping resource allocation, promoting food security and enhancing inter-sectoral linkages using a wavelet-based analysis to explore the temporal and frequency relationships among these sectors.

Methodology: This study adopts a continuous wavelet transform (CWT) and wavelet coherence analysis to examine the interactions between the WEF 116ort components and fiscal policy tools. This approach is a powerful signal processing method that decomposes a signal into its basic components at different scales, allowing for time-frequency variations to be measured (Liang 2014) providing a nuanced understanding of the dynamic linkages between variables.

Data and variables: This paper employs time series data from 2010-2023, including indicator representing WEF sectors and fiscal policy where:

Table 01: variables

Sector	Variables	Definition	source
Water	Water usage	The availability and the usage of water in different sectors including agriculture	FAO
	Water stress index	The rarity of a nation's renewable water supply to meet all water needs 116ort he population	Statista
Energy	Energy consumption	The total energy use in a specific country during a specific period of time	International Energy Agency
	Oil	Oil production	World bank
Food	Fsi	Food security index	FAO
Fiscal policy	Public spending	Government spending on water, energy and food sectors	FREDs
	Fossil fuel subsidies	financial contribution by a government, or agent of a government, that confers a benefit on its recipients	International Energy Agency

Results: Preliminary findings indicate significant interdependencies, with different patterns of coherence varying across diverse time scales. Notably, short-term fiscal stimuli exhibit immediate impacts on energy and food prices, while long-term fiscal strategies influence water resource management and food security more profoundly. The wavelet coherence analysis reveals periods of strong synchronization between fiscal policy adjustments and fluctuations in the WEF nexus, highlighting the critical windows where policy interventions can be most effective.

This research contributes to the literature by providing a nuanced understanding of the temporal dynamics between fiscal policy and the WEF nexus, offering valuable insights for policymakers aiming to enhance resource sustainability and economic resilience in Algeria.

Keywords: WEF nexus, Fiscal policy, Sustainable development, Wavelet analysis, Algeria

JEL Codes: Q25, Q41, Q18, E62, C32

Decoding the Determinants of Human Capital Formation in Egypt: New Evidence from RALS-EG Cointegration Test and QARDL Technique

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Extended Abstract

Purpose: This study explores the nonlinear and asymmetric impacts of factors that influence human capital formation in Egypt from 1980 to 2023. These factors include the per capita incomes, inflation rate, public spending on education, domestic investment and migrants'remittances.

Methodology: The study employs the Residual Augmented Least Squares-Engle-Granger (RALS-EG) cointegration test to investigate the long-term relationship between variables, followed by the Quantile AutoRegressive Distributed Lag (QARDL) technique to explore the short and long-term dynamics.

Findings: The results revealed the existence of asymmetric effects of the variables in the long-run; where both per capita income and inflation exerts a significant impact at some quantiles and a cumulative insignificant effect on the median human capital formation. Also, domestic investment has negligible impact throughout the quantiles. Moreover, remittances exerts a marginal cumulative effect and negative impact at higher quantiles.

Practical Implications: These results provide valuable insights for the government on how to manage macroeconomic variables to promote human capital formation. Specifically, revitalizing the educational sector is essential by focusing on an effective transparent spending and enhancing the schooling quality. Moreover, implementing a sustained growth policy that directs remittance savings toward productive domestic investments is crucial. Lastly, sustainable economic growth strategies should align with human capital enhancement strategies.

Originality: This study contributes to the existing knowledge in twofolds; first, it is one of the first to quantitatively construct a human capital index in Egypt following Kraay (2018)'s methodology. Second, it utilizes the QARDL model to disclose the dynamic asymmetric effects of the variables.

Keywords: Quantile-ARDL, Asymmetry, Human Capital Index.
JEL Classification: C22, C58, J24

Inclusive Growth in Egypt: A Comprehensive Index Approach to Economic and Demographic Influences

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Extended Abstract

Purpose: This study constructs a unified measure of inclusive growth for Egypt, aiming to evaluate its response to the immediate and indirect consequences of public spending on education, foreign direct investment, financial deepening, trade openness, and demographic changes from 1990 to 2023.

