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BOOK OF ABSTRACT

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On behalf of the Organizing Committee, we are pleased to announce that I. International Congress On Finance, Economy And Sustainable Policies (ICOFESP) will be held in International Balkan University from 04-06 September 2023 in Skopje, Macedonia

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All the papers are subject to rigorous peer-review by at least two members of scientific committee or additional reviewers. We are looking forward to seeing you in Skopje / Macedonia

With our best regards,
Organising Committee of ICOFESP

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Full version of submitted papers will be published in Special Volumes of reputed journals. Procedure, Guidelines and Checklist for the preparation and submission of papers to the Proceedings of ICOFESP can be found in the journals websites.

The journals in which selected and peer-reviewed full papers of ICOFESP will be published are as follows:

- Research of Financial Economic and Social Studies - (ISI)
- Journal of Economics Public Finance Business - (ESJI)
- Van Yüzüncü Yıl Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi (Index Copernicus)
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The Impact of Economic Policy Uncertainty on Foreign Direct Investment: A Panel Data Analysis for Selected European Economies

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Abstract- The main objective of this study is to examine the effects of economic policy uncertainty on FDI for advanced European economies. Inflation rate, trade openness, real economic growth and economic policy uncertainty index are used as variables in the study. 10 European economies with uninterrupted data supply between 2002-2021 are analyzed. The study includes introduction, literature summary, methodology, findings and conclusion sections. In the study, empirical analysis was conducted with the panel ARDL method and a significant and negative relationship was found between economic policy uncertainty index and FDI in selected countries. In addition, while there is a significant and positive relationship between inflation and trade openness and FDI, there is no significant relationship between real growth and FDI.

Keywords: EPU Index, FDI, Inflation Rate, Trade Openess, Real Economic Growh, Panel ARDL

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A Fractional Order Modeling and Stability Analysis of Chaotic Time-Dependent Nonlinear Financial Systems

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Abstract – This paper presents a study on the fractional order modeling and stability analysis of chaotic time-dependent nonlinear financial systems. In the realm of financial dynamics, the intricate interplay of nonlinear behaviors and time-dependent factors has been a subject of paramount importance. In this work, we extend the conventional stability analysis techniques to fractional order systems. We investigate the impact of fractional orders on the stability boundaries of chaotic financial systems, shedding light on how system parameters and fractional orders influence the emergence and persistence of chaos. Our analysis provides insights into the potential benefits of utilizing fractional order models in forecasting financial market behavior. Through numerical simulations, we demonstrate the efficacy of the proposed fractional-order approach in capturing the intricate behaviors of financial systems. In conclusion, this research contributes to the advancement of modeling techniques in the realm of financial systems by introducing fractional order modeling and stability analysis. The findings underscore the importance of considering fractional calculus as a powerful tool for better understanding and predicting the behavior of chaotic time-dependent nonlinear financial systems. This work opens up new avenues for refining risk management strategies and enhancing decision-making processes in the financial domain.

Keywords – Fractional order, Stability analysis, Chaotic Dynamics, Financial Systems, Nonlinear Dynamics.

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The Effect of Brain Drain on Developing Countries in Terms of Loss of Skilled Labor, the Case of Türkiye

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Abstract – Brain drain is the situation in which professions (such as Medical Doctors, Engineers) that require great resources and effort to train migrate to a more developed country due to financial anxiety, impossibility and fear of the future. This has always been a problem that developing countries such as Türkiye face. This immigration situation not only creates a huge deficit in terms of the country's economy but also makes it difficult to find employees in areas that require qualified labor force, therefore it creates problems in various variations, up to an unbearable increase in the workload of the remaining employees. Brain drain, which is a problem that only Turkiye does not face, has been prevented by some countries and not prevented by some countries, causing the country to slow down considerably in terms of development.

By looking at such countries, the development and position of Türkiye in this regard can be better understood. Information about the past, present and future of this migration situation will be collected and we will try to find the answer to the question of whether this situation can be prevented by presenting solutions for the future. This research will focus on the problem of brain drain in Türkiye, especially after 2010, explaining the situation statistically and presenting a solution proposal to this situation, and will make a detailed examination on the subject.

Keywords – Brain Drain, Migration, Development

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A Reliable Computational Stochastic Framework for the Mathematical Smoking Model

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Abstract –The purpose of this paper is to present a reliable computational framework for solving the smoking mathematical model. The mathematical form of the nonlinear differential model is based on three categories, potential smokers, smokers, and permanently smoking quitters. An artificial intelligence based supervised neural network using the Levenberg-Marquardt backpropagation (LBMQB) is applied to solve the nonlinear form of the smoking differential model. A targeted dataset is achieved using the Adams method that is further validated through the process of testing, validation, and training. The distribution of the model is provided in three cases based on the initial conditions for the simulations of the results by applying the proposed stochastic algorithm. The perfection of the algorithm is checked through the comparison of obtained and reference outputs. The efficiency of the designed solver is observed by applying the different operators in terms of regression, state transition, histogram error, and correlation.

Keywords: Smoking model; Supervised neural networks; Stochastic framework; Levenberg-Marquardt Backpropagation;

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The Effects of Trade Liberalization and Globalization on Developing Economies

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Abstract –This research paper investigates the far-reaching consequences of trade liberalization and globalization on economies in the developing world. By analyzing a diverse set of case studies and empirical data, this study aims to provide a comprehensive understanding of the multifaceted effects of these global economic phenomena.

The paper explores how trade liberalization and globalization impact various aspects of developing economies, including economic growth, income distribution, poverty alleviation, technological diffusion, and cultural changes.

Trade liberalization and globalization have become defining features of the contemporary global economy. Developing economies, often characterized by their aspirations for growth, poverty reduction, and enhanced global participation, are particularly affected by these processes. This paper delves into the multifaceted effects of trade liberalization and globalization on these economies, aiming to offer a comprehensive understanding of their impacts. By examining both positive and negative outcomes, this study contributes to a nuanced comprehension of the dynamics that unfold when developing economies integrate into the global marketplace.

The analysis takes into account both the positive contributions, such as increased access to international markets and technology transfer, as well as the challenges, such as heightened inequality and vulnerability to external shocks.

Through this exploration, the research sheds light on the nuanced interactions between trade policies, globalization, and the unique socio-economic contexts of developing economies. This study's findings have significant implications for policymakers, practitioners, and scholars seeking to enhance the positive outcomes and mitigate the potential drawbacks of trade liberalization and globalization in the developing world.

Keywords – Trade Liberalization, Globalization, Developing Economies, Economic Impact

The Relation between Trade and Migration in Western Balkan Countries

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*Abstrac*t- This research explores the intricate relationship between trade and migration within the Western Balkan countries. The Western Balkan region has witnessed dynamic shifts in both economic and demographic patterns, shaped by historical legacies, geopolitical dynamics, and aspirations for European integration. This study delves into the multifaceted interplay between trade and migration, examining how these two phenomena interact, influence, and potentially transform one another.

Through a comprehensive review of existing literature and empirical data, this abstract seeks to unravel the ways in which trade dynamics impact migration trends and vice versa. It investigates how trade liberalization and integration efforts, particularly those associated with the European Union, have influenced patterns of labor migration, remittance flows, and human capital mobility. Additionally, it examines the role of trade-related employment opportunities in shaping migration decisions and the consequent impact on both sending and receiving countries' economies.

Conversely, the abstract also scrutinizes how migration dynamics can influence trade patterns. It explores how diaspora communities and returning migrants contribute to cross-border trade networks, investment flows, and the transfer of knowledge and skills. Furthermore, it examines potential challenges posed by brain drain and loss of human capital in the context of trade development.

The study employs a multidisciplinary approach, drawing from economics, political science, sociology, and international relations, to provide a holistic understanding of the intricate connections between trade and migration. It underscores the need for nuanced policy considerations that account for the intertwined nature of these phenomena, aiming for synergistic outcomes that harness the potential of trade and migration to foster sustainable development and regional cooperation.

Keywords: Trade, Migration, Western Balkan countries, Economic Dynamics, Trade liberalization

The New Complex Travelling Wave Solutions of the Simplified Modified Camassa Holm Equation

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Abstract – In this study, we use the (m+1/G')-expansion method to obtain the travelling wave solutions of the the simplified modified Camassa-Holm equation. The three dimensional graphs and corresponding contour graphs of the obtained results are drawn and analyzed. The results obtained show that the presented method is powerful, practical and suitable for investigating the model.

Keywords – (m+1/G')-Expansion Method, Modified Camassa-Holm Equation, Travelling Wave Solutions.

A New Score Function Based on Pythagorean Fuzzy Set to Multiple Criteria Group Decision-Making

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Abstract – In this paper, we first defined intuitionistic fuzzy sets (IFSs) and Pythagorean fuzzy sets (PFSs) as well as PFSs operational laws. After analyzing on shortcomings of the existing score functions, a new score function based on the Pythagorean fuzzy set is presented. Then, we used the D-CRITIC method to weigh the criteria and used a method for Measurement Alternatives and Ranking according to Compromise Solution (MARCOS) based on the score function in MCDM problems. The main advantages of the proposed method are: (1) D-CRITIC method can produce a more valid set of criteria weights than the original CRITIC method. (2) the MARCOS method can easily be implemented to address a wider range of multi-criteria problems; (3) High validity and efficiency to deal with MCDM problems. In the end, the validity and the feasibility of the method are demonstrated by a numerical example.

Keywords – Multiple Criteria Group Decision Making, Intuitionistic Fuzzy Set, Pythagorean Fuzzy Set, D-CRITIC Method, MARCOS Method.

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Crowd funding as a Modern Fundraising Technique within the framework of Sustainable Development: The Case of Türkiye as an Emerging Economy

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Abstract-The purpose of the research is to provide an overview of crowd funding within the context of sustainable development. Crowd funding is regarded as a comparatively new and modern funding model for financing new projects that are in need of funds (for especially 'start-ups').

The approach used is SWOT analysis. In view of the fact that crowd funding is a relatively new funding module in financial system of Türkiye, data is not available for carrying out a quantitative (econometric) analysis.

The main results of review of current figures are as follows: SWOT analysis indicates that strong side of this model is that this business is in its early age in Türkiye, it has great potential to grow. The weakness of is that investors are not familiar with this funding technique. The greatest opportunity facing this model is dynamic business structure and growing entrepreneurship in the country. The leading threat is considered to be volatile economic and financial environment in Turkey.

Important conclusions and policy recommendations: Crowd funding' as one of the non-banking direct-finance applications continue to be enhanced to ensure sustainable development in especially emerging economies. Secondary legislation is being developed by regulatory bodies related with crowd funding. Policy recommendations: Taking into account the current inadequate amount of investment, crowd funding system should be promoted, advertisement and publicity is needed. Further, secondary market for this funding model should be established within Borsa-Istanbul.

Keywords – Crowdfunding, Alternative Finance Techniques, Fund Raising

The World Bank Group's Response to the Covid-19 (Coronavirus) Pandemic

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Abstract- As countries around the world work to contain the spread and impact of Covid-19, the World Bank Group has mounted the largest crisis response in its history to help developing countries strengthen their pandemic response. With the pandemic's rapid spread into developing countries, the World Bank Group is working hard to deliver support to clients. From April 2020 to March 2021, the Bank Group committed over $200 billion, an unprecedented level of financial support, to public and private sector clients to fight the impacts of the pandemic. Our support is tailored to the health, economic, and social shocks that countries are facing.

The Bank Group's support is helping developing countries save lives and detect, prevent, and respond to Covid-19. The financing is also helping address the health emergency, strengthen health systems, protect the poor and vulnerable, support businesses, create jobs and jump start a green, resilient, and inclusive recovery.

In addition to ongoing support for health systems, our operations emphasize social protection, especially through cash transfers, as they as poverty alleviation and policy-based financing. The World Bank is also working to restructure, redeploy, and reallocate existing resources in projects it finances.

Keywords: Policy-Based Financing, Health, Economic, And Social Shocks.

Effect of International Marketing on Brand Attitude and Consumer Purchasing Intention

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Abstract-Social media is becoming more widely used, and people are using it to express their beliefs and lives. According to how much significance people place on social media, these sites also have an impact on how people behave while making purchases. The increase in popularity of Instagram, one of the most used platforms in recent times, has paved the way for the emergence of new celebrities in the digital environment called influencers.

By sharing photos, videos, and stories on Instagram, the influencer creates the intention of consumers to obtain information before purchasing the product or to purchase about a product that they are not aware of It is thought that consumers will create a purchase intention in their minds for The advertised product due to their trust and admiration for the influencer. The aim of this research is to determine the effect of the online resource reliability (reliability, expertise or competence, attractiveness, and self-expression) dimensions of the Instagram influencer on the consumer's attitude towards the brand and purchase intention. The sampling of the study was carried out with the convenience sampling method, which is one of the non-random sampling methods. With the online and face to face collected questionnaires, 434 data points suitable for analysis were obtained. The analysis of the data was carried out in the SPSS program. According to the results of the multiple regression analysis, it was concluded that the online resource reliability dimensions of the influencer, such as reliability, expertise or competence,

Attractiveness, and self-expression, have a significant and positive effect on the consumer's attitude towards the brand and purchase intention. In addition, it has been determined that brand attitude has a significant and positive effect on purchase intention.