Methodology: A two-step methodology was used for the empirical estimations. First, the study constructed an inclusive growth index following McKinley's (2010) methodology, which integrates all pillars of growth into a single measure. In the second step, standard and structural unit root tests were utilized, then the unrestricted error correction autoregressive distributed lag model (UEC-ARDL) was applied to capture the short- and long-run dynamic effects.

Findings: The main results indicate that the direct impact of public spending on education is insignificant, while population growth has an adverse influence on inclusive growth. This negative effect becomes insignificant when combined with education's public expenditure, due to inadequate, inefficient, and inequitable spending. Additionally, owing to the misallocation and inefficiency of funds provided to the private sector, financial deepening exerts a negative influence on inclusive growth. Unsurprisingly, the contribution of foreign direct investment to inclusive growth is limited by the underdeveloped financial sector and deficiencies in technology, education, and financial access. Moreover, as a result of the inability to utilize and imitate the technologies generated in advanced economies, the Egyptian economy's openness to trade fails to show a significant impact on inclusive growth. Subsequently, the trade-FDI synergy has a negligible impact as it suffers from insufficient value-chain integration, limited technology spillover to exports, FDI's domestic orientation, and preference for capital-intensive industries with weak local linkages and skill deficits.

Practical Implications: This study provides valuable insights for the government to foster inclusive growth. To address the current challenges, policymakers should consider a balanced investment strategy that prioritizes investment in education and skill development to ensure that the benefits reach all segments of the population. Moreover, education and training programs should align with the needs of the labor market to avoid skill mismatches. Finally, implementing policies that sustainably manage population growth, taking into account factors such as family planning, migration, and urbanization, is crucial to ensuring an improved quality of life and enhancing human capital outcomes. Moreover, as the effectiveness of FDI depends on the context of financial development, policymakers need to consider this aspect when designing strategies to attract and maximize the benefits of FDI. Finally, to enhance the impact of FDI-trade synergy on inclusive growth, policy interventions are needed and these include promoting backward linkages, fostering technology transfer, and improving the overall business environment.

Originality: This study is the first attempt in Egypt that develops a comprehensive index of inclusive growth, incorporating economic growth, productive employment, infrastructure, inequality, accessibility, and social protection aspects, and subsequently applies this index to identify its determinants.

Keywords: Inclusive growth, Equity, Inequality
JEL Codes: O11, O47, D63

The Importance of Institutions in Building Entrepreneurial Capacity: Developing vs. Developed Countries

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Extended Abstract

Objectives: In light of Schumpeter's statement that "economic growth is not autonomous, being dependent upon factors outside of itself," and recognizing that these factors are numerous, it becomes clear that no single-factor theory can ever be satisfactory. One of these crucial factors, as Schumpeter emphasized, is the "entrepreneur." He was a pioneer in highlighting the significant importance of innovation and entrepreneurship in driving economic growth, a sentiment echoed by other economists. The climate that fosters entrepreneurship is significantly influenced by institutions. The interaction between institutions and entrepreneurship is dynamic and quite complicated. Previous literature has linked higher levels of entrepreneurial activity to well-functioning institutions that uphold contracts, safeguard property rights, and provide access to capital and other essential resources. Contrarily, unstable institutions can create obstacles and promote uncertainty, hindering entrepreneurial activity. Thus, both the quantity and quality of entrepreneurship are influenced by institutional frameworks.
However, most previous research has focused on either institutions or entrepreneurship in isolation, with little attention paid to how these two elements work together to promote economic growth. This raises an important question: could the interaction between institutions and entrepreneurship, functioning as an ecosystem, be the missing piece in understanding the variations in economic growth among nations? This has raised this researchers' interest to answer this research questions by examining the relationship between entrepreneurship and economic growth, particularly in terms of how regulatory, cognitive, and informative institutional efforts contribute to building entrepreneurial capacity, while comparing findings across both developing and developed contexts.