Keywords: Social Media, Instagram, Brand Attitute, Advertised product

Is It Possible to Shorten the Process of Environmental Damage in the Initial Stage of Economic Development?

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Abstract – This study focuses on the trade-off between developmental and environmental indicators in the initial stage of economic development. Early-developed countries made significant environmental concessions during their initial phase of economic development. However, it is evident that currently these countries show substantial positive progress in environmental indicators. Historical data regarding carbon emissions in early developed countries such as the UK and the US reveals this fact. In theory, this phenomenon is referred to as the Environmental Kuznets Curve. Nevertheless, this does not alter the reality that the mentioned trade-off process is long and arduous. This study contains traces of solutions that could potentially shorten this process, while highlighting the duration of the trade-off process in the initial stages of economic development. Especially developing countries that embrace green economic transformation in the early stages of current technology, it is possible to minimize the human and environment-based concessions they face. While countries in the early stages of development like China and India can draw lessons from historical experiences, they must also seize the green opportunities of today. In other words, the study points out that green transformation is one of the best alternatives to ensure that the environmental concessions made for economic development do not encompass a painful and prolonged period.

Keywords - *Sustainability, Green Transformation, Economic Development, Environmental Damage.*

An Investigation on Food Safety Needs of Restaurants in Kırklareli, Türkiye

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Abstract – The food industry is one area where global warming and the coronavirus pandemic impact social life. The negative effects of extreme temperatures and hygiene on food production and commerce have a direct impact on human life. Symptoms of foodborne illness that affect people's health include vomiting, diarrhea, and fever, and treatment requires consulting a specialist. To avoid reaching this stage, however, it is necessary not to disregard food safety decrees. Determining what factors are necessary to ensure food safety in restaurants where food production, sale, and consumption all occur simultaneously, as well as what measures can be taken, is the primary objective of this study. The measures taken by restaurants in Kırklareli province against foodborne diseases and food safety hazards were gathered by conducting face-to-face interviews with the managers and employees of the restaurants and semi-structured surveys to determine the level of knowledge of the employees. Five aspects of food safety have been examined. These include risk perception, applications in food processing, temperature control, infectious diseases, and personal hygiene. In the investigation, the demographic characteristics of the employees were also considered. The level of application of general hygiene rules by survey-participating restaurants was found to be moderate, the occupational safety environment at workplaces was partially adequate, and the food safety and hygiene practices at restaurants as well as the staff's knowledge of these issues were found to be inadequate. Due to the significance and awareness of food safety regulations, which are the primary focus of the study, it is anticipated that restaurants operating in the sector will provide much higher quality service and a high level of customer satisfaction.

Keywords – Food Safety, Food And Beverage, Restaurant, Kirklareli

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Does Carbon Tax Impacts the Economic Growth: Evidence from Western Balkans

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Abstract-Lately, a lot of evidence has been registered regarding the increased emission of the carbon dioxide and other greenhouse gases in the atmosphere. In this way, our planet is getting everyday warmer causing crucial concerns about global warming and climate changes. Concerning the recent trends about the climate changes and difficulties in achieving its effective solution, carbon tax effects has been discussed by many policymakers and scholars, as an instrument for gradual decrease of the carbon dioxide emissions worldwide.

Considering the huge attention given to the climate change concerns and finding effective and efficient solution on dealing with the decrease of the carbon tax emissions and its impact on the economy, main aim of this research is to analyze if carbon tax is an effective instrument on effecting the growth in Western Balkan countries. Thus, the following panel techniques have been used in determining the effects of the carbon tax on the economic growth: OLS, Fixed effect and random effect model, mainly for comparison results, while Hausman Taylor test is used to determine the appropriate model among them. Finally, empirical results reveal existence of a negative and statistically significant relationship between carbon tax emission and economic growth in Western Balkan economies, suggesting the need for policy strengthen of the adoption and effective use of the carbon tax on these countries, in order to reduce the carbon dioxide emissions and to indirectly help boosting the economic growth in this region.

Keywords-Carbon Tax, Economic Growth, Fixed Effects, Random Effects, Western Balkans.

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Trade, Technological Change and Economic Development: A Study of Knowledge Transfer and Innovation Diffusion

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Abstract- This research aims to delve into the complex relationship between trade and technological innovation, focusing on how international trade channels influence the transfer of knowledge, drive technology adoption, and ultimately foster economic growth.

The primary objective of this study is to uncover the mechanisms through which trade facilitates the dissemination of technological knowledge across borders. By analyzing trade flows, patterns, and their correlation with technology adoption rates, the research seeks to identify the extent to which international trade serves as a conduit for the transfer of innovative ideas and practices. Moreover, the study will investigate the role of multinational corporations, cross-border collaborations, and intellectual property rights in facilitating or hindering this knowledge transfer process.

The research will also investigate the impact of technological diffusion through trade on economic development. Utilizing both quantitative and qualitative methodologies, the study will assess how technology-driven growth is influenced by factors such as institutional frameworks, education systems, and domestic innovation capabilities. By examining a diverse set of countries at different stages of development, the research aims to provide a nuanced understanding of the relationship between trade-driven technological change and varying economic outcomes.

In conclusion, this research seeks to contribute to the existing literature on international economics by shedding light on the intricate dynamics between trade, technological innovation, and economic development. By exploring the mechanisms of knowledge transfer, technology adoption, and their consequences, the study aspires to offer valuable insights for policymakers, businesses, and researchers seeking to harness the benefits of global trade in an increasingly interconnected world.

Keywords – International Economics, *Technological Change, Knowledge Transfer, Innovation Diffusion, Economic Development*

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Emerging Trends in Sustainability Communication and Public Relations in the Post-Covid Era

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Abstract – The global Covid-19 pandemic has triggered a profound transformation in the landscape of sustainability communication and public relations (PR). As societies around the world struggled with the pandemic's aftermath, there has been a notable shift in the priorities and strategies employed by organizations and communication practitioners to address sustainability issues. The CovidD-19 pandemic exposed vulnerabilities in supply chains, highlighted the interconnectedness of global systems, and underscored the urgency of addressing environmental and social challenges. Consequently, organizations have increasingly recognized the importance of integrating sustainability into their core operations.

This paper aims to explore how sustainability communication has evolved from a secondary concern to a central element of brand identity and reputation management. Digital transformation has played a pivotal role in shaping sustainability communication strategies. The shift towards remote work and digital engagement during the pandemic has led to an increased reliance on online platforms and social media. We will investigate how organizations leverage digital channels to disseminate sustainability initiatives, engage with stakeholders, and foster dialogues on pressing environmental and social issues. Additionally, authenticity and transparency have become paramount in the post-Covid era. Stakeholders, including consumers, investors, and employees, are demanding greater accountability from organizations. We will also examine how sustainability communication efforts now emphasize genuine commitment to sustainability goals, backed by tangible actions and measurable outcomes.