Methodology: This paper employs a quantitative empirical analysis, to compare the findings of two sets of countries, that are sorted in accordance to their development condition as per the United Nation's classification: developing vs developed using entrepreneurial data gathered from the Global Entrepreneurship Monitor (GEM), while developmental indicators are collected from the World Bank Data Base and the regulatory institutional data is collected from the Fraser Institute's

Economic Freedom project. An unbalanced panel regression is conducted on 28 developed countries from the year 2001-2022, in addition to another unbalanced panel regression ran on 15 developing countries from the year 2001-2022 as well, in a general least squares (GLS) specification, while trying to fill the gap of investigating and comparing entrepreneurial activity in each unique context.

Results: The results have shown that the regulatory institutions had no significant impact on the entrepreneurial capacity within the developing context, while being highly associated with higher entrepreneurial activity rate within the developed contexts. While, both the normative and

cognitive institutions had a significant impact on the entrepreneurial capacity within both contexts.

Conclusion: According to the empirical results of the study conducted from 2001 to 2022. It's recommended to focus on tailoring policies in developed and developing countries that would contribute in strengthening the cultural framework, where the normative and cognitive dimensions flourish, these policies can stimulate entrepreneurial capacity, which is essential for achieving various Sustainable Development Goals (SDGs). Since higher entrepreneurial activity rate has long been associated with the establishment of a productive business environment that generates job opportunities, promotes higher social equity, and encourages the creation of innovative business ideas. Ultimately, this will enhance resource allocation and foster economic growth on a global scale.

Keywords: Entrepreneurship, Economic growth, Institutions

JEL Codes: L26. O43. O57

Does the Green Supply Chains Lead to Higher or Lower Returns?

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Extended Abstract

Over the years, firms have begun to understand that their supply chain operations need to be changed to be more environmentally sustainable or compatible with the environment under great stress from customers and communities (Fahimnia et al., 2015; Quintana-García et al., 2021; Seuring & Müller, 2008). According to the United Nations Brundtland Commission (1987), defined sustainability as "*meeting the needs of the present without compromising the ability of future generations to meet their own needs*". The need for environmentally friendly and sustainable firms and processes has led to the emergence of the concepts of the green supply chain management (GSCM) (Balkumar et al., 2023). GSCM can be defined as incorporating environmental considerations into supply chain management processes, such as product design, procurement and selection of materials, production, and final product distribution to customers (Abu Seman, 2012; Fasan et al., 2021; Green et al., 2012; Srivastava, 2007). The primary motivations for implementing GSCM are pressure from competitors and clients, legal regulations and environmental protection strategies, gain competitive advantage by sustainable product and process design, and corporate reputation (Bose & Pal, 2012; Fasan et al., 2021; Green et al., 2012; Perotti et al., 2015; Quintana-García et al., 2021; Seman et al., 2012; Ullah et al., 2022; Zhu & Sarkis, 2004; Zhu et al., 2007). It is anticipated that the application of GSCM techniques result in better environmental performance as indicated by lower air emissions, solid waste, wastewater, and toxic material consumption (Green et al., 2012).

Some authors argue that GSCM is a beneficial tool for improving financial performance (Barratt & Oke, 2007; Cousins et al., 2019; De Giovanni & Vinzi, 2012; Fasan et al., 2021; Rao & Holt, 2005; Sen, 2009; Ullah et al., 2022; Zhu & Sarkis, 2004). According to Yildiz Çankaya and Sezen (2019), there are two ways that GSCM could improve economic performance. First, by cutting waste and energy expenses, firms can immediately make profit. Second, companies can make profit economically in more indirect ways by using green practices to improve their corporate reputation and customer loyalty. Rao and Holt (2005) found a connection between green supply chain practices and financial performance. They find that greening the various supply chain phases eventually results in increasing financial performance and competitiveness. Additionally, Fasan et al. (2021) questioned whether green supply chain management alleviated the economic effects of COVID-19 and found that GSCM had a positive effect on the firm's abnormal return. Similarly, Bose and Pal (2012) investigated the effects of GSCM initiatives on stock prices using an event study and their findings revealed that stock prices reacted largely positively to adopting GSCM, however, there were also significant negative returns. Some authors also argue that the key to gaining competitive advantage with GSCM is to be an early adopter of GSCM (Barratt & Oke, 2007; Sen, 2009; Zhu et al., 2008). There is, however, no consensus on the impact of environmentally friendly supply chain efforts on the profitability and value of the firms. Some studies claim that GSCM practices are not effective and bring new costs to the company (Amankwah-Amoah & Syllias, 2020; King & Lenox, 2001; Min & Galle, 2001; Seuring, 2001). Based on their comparative analysis, Bowen et al. (2006) found that firms that practice least green supply have better financial results than those that actively 'green' their supply chain. Furthermore, Zhu et al. (2007) found that GSCM applications have a