Furthermore, this paper addresses the power of storytelling in conveying sustainability messages. Organizations are crafting compelling stories that highlight their sustainability journey, showcasing both successes and challenges. We will also investigate the role of narrative in shaping public perception and building emotional connections. In conclusion, the post-Covid era has triggered a new paradigm for sustainability communication and PR.

Keywords – Sustainability, Digital Transformation, Accountability, Communication, PR.

Investigation of Nonlinear Hamiltonian Amplitude Equation: Solutions, Interpretation and Applications

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Abstract – This study investigates the nonlinear Hamiltonian amplitude equation by using the modified extended tanh-expansion approach. Some important wave solutions such as dark, singular, combined dark-singular, solitons, and periodic wave solutions are successfully constructed. All the acquired solutions have satisfied the original equation. In addition, this study presents providing insights applicable to economic growth theory and other economic models. The economic interpretation of the Hamiltonian reveals two significant terms: the first term representing the utility of current consumption, and the second term reflecting the net investment evaluated by price λ, which indicates the marginal utility of consumption. To explain the impact of the parameter λ, we have presented some 3D and 2D wave profile of the attained solutions under selection of the different values of λ. This proposed technique could be applied to study many other nonlinear evolution equations in various fields in future.

Keywords: Hamiltonian Amplitude Equation; Optical Soliton; Modified Extended Tanh Approach

Touching the Free from Masculinity Face of Sustainable Development: A Sociological Perspective to Gender Equality

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Abstract- The phenomenon of development has a multifaceted structure that contains important clues about the position of countries in the development literature. The understanding of the phenomenon in economic context has been transformed with important political and social changes. Thus, its scope has expanded and at the same time, it has implications that are frequently discussed and lead to interpretations. Evaluation of development beyond pure economy necessitated deep questioning, research and policy making in terms of some sharp instruments.

This phenomenon, which also opened the doors of social, legal and political fields, led to the formation of some global goals after the fact that different dimensions were addressed during the increase in the effectiveness of neo-liberal policies with the 1970s. The 17 basic principles, in which global targets are determined for the formation of sustainable development covering the years 2016-2030, have revealed that the indicators of the percentage of the share from the pie, called economic welfare, which are the basic indicators of development, are not sufficient for sociological analysis alone. At this very point, the Sustainable Development Principles, which shed light on many aspects and problems of life, made it possible to look at the nature of development around new windows. Among these windows, the principle of "Gender Equality", which is stated as the 5th Principle, has led to many studies that have been talked about especially recently.

This study aims to interpret the aspects of gender equality in Turkey in the light of a sociological perspective. For this purpose, especially the representations of men and women in education, working life and political arena, and the policies and projects produced throughout the country will be mentioned. These evaluations will be explained around sociological facts and with an orientation based on gender equality.

Keywords: Sustainable Development Principles, Gender Equality, Sociological Perspective.

New Approximation Solution for Fractional Benney Equation Involving Caputo-Fabrizio Fractional Derivative

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Abstract – This article is devoted to showing the approximation solution for Fractional Benney equations (FBEs) driven by Caputo-Fabrizio fractional derivative(CFFD) of order $\alpha\alpha \in (0, 1)$ by using the fractional homotopy perturbation transform method(FHPTM) is highly effective in obtaining approximate solutions for strongly FBEs. These solutions are presented through graphs, highlighting the behavior of the FB equation under various conditions.

Keywords -The Fractional Benney Equation; FHPTM; Caputo Fabrizio Derivative (CFD); Laplace Transform

The Impact of Social Responsibility in Achieving Green Marketing Strategies A Study of the Views of A Sample of Industrial Companies in the Republic of Iraq

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Abstract – This study aims to which industrial companies in the Republic of Iraq are committed to social, environmental and ethical responsibility on green marketing strategies, and the extent to which these organizations are keen to reduce environmental pollution, as well as its dimensions, which are represented by its implications, by removing and lowering the concept of waste , redefining the idea of the product and the link between price and cost, and turning environmental consciousness into a profitable endeavor, The researchers designed a questionnaire and selected a random sample of individuals employed in industrial companies, as the sample size reached 120 and was distributed to the companies' departments, in addition to conducting structured personal interviews with executives and managers of other departments.

On the other hand, this study highlights the adoption of the green marketing philosophy in industrial organizations and social responsibility, such as advertising the low emissions associated with production processes and the use of post-consumer recycled materials for product packaging.

The researchers reached several conclusions, the most important of which can be mentioned: The need for executives in senior management to be aware of the goals and strategies of green marketing and environmental preservation through the enactment of laws by the government and obligating all companies to adhere to the application of social responsibility towards the environment.

Keywords – Social Responsibility, Green Marketing, Industrial Organizations, Republic of Iraq

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Assessment of Economic Variables Together with the Beneish M-Score Model for Detecting Financial Errors or Fraud: A Case Study of Borsa Istanbul

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Abstract – Financial statement manipulation can be conceptualized as a strategic process adopted by businesses to potentially avoid disclosing their financial failures or distress during periods of economic or financial crises. Particularly in such turbulent times, companies may be inc lined to present deceptive accounting data to mask or exaggerate their true financial position. These deceptive practices may impede investors and other stakeholders from accurately assessing the actual financial health, thus possibly resulting in detrimental implications for the overall financial system. In addition, the analysis of financial variables provides insights into a company's current financial distress or health, thereby influencing decisions aimed at achieving long-term financial sustainability.

In response to the complexity and severity of financial statement manipulation, researchers have pursued the development of models aimed at identifying fraudulent activities in financial reporting. Among these models, the Beneish M-score model has garnered considerable attention. The Beneish M-sore model relies exclusively on financial statement-based indicators to detect indications of financial accounting manipulation within companies.

In this study, an extended version of the Beneish M-score model has been employed to companies from Borsa Istanbul between the period 2018-2022, incorporating external economic variables that reflect a country's economic status and can serve as influential factors in motivating accounting manipulation . To assess the validity of the approach, the random forest method, a prominent machine learning technique known for its effectiveness in handling complex datasets is employed. By employing this method, the aim is to ascertain the accuracy and robustness of the extended model, which incorporates the interplay of both financial and economic variables.

The empirical findings derived from the study suggest that the model enriched with economic variables outperforms the traditional Beneish M-score model in detecting financial statement manipulations.

Keywords – Beneish M-score, Random Forest, Financial Sustainability.