slight effect on environmental and operational performance but have no effect on financial performance. Therefore, this study investigates the effects of GSCM on stock return.

The sample of this study comprises of non-financial firms that have non-missing resource use scores between 2010 and 2019. We used resource use scores as a proxy to measure GSCM by using Refinitiv Datastream. "*Resource use category score reflects a company's performance and capacity to reduce the use of materials, energy or water, and to find more eco-efficient solutions by improving supply chain management*". Daily total return at the end of the year is the dependent variable. Resource use score is the main variable of interest as independent variable. We also include a number of firm- and macro-level control variables such as firm size, return on assets, leverage, market-to-book ratio, capital expenditures, sales growth, GDP growth and inflation. We trimmed the 1. and 99. percentiles for financial data to eliminate the possible bias caused by outliers. First, we employed OLS as preliminary analysis to discover the effect of GSCM on return. Then, we estimate the same model with fixed-effects by using year dummies to capture unobserved heterogeneity. The preliminary findings showed that GSCM has a negative but insignificant effect on return. However, the negative effect of GSCM is statistically significant based on the result of the fixed-effects model.

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Keywords: Green supply chain management, Share return, Sustainability

JEL Codes: M11, Q51

Regional Concentration of Greenfield Foreign Direct Investment in Egypt – A Sector-Level Analysis

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Extended Abstract

Analysing the regional distribution of Greenfield Foreign Direct Investment (FDI) within a country is important to better understand the determinants of FDI location choice and the impact of FDI distribution on regional growth and development. However, studies on FDI often ignore its sectoral composition. The problem of treating FDI as a homogenous bloc without distinguishing across sectors has been criticized by several studies (e.g. Aykut and Sayek, 2007; Bergougi and Murshed, 2023; Hanafy and Marktanner, 2019; Jones and Wren, 2016). Most of the literature, for example, on the FDI-growth-nexus disregarded for a long time the notion that different sectors differ in their potential to create linkages and knowledge spillovers from foreign to domestic firms, which likely affects their absorptive capacities of FDI effects (Alfaro, 2003; Hanafy and Marktanner, 2019). Against this background, an emerging body of literature tackles the non-homogenous nature of FDI sectors and empirically shows that different sectors significantly vary in their impact on economic growth [e.g., Bergougui and Murshed (2023) on MENA, Wang (2009) on Asian and Haini and Tan (2022) on OECD countries] and on the economic complexity index (Kannen, 2020).

Investigating the sectoral heterogeneity of FDI growth-effects in Egypt, the authors use a panel dataset of Egyptian governorates to empirically analyse the growth-effects of aggregate and sectoral Greenfield FDI, following the analysis by Hanafy and Marktanner (2019). The results reveal significant growth-effects of services FDI as compared to the other sectors. The paper further analyses the regional and sectoral distribution of Greenfield FDI flows across Egyptian governorates and discusses their implications considering the existing literature. The approach is close to Bickenbach et al. (2015), which measures and analyses FDI regional concentration in India at district level and finds that FDI persistently concentrated in less districts. However, the study does not capture the sectoral dimension. Ramachandran et al. (2020) analyse both the spatial and sectoral distribution of Greenfield FDI in India and its impact on industrial agglomeration.