The Nexus of Environmental Pollution and Economic Growth in the Context of Green GDP

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Abstract – The process of rapid economic growth and industrialization can threaten people's quality of life and cause environmental pollution, climate change and global warming. In fact, environmental pollution has become a global problem that affects all mankind and can prevent stable economic growth. Up to now, the relationship between economic growth and environmental pollution has been studied by many researchers in the context of the Environmental Kuznets Curve (EKC). According to the EKC approach, an increase in per capita national income in the early stages of industrialization and economic development increases pollution, while an increase in income above a certain income level reduces pollution. This is because in the early stages of industrialization, countries did not attach much importance to pollution, and as nations became wealthier, they became more sensitive to healthy and clean environmental conditions. Empirical studies have examined the relationship between pollution indicators such as CO_2 and SO_3 and GDP per capita using different groups of countries. However, these indicators can only reflect pollution to a limited extent. As a new approach, this study uses the difference between green GDP, calculated by some researchers, and nominal GDP as a variable representing pollution. The study covers countries for which green GDP variables are calculated. The methodology used is panel OLS and panel ARDL cointegration.

Keywords – Green GDP, Environmental Kuznets Curve, Environmental Pollution, Sustainable Economic Growth

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The Relationship Between Energy Consumption and Economic Growth: An Evaluation on Türkiye

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Abstract – The distribution of energy resources in energy use, which stands out as a fundamental element for economic growth and development, is important for the sustainability of economic growth and development. In this context, problems such as global warming and climate change should be prevented by increasing renewable energy resources and minimizing the use of energy resources that harm natural life. The most important issue is to produce within the framework of the steps and measures taken worldwide, to establish the correct relationship between people and resources, and to realize economic growth by protecting resources, not at the expense of resources. Within the framework of the principles established by the Kyoto Protocol, developed countries have made a number of commitments, while developing countries such as Turkey are carrying out their production processes by taking a number of measures. Increasing carbon emissions, especially as a result of fossil fuels used to meet the energy demand of industry, cause irreversible environmental problems and lead to climate change. This study analyzes the relationship between energy consumption and economic growth in Turkey between 1980-2020. In the analysis, the causality relationship was investigated by Granger Causality Test, Johansen Cointegration Test and Vector error correction model (VECM) and as a result of the analysis, it was found that there is a causality between energy consumption and economic growth in the long run from growth to energy consumption. In line with the findings of the study, policy recommendations on energy consumption and economic growth have been formulated.

Keywords – Energy Consumption, Economic Growth, Causality Relationship

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Are the Netherlands, Sweden, and Germany Ready for Digital Transformation?: Policy Recommendations for Developing Digital Skills

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Abstract- Despite no consensus on its definition in the literature, digitalization - essentially coined thanks to the widespread integration of digital technologies into everyday life - is likely to bring diverse impacts to each country. The inevitability of digital technologies in contemporary daily life forces almost every country to design different strategies to encourage its citizens to adopt digital skills. In this sense, the present study aims to draw attention to the increasing demand for digital skills with digital transformation processes in selected countries and scrutinize these countries' digitalization-specific policies and strategies. Accordingly, this case study focuses on three digitally competent European countries - the Netherlands, Sweden, and Germany - regarding their digital transformation processes and practices, strategies, and fundamental policies for improving their citizens' digital skills. In this regard, we can assert that each country bears different digital strengths. While Sweden has an advanced digital economy and has rapidly started to transition to an efficient knowledge economy, Germany has a relatively high supply of digital skills to satisfy the increased demand by an innovation-oriented industry. The Netherlands, on the other hand, shines out by ranking first in Europe as about 80% of its population aged 16 to 74 years adopt digital skills.

Keywords – Digital Transformation, Digital Skills, Workforce, Education

Evaluation of financial performance and ranking of refinery companies active in Tehran Stock Exchange using SWARA and MABAC fuzzy multi-criteria decision making method.

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Abstract-Evaluating the financial performance of refinery companies active in the Tehran Stock Exchange is one of the most important issues of interest to investors in the oil and gas industry. Financial performance evaluation is a process that helps shareholders and other investors to make optimal investment decisions in evaluating financial performance, the basic issue is related to uncertainty and inaccuracy. This research determines the weight of the financial criteria of the refineries using the fuzzy SWARA method and evaluation of efficiency-based ranking using the fuzzy MABAC method, which is one of the fuzzy multi-criteria decision-making methods. Performs for refinery companies active in Tehran Stock Exchange. The results of the research show that Isfahan Refinery Company and Bandar Abbas Refinery Company are ranked first and second, respectively, and Pasargad Oil Company is ranked last.

Keywords - Financial Performance Evaluation, Multi-Criteria Decision Making, Fuzzy SWARA Method, Fuzzy MABAC Method

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Sustainable Aviation Fuel Utilization and Sustainability Initiatives of Turkish Airline Companies

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Abstract – Air transportation, with its share of nearly 3% in the total CO2 emissions produced worldwide, stands as the second-largest contributor to climate impact in the transportation sector after road transport. In this context, the aviation sector has been subjected to regulations as a result of the European Green Deal, aiming to reduce its climate impact. One of these regulations involves the inclusion of the aviation sector in the Emission Trading System (ETS), and it aims to reduce the use of fossil fuels in aircraft by promoting the adoption of Sustainable Aviation Fuels (SAF) or their derivatives, which are more environmentally friendly. The purpose of this study is to present the usage of SAF by Turkish airline companies and their compliance with other relevant ETS regulations, thereby comparing their efforts towards carbon neutrality. Beyond conducting a systematic literature review, this study examines the sustainability practices of Turkish airline companies. The findings are discussed comparatively within the study. As a result of this study, it has been concluded that the practices of many companies regarding the regulations specified within the scope of sustainability are insufficient. The aim of this research is to contribute to the improvement of our country's quota within the ETS system by specifying what Turkish airline companies should do within the scope of ETS regulations.

Keywords – Sustainable Aviation Fuel, Sustainability, Aviation, Emission, Climate Impact

Exploring The Relation Between Financial Distress and Financial Errors or Fraud: A Case Study of Borsa İstanbul

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Abstract – In today's complex financial landscape, the accurate detection of financial errors and/or fraudulent activities has become a crucial concern for investors, regulators, and market participants. This study focuses on employing two prominent financial analysis tools, the Altman Z-score, and the Beneish M-score Model, to examine the potential for identifying such financial errors/fraud.

The Altman Z-score is a well-established model that assesses a company's financial distress and bankruptcy risk through a combination of five financial ratios. On the other hand, the Beneish M-score Model is widely recognized for its effectiveness in detecting financial statement manipulation with the help of eight financial indicators. Upon conducting the outcomes derived from these two models, a comprehensive examination of the quantified relationship between financial distress and financial manipulation will be undertaken.