The paper employs a unique dataset at the governorate level that is based on registered investments by foreign firms upon a company's registration, or expansion, at the General Authority for Investment and Free Zones (GAFI), which is the principal governmental authority in charge of licensing, registering, regulating, and promoting foreign and domestic investment projects in Egypt. The dataset has several advantages: first, it begins in 1972, when Egypt received the first Greenfield FDI inflows in anticipation of a new open-door policy. Second, Greenfield FDI inflows are disaggregated for all 27 Egyptian governorates, which enables a regional analysis at the governorate level. Third, the dataset allows for a disaggregation of Greenfield FDI inflows by sector, allowing us to capture the sectoral heterogeneity of Greenfield FDI. Sector-wise, the largest fraction of Greenfield FDI goes into services, followed by manufacturing, whereas agriculture attracts very little FDI.
We assess the development of the regional concentration of Greenfield FDI over time by

employing inequality measures, as geographic concentration is a reflection of spatial inequality (Krugman, 1991). Our results show that regional concentration of Greenfield FDI first decreases until the mid/late1990s, followed by a phase of stagnation in the 2000s, before increasing again in the 2010s. Disaggregating Greenfield FDI by sector reveals differences in the patterns of FDI regional concentration across sectors, supporting the notion of sectoral heterogeneity regarding FDI spatial patterns. We find that FDI in the service sector shows the strongest spatial concentration, which is mostly articulated in ICT und finance, whereas manufacturing FDI shows the most geographical spread. The relatively stronger spatial concentration of services FDI and its concentration in the major urban areas resonates results of Jones and Wren (2016).

Although the regional concentration of FDI within a country is not unusual (e.g., Bickenbach et al., 2015; Wei et al., 2009; Yavan, 2010) and is largely driven by agglomeration economies, its concentration in only a few regions might prevent the dissemination of positive FDI effects throughout the whole economy and thus increase regional inequality (Bickenbach et al., 2015; Lessmann, 2013; Nunnenkamp and Stracke, 2008; Ramachandran et al., 2020). Against this background, the paper discusses reasons and implications of FDI concentration in Egypt, addressing the trade-off between efficiency-increasing agglomeration economies and regional equality as well as policy recommendations to possibly mitigate it.

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Keywords: Greenfield foreign direct investment, Regional FDI, Sectoral FDI, Sectoral heterogeneity, Regional concentration, Regional growth, Regional disparities.
JEL Codes: F21, E22, R12, O53, Z10

Sibling Sex Composition and STEM Major Choice: Evidence from the Middle East

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Extended Abstract

Building on the work of Oguzoglu and Ozbeklik (2016), this study explores how the siblings' sex affects the likelihood of women pursuing STEM majors in college. Oguzoglu and Ozbeklik (2016) found that US and Australian women with fathers in STEM occupations are 15 to 28 percent less likely to choose STEM fields in college if they grew up with brothers rather than sisters. This discrepancy may arise from various factors, such as change in parental investment in daughters' education in the presence of a son or the influence of sibling dynamics on gender perceptions and competitiveness.

In this paper, we revisit the role of sibling sex composition in STEM major choice in a setting where societal norms and government regulations can be much less supportive for women pursuing careers in male-dominated fields than those analysed by previous work.

More specifically, we use the 2005-2018 Iranian Labor Force Survey (ILFS), a nationally representative cross-sectional sample provided by the International Labour Organization (ILO) and the Statistical Centre of Iran. The ILFS collects the data on 140,000-170,000 individuals quarterly using random sampling. The ILFS is appropriate for studying this study because of three reasons. First, it provides detailed individual information on educational level and major. Second, it provides information on employment status and occupation that enables us to study the labor market effects, i.e., whether the labor market is restructured by new entrants and how occupations are matched. Third, it includes demographic information and family characteristics. In particular, we can link children to their parents and observe their family characteristics (e.g., parents' education and major, siblings' education and major, family size, etc.).

In addition to richness of the data source, Iran, with highly educated female workforce and changing political climate offers a unique perspective into women's major choice when traditional gender roles and societal/political/family pressures are likely to be very strong. On August 20, 2012, Iran's Ministry of Science, Research, and Technology announced restrictions on public university entry for female students. 36 public universities cut 77 programs (16% of all programs) from the female curriculum, making them male-only including programs in engineering (civil engineering, Electrical engineering, Marine Engineering, etc.), science (physics, statistics, chemistry, etc.), and social science (law, management, education, geography, etc.). As a result, female enrollment in engineering programs dropped significantly.