By applying these models to companies from Borsa İstanbul, this research aims to shed light on their efficiency in uncovering signs of financial distress or fraudulent reporting. In the study, companies from various sectors other than banking were examined, aiming to observe changes over time. The study period covers the range from 2018 to 2022. Since effective fraud detection mechanisms preserve market integrity and also develop safeguard the sustainability of investments and overall market trust, the findings of this study could offer valuable insights for investors, and auditors in their efforts to ensure the transparency and integrity, and sustainability of financial markets.

Keywords – Altman Z-Score, Beneish M-Model, Financial Sustainability.

The Effects of Demand for Corporate Reputation on Sustainable Development: A Qualitative Review in Public Banking

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Abstract – While intangible resources have an important place for companies to achieve sustainable competitive advantage, corporate reputation comes first among these resources. Activities to increase corporate reputation not only contribute to increasing the reputation of the enterprise, but also create benefits in environmental and social issues. Benefiting from corporate reputation as a differentiation tool under the intense competition conditions created by globalization is an expected result, and there are many studies focusing on this issue [1], [2], [3], [4], [5][6]. There are many sectors in which both private and public enterprises share the same organizational space. When evaluated in terms of competition conditions, enterprises established with public capital are not completely outside the competition circle, but they have many differences that cause them to be separated from private sector enterprises, especially the ownership of the state [7]. However, considering the issue of sustainability, it is seen that public enterprises publish sustainability reports like private sector enterprises and engage in economic, social and environmental studies.

The study is shaped on this basis, and it is aimed to understand the effect of the corporate reputation acquisition demand of public banks on sustainable development. In the given context, on which sustainability issue(s) do public banks give importance to corporate reputation acquisition? The question constitutes the research question.

The study was designed as a qualitative study, and the integrated reports of the public banks Halkbank, Vakıfbank and Ziraat in Turkey formed the data source of the research. The themes created by subjecting the data to content analysis using the MAXQDA program and the approaches of public banks to the three main sustainability themes of economic, environmental and social sustainability were examined comparatively.

Keywords:- Sustainability, Corporate Reputation, New Institutional Theory, Corporate Social Responsibility, Banking, Management And Organization

How is Sustainability Defined in Marketing? Definitions of Sustainability in Articles Published Between 2016-2022

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Abstract*-* Purpose- In this study, examining the definitions of "sustainability" in articles on sustainability published in the field of marketing between 2016-2022 and evaluating the perspectives of individuals and institutions on sustainability; if there is any it is aimed to examine new concepts that develop with sustainability.

Method- In this study, a literature review was conducted for articles on sustainability published in the field of marketing between 2016-2022.

Findings- According to the articles that were reviewed in the literature; a sustainability marketing model called the new 3Ps of sustainability marketing has been proposed. Three concepts of sustainability marketing are described. It has been observed that consumers attention to sustainable issues does not result in brand loyalty. It was emphasized that the market-oriented consumption approach should be replaced with a sustainable approach over time.

Originality- In the relevant literature, there is no study covering the definitions of sustainability between the years of 2016-2022. Therefore it is thought that this study will contribute to the marketing literature.

Keywords- Marketing, Sustainability, Sustainability Dimensions, Sustainability Marketing

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Surveying the Driving Affecting Factors on SMEs Institutionalization

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Abstract –The main purpose of writing the current paper is to survey the driving affecting factors on SMEs institutionalization in Iran. The research is applicable from goal view and descriptive from data collection. Also data collection method is library and fieldwork. To measure driving affecting factors on SMEs institutionalization entrepreneurship, market orientation and innovation were utilized. Statistical society includes employees of small and medium enterprises in Iran. A questionnaire includes questions was designed and after proving its validity and reliability distributed among statistical sample. The results of applying Chi Square and Friedman tests illustrated that entrepreneurship, market orientation and innovation affect significantly and positively on SMEs institutionalization. Meanwhile innovation was selected as the most important dimension and finally market orientation was placed in favourable level as Binomial test indicated.

Keywords-: Entrepreneurship, Market Orientation, Innovation, SMEs, Institutionalization

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The Effect of Free Cash Flow on an Investment Efficiency Underlining Investor Support Impact in the Listed Companies on Tehran Stock Exchange

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***Abstract-** T*he present study intends to survey the impact of free cash flow on the investment efficiency highlighting investor protection effect in the listed companies on Tehran Stock Exchange. Hence, the information analysis was conducted for 08 sample companies in the 0-year period from 2802 to 2802. To analyze relevant data, multivariate regression, combined data, EViews08 and STATA software version 01 were used. Data analysis displayed free cash flow negatively and meaningfully affect the investment efficiency. On the other hand, the investor support revealed its positive and meaningful effect on the relationship between free cash flow and investment efficiency.

Keywords- Free Cash Flow, Investment Efficiency, Multivariate Regression, Investor Support.

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The Multi-Criteria Supply Chain Model to be Used in the Distribution of Disaster Relief Materials through the Maritime Disaster Task Group

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Abstract – Countries like Turkey, located on important earthquake zones, need to create supply chain management models that can meet the material requirements that will arise after disasters in a short time frame and with minimum cost. In this study, a multi-criteria stochastic optimization model has been created that foresees the procurement, storage, and delivery of the materials that may be needed after the disaster, to the distribution centers and then to the disaster areas by the ships of the Naval Disaster Task Group. The objectives of the model are the transportation of aid materials to the affected population by Naval Task Group ships and air transport vehicles in minimum time and with minimum total cost including inventory and operational costs. The decision variables in the model are the sources from which aid materials will be supplied, the choice of the locations of warehouses and distribution centers, and the type and number of distribution vehicles. Supply Chain structure was taken as basis in the formation of the model. This model enables decision-makers to select the optimum locations and distribution means for different disaster scenarios.

Keywords – Disaster Relief, Maritime Disaster Task Group. Multi-Criteria Stochastic Optimization Model, Supply Chain Management

Risk of Car Crashes By Spatial Analysis And Investigation of Weather And Atmospheric Changes and its Effect on Inner-City Accidents in the Case of Erbil, Northern Iraq

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*Abstract –*With the expansion of car life and the increasing traffic in cities and roads, in contrast to the economic and welfare process caused by the expansion of communications and the speed of movement of goods and passengers, the number and severity of motor vehicle accidents have unfortunately increased. Accidents are one of the most important causes of death and severe injuries to life and property, and their heavy social, cultural, and economic effects have severely threatened human societies. Among the factors that play a role in the occurrence of accidents, the contribution of climatic phenomena such as snow, rain, fog and blizzard, sandstorm, dust, fine dust, road surface temperature, air temperature and humidity cannot be ignored. This study includes spatial analysis of inner-city accidents and spatial factors affecting traffic accidents in Erbil city. The current research is applied and descriptive analytical. Statistical population - All the inner-city accidents occurred in 2015-2022, and in this research, the entire statistical population was used without considering the statistical sample. The results show that in the months of November and December, there is a significant correlation with a correlation coefficient of 0.68 between rainfall and the occurrence of accidents, and in other months and seasons, a significant and direct correlation is also seen between the ambient temperature and the number of accidents. The results show that according to the most statistics obtained from the number of accidents in the month of November, it can be said that atmospheric factors have the main and decisive role and are considered as the main factor.

Keywords – Spatial Analysis, Climate Change, Urban Accidents, Erbil, Actuarial

Evaluation of the Performance of Economic Indicators in Turkey with the Gray Relational Analysis Method

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Abstract – In recent years, the pandemic, the Russia-Ukraine war and the food and energy problem, the effects of the earthquake have been felt in the Turkish economy. This process affected demand, prices, and expenditures of economic units, borrowing, production and sales. Considering the economic indicators between January 2019 and May 2023, the developments in this process and the analysis of the performance of the economy are discussed. For this purpose, indicators that are frequently used and interpreted in the evaluation of the market trend and economic outlook, both in Turkey and in many countries, have been selected. Among these indicators, inflation, unemployment, growth, stock market index, capacity utilization rate, industrial production, manufacturing PMI, CBRT interest rate, bond interest, economic confidence index, turnover index, retail sales data were taken into account.

While performing the performance analysis of the Turkish economy regarding the January 2019 – May 2023 period, it is aimed to determine in which months the performance is shown positively or negatively, as well as to determine whether there have been developments towards improvement in the last months. The selected 14 economic indicators were analyzed using the Gray Relational Analysis method, one of the multi-criteria decision making techniques.

Gray Relational Analysis method is one of the decision making techniques that is frequently used to choose the best one when there are multiple alternatives. One of the reasons for its use in this study is; while comparing the alternatives with the reference value, besides the reference value produced from the data, the reference value is entered according to the criteria to be determined by the analyst. In this way, in some of the economic indicators, for example, the highest in benefit-based data and the lowest in cost-based data, the criteria entered by the user or accepted for that data can be entered as the reference value in optimum-based data. For example, production PMI, Economic Confidence Index and Foreign Trade Rate are evaluated according to whether they are above a certain threshold value. Therefore, the relevant alternatives can be evaluated by entering this threshold value as the reference value.

As a result of the evaluation of 14 economic indicators related to 53 months of the Turkish economy in the January 2019 – May 2023 period with Gray Relational Analysis; In terms of performance, the best first five months are December 2019, February 2020, March 2023, January 2020, December 2022. In the pre-pandemic period, economic data, namely performance, started to improve in Turkey, after the pandemic emerged in March 2020, there was a decrease in performance, and the decisions taken during the pandemic process (such as the closure of workplaces - opening) saw ups and downs in performance until the middle of 2022, when the effects of the pandemic disappeared. seen. Although the 5-month period of 2023 showed a relatively better performance, there was an earthquake in this period and the election process was started, and the monthly development could not draw a full direction in terms of performance.

Keywords – Gray Relational Analysis, Economic Indicators, Performance

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Technical Measure of Capacity Utilization in Network Production Systems in the Presence of Undesirable Outputs

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Abstract: The current study intends to technically measure the capacity utilization in network production systems in the presence of undesirable outputs. Capacity utilization is a determinant which measures the capability of decision-making units to utilize fixed inputs in short-run. Accordingly, in such systems production factors are categorized into fixed and variable inputs. Hence, a modified Network Data Envelopment Analysis (NDEA) model applies to measure the capacity utilization in the presence of undesirable factors. The study goes on to consider the effect of intermediate measures on capacity utilization in the network production systems. An illustrated numerical example displays the effectiveness and applicability of current model.

Keywords- Capacity Utilization, Network Data Envelopment Analysis (NDEA), Undesirable Outputs.

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The Internet of Behavior in Tourism and Services

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Abstract. The Internet of Behaviour (IoB) it's a new concept derived from Internet of Things (IoT). This technology assists in analyzing the behavior of users. IoT understanding data is a means of actions, while IoB tries to disentangle the meanings underlying it. The interconnection of devices produces many new data points and extends from the Internet of things (IoT). Businesses collect information from customers through 'sharing' between connected devices, monitored through a single computer in real life. This work is brief about the IoB and its role to fulfil customer requirements. This study also identifies and discusses IoB applications for better customer services. The aggregation of use and information from IoB devices gives helpful insight into consumers' comportments, desires, and tastes, something coined as a computer network. It encompasses many devices from phones to vehicles, exercise reloads, credit cards, to everything else literally connected to the Internet. Thus, The IoB's aim is to summarize, analyze, comprehend, and respond to all forms of human behavior in a way that allows people to be tracked and interpreted using developing technology advancements and advances in machine learning algorithms.

Keywords- Tourism, behavior, Internet, IoB, IoT

The Impact of Unconventional Monetary Policies on the Risk of Falling Stock Prices (Case Study: Companies Listed to Tehran Stock Exchange)

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Abstract- Since policy uncertainty is temporary, an increase in cash assets can provide flexibility that allows firms. Based on this, the purpose of this research is to investigate the impact of unconventional monetary policies on the risk of falling stock prices in companies listed on the Tehran Stock Exchange. The current research is practical in terms of its purpose and in terms of method it is a causal (post-event) type of research. The statistical population of the research is the companies admitted to the Tehran Stock Exchange, and using the systematic elimination sampling method, 141 companies were selected as the research sample in the period between 2015 and 2022. Logistic regression has been used to test research hypotheses. The results of the research showed that the inflation rate has a significant effect on the risk of falling stock prices, also the interest rate and specific company policies have a significant effect on the risk of falling stock prices.

Keywords-Unconventional Monetary Policies, Inflation Rate, Money Interest Rate, Specific Company Policy, The Risk Of Falling Stock Prices.

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Investigating the Impact of Product Market Competition on the Relationship Between Corporate Governance Mechanisms and Dynamic Capital Structure in Companies Listed on the Tehran Stock Exchange

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Abstract-The capital structure of a company is a combination of short-term debt, long-term debt and equity by which the company's assets are financed. The existence of strong corporate governance mechanisms will ensure that managers' behavior for reporting is closely monitored and not directional. Competitiveness is defined as the company's ability to survive in the business market, protect the company's various capitals, obtain (return) capitals and guarantee jobs in the future. In this research, the impact of product market competition on the relationship between corporate governance mechanisms and dynamic capital structure has been investigated. The examined sample includes 136 companies admitted to the Tehran Stock Exchange during the years 2018 to 2022. In order to test the hypotheses of the research, a multivariate regression model with a panel data approach has been used. Family ownership, institutional ownership, independence of the board of directors, dual duty of the CEO and the existence of the internal audit unit have been used as five mechanisms of corporate governance.