Our empirical strategy follows Oguzoglu and Ozbeklik (2016). Namely, to quantify the impact of sibling sex composition on choosing a STEM major for females in families where the father has a STEM occupation, and to control for potentially unobservable confounding variables (e.g. the endogeneity of number and sex composition of children among families), we will estimate the following difference-in-differences regression:

STEMi=0+1FATHERiS+2BROi+3FATHERiSBROi+Xi'+i (1)

where STEMi is equal to one if female i is a STEM major; BROi is one if female i has any brother; FATHERiS takes the value of one if female i's father has ever been employed in a STEM occupation; Xi is a vector of individual and family characteristics. We also explore Mother's role separately in addition to examining the siblng sex-composition effect before and after the introduction of the gender quota.

JEL Codes: J24, J16, I23

Navigating Degrowth for Sustainable Development: North Africa and EU Relations

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Extended Abstract

This study examines the issues of sustainable development in North African countries and the inequalities in their relations with the European Union (EU). It highlights how current growth-based neo-capitalist economic policies have exacerbated disparities between Europe and North Africa, negatively impacting the Sustainable Development Goals (SDGs) performance.

Global North-Global South Conflict: Historically, the Global North (EU) has maintained economic and political dominance over the Global South (North Africa). It is noted that the Global North sustains its prosperity by exploiting the natural resources, labor, and environment of the Global South. Free trade agreements and the global economic structure result in the South continually running trade deficits, enriching the North further.

Sustainable Development Goals (SDGs): North African countries are performing poorly on SDGs, particularly in areas such as poverty, hunger, education, and basic health. The EU's Green Deal is criticized for relying on external resources under the guise of sustainability and for outsourcing cheap labor.

Proposed Solutions: The study advocates for a "degrowth" approach, emphasizing the need for the Global North to curb its overconsumption, which it seems unwilling to do voluntarily. It suggests establishing a fair pricing system for the Global South's resources and reducing its debt stock through agreed measures. Reevaluating free trade agreements and exploring barter-based trade methods are recommended.

This analysis questions the impact of the global economic system on sustainable development and proposes strategies for a more equitable economic order.

Keywords: Degrowth, Sustainable development, North Africa

JEL Codes: Q01, Q56, R11, P48

Digitalization, Decent Work and Economic Growth Nexus: An Empirical Analysis

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Extended Abstract

Research Background: The 8th Sustainable Development Goal (SDG) seeks to foster sustained and inclusive economic growth, alongside full and productive employment and decent work for all. This paper examines the nexus between digitalization and the 8th SDG, emphasizing the impact of digitalization on promoting decent work and driving economic growth.

Purpose: The aim of this thesis is to deepen our understanding of how decent work affects labor productivity and to explore the role of digitalization in promoting decent work and economic growth. By providing an international comparison of the 27 EU countries from 2014 to 2022, this research significantly contributes to the literature on decent work.

Design/Methodology/Approach: The study employs panel data analysis and calculates an index of decent work deficits developed by the International Labor Organization (ILO). This index includes seven specific indicators measured using the trimmed average method: non-enrollment rate, low pay, excessive hours of work, unemployment, youth unemployment, male-female gap in labor force participation rate (LFPR), and old age without pension. Additionally, the study incorporates the Digital Economy and Society Index (DESI) and its subcomponents in a two-stage least squares estimate (2SLS).

Findings: The findings reveal a significant negative relationship between the decent work deficits index and labor productivity, underscoring the crucial role of decent work in influencing productivity and economic growth. Furthermore, the study indicates that digitalization has a significant negative impact on decent work deficits, suggesting that digitalization can enhance decent work at a macro level. These results imply that decent work can promote productivity, facilitated through digitalization.

Policy Implications: The findings are valuable for policymakers to develop strategies that leverage digitalization while ensuring inclusive employment and economic growth. The study shows that improving decent work enhances labor productivity, encouraging economies to prioritize decent work initiatives. Additionally, it highlights the positive impact of digitalization on promoting decent work and advocates for policies supporting digital transformation. Businesses should invest in digital technologies, provide digital skills training, and promote fair compensation, work-life balance, and inclusivity to enhance employee well-being and productivity.

Conclusion: This paper offers two novel contributions: calculating the decent work deficits index across 27 EU countries, and advancing our understanding of the nexus between digitalization, decent work, and labor productivity. This research highlights the significant role of digitalization in enhancing decent work conditions and labor productivity, demonstrating that improving decent work positively influences economic growth. Policymakers and businesses should prioritize digital transformation and decent work initiatives to achieve inclusive and sustainable economic development.

Keywords: Digitalization, Decent work, Labor productivity; Economic growth; DESI; SDG8; Inclusive growth
JEL Codes: J01, J08, J16, J24, O15, O33, E24

The Determinants of Female Labor Force Participation in Iranian Rural Areas: An Inter-provincial Study

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Extended Abstract

Almost half of the population and potential manpower in the country and rural areas are women. Manpower especially educated plays an important role in production and economic growth. Also, the potential of rural areas to create employment should not be overlooked.

The economic analysis of female labor force participation has attracted considerable attention since the pioneering works of Mincer (1962) and Cain (1966). Female labor force participation rates increased considerably in developed countries in recent years. In contrast, in many developing countries like Iran, the female labor force participation rates do not show a considerable change. Therefore, in this research, we study the effects of socio-economic and demographic factors on women's economic participation in rural areas of Iran's provinces.

Methods: In this study, we use pseudo-panel data regression which differs from panel data. For using pseudo panel data regression, we clustered the data in the provinces. There are significant analogies between the econometric techniques used here and the method of estimation routinely used for panel data. ***This is one of the innovations of this study that has not been done in the studies of other researchers***. For making pseudo-panel data, the role of the individuals is taken by the clusters (provinces) in the survey, and repeated time series observations are replaced by the individual households within each cluster. It should be noted that the estimation of logit and probit regression are very close, and in a large sample, they are the same. Also, the Maximum Likelihood approach used for estimating panel data or pseudo-panel data with limited dependent variable models.

Therefore, this study was performed by using the Micro data of rural households income and expenditure survey -which was taken in 2016- in the framework of pseudo-panel data. At first, we stacked the data based on the provinces. Then we made a data description before estimation. Then, the logit model and the maximum likelihood method were used for the estimation of the probability of rural women's participation, with 28,265 observations.

Finding: Results show the inverted U-shaped relationship between age and the probability of female participation. In other words, young women are more likely to participate in labor markets than the other groups. A divorced and single woman has more chance of participation in comparison with those who are married. ***With increasing the divorce rate and singleness in Iran, economic policymakers must provide appropriate solutions for this challenge in the coming years.*** We found that being a student and the presence of an infant under the age of 6 in the household has a negative effect on the possibility of female participation in the labor market. In other words, engaging in education delays entering the labor market. However, increasing the level of education increases the probability of female participation, which is sub to the change of attitude about the girls' educational attainment in both urban and rural areas and the change of women's attitude towards themselves and achieving self-confidence.

The women's education level has a U-shaped relationship with their participation rate. Illiteracy and being highly educated have a strong positive effect on the economic participation of rural women. It shows the dual labor market for women in Iran. Illiterate women are attracted to service jobs, and educated women are more attracted to education and health jobs. This situation shows job discrimination and job segregation against women. Increasing household income has a small but positive and significant effect on the probability of rural female participation. In the overlook, due to the frequency of the women population in the age group of 25 to 35 years, and more willingness of women in the age 35 to 44 years to participate in the labor market, and studying a significant portion of the rural women, the increase of rural female participation is expected in the years ahead. Thus, ***it is expected that policymakers create new job opportunities for the employment of educated women and take the necessary plans to improve the current situation for women.***

Keywords: Female participation rate, Rural area in Iran, Provincial data, Pseudo-Panel data Method, Big data.

JEL Codes: J12, J21, C23