Keywords- Corporate Governance, Pure Market Competition, Capital Structure

The Effect of Government expenditures and Received Foreign Aid on Economic Growth in Afghanistan, Pakistan and Iraq

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Abstract- Macroeconomic growth has been the main goal of all countries since the birth of the economy. So, each country applies different economic policies in order to grow faster and stable. Therefore, between 2001 and 2020, in Afghanistan, Pakistan and Iraq foreign aid was provided in order to support their economic growth and development process. Despite received developments aids, there is still a large problem of unemployment and poverty in these countries.

The main purpose of this study is to investigate the relationship between government expenditures, received development aids, inflation and economic growth in Afghanistan, Pakistan and Iraq during the 2001-2020 period using panel data analysis method. According to the results of the panel data analysis, the economic growth of Afghanistan, Pakistan and Iraq was affected positively by government expenditures and negatively by received development aid. However, the relationship between economic growth and inflation in these countries was found to be negative and meaningless.

Keywords- Economic Growth, Government Expenditures, Foreign Aid, Inflation, Fixed Effects Model

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Long-Term Asymmetric Relationship Between VIX Fear Index and Stock Market Tourism Indices: The Case of Turkey and Selected Countries

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Abstract – The tourism sector can be significantly affected by both systematic and non-systematic risk factors. Geopolitical and political risks, global uncertainties, and economic developments are some of the uncertainties that can impact the sector. This situation not only affects the sector itself and consequently the economy, but also investor decisions in capital markets. The aim of this study is to examine the long-term asymmetric relationship between the VIX fear index and Tourism Indices in Turkey and selected countries using the NARDL method. The study also investigates the long-term relationship of the Geopolitical Risk Index (GPR) and the Global Economic Policy Uncertainty Index (GEPU) on tourism indices using the ARDL and NARDL methods. The analysis period covers monthly data from 01.2010 to 06.2023. In the model established for each country, the dependent variables used are Turkey (BIST Tourism), UK (FTSE 350 Travel & Leisure), US (Dow Jones Travel & Leisure), Italy (FTSE Italia All Share Travel & Leisure), and China (FTSE China Travel & Leisure) indices. The natural logarithms of all included variables are taken in the study. According to the unit root test results, it is determined that the GPR, GEPU, and VIX variables are stationary at the I(0) level, while the other variables are stationary at the I(1) level. In the study, Linear and Nonlinear ARDL Model Cointegration Test results for the UK, US, and Italy demonstrate a cointegration relationship among the variables. For China and Turkey, it is determined that there is no cointegration relationship among the variables in both ARDL and NARDL models. The results indicate that the negative shocks of the VIX index have a more dominant effect on the tourism indices of the UK, US, and Italy stock markets.

Keywords – VIX Index, Tourism Index, ARDL and NARDL Methods

Hybrid Stochastic Differential Modeling Considering Change Point Estimation for Europe Brent Oil Data

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Abstract – In this study, Europe Brent crude oil closing were handled with stochastic differential equation (SDE) modeling as they follow a trajectory in the form of a standard Wiener process. Because crude oil, known as the lifeblood of an economy, and the reason of fluctuations in oil prices, affected many countries around the world, especially in the last few years, as it has shown sudden changes due to various global effects.

Therefore, in this research, it was aimed to obtain the most suitable hybrid SDE model for Brent data, taking into account change point estimation (CP). For this, the Brent dataset was first modeled with geometric Brownian motion (GBM), Ornstein-Uhlenbeck (OU) and Cox-Ingersoll-Ross (CIR) SDEs, frequently used in finance, without considering the CP estimation. Then, GBM SDE, OU SDE and CIR SDE models were reconstructed considering the CP estimation.

Finally, a hybrid SDE model was proposed, which is compatible with Brent data, again considering CP. GBM SDE, OU SDE and CIR SDE models were used to establish the hybrid SDE model. Parameters and CPs for each model were estimated by quasi- maximum likelihood estimation method (QMLE). Obtained CPs were found to be linked to the Covid-19 outbreak and the Russia-Ukraine war. Whether there is lack of fit between the established models and the data set was examined with the chi-square test was developed specifically for SDEs in the literature. The approximate solution of each SDE model was obtained with the Euler-Maruyama (EM) numerical solution. Among the established models, MAPE, RMSE, AIC, and BIC criteria were used to determine the best model for the data set. Accordingly, it was concluded that the most suitable model for the Brent dataset according to the MAPE and the RMSE criteria is the proposed hybrid SDE model. This model explained the sudden ups and downs in the data set better than the other models. It was observed that considering the CP when working with datasets with sudden changes has a positive effect on the performance of the model created. The results graphically support that the hybrid SDE model fits the dataset.

Keywords – Change Point Estimation, Cox-Ingersoll-Rose, Geometric Brownian Motion, Euler-Maruyama Approximation Method, Ornstein-Uhlenbeck, Quasi-Maximum Likelihood Estimation Method

The Impact of the COVID-19 and Energy Crisis on the Top Five Companies Listed on the Macedonian Stock Exchange" during the Period 2018-2022

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Abstract - This research paper highlights the pivotal role of investments and effective financial management in establishing and sustaining prosperous companies. The paper extensively examines the Macedonian securities market and the current state of the regional stock exchange. Through meticulous research, we make a notable observation: companies committed to substantial investments tend to attain favorable financial outcomes, particularly profits. Notably, these proactive companies attain prominent positions on the Macedonian Stock Exchange, excelling in traded share volume and earnings per share.

The research underscores the indispensable significance of strategic investments and adept financial strategies in propelling business success, particularly within the Macedonian securities market. Furthermore, this study delves into the intricate impact of the Covid-19 pandemic and energy crisis on the financial performance of companies comprising the MBI10 index in North Macedonia. By closely examining the effects of the pandemic on profitability dynamics, the study uncovers a nuanced situation, indicating a partially negative impact on profitability.

This research advances a deeper comprehension of the intricate interplay between global crises, exemplified by the Covid-19 pandemic, and the financial well-being of the top five businesses within the North Macedonian context. The insights illuminate the multifaceted challenges faced by these companies in sustaining profitability amidst unprecedented external shocks. By addressing the dual dimensions of financial strategies and crisis resilience, this research offers valuable insights for businesses navigating both prosperous and challenging times within the context of the Macedonian market.

Keywords- Securities, Investments, Projects, Financial Results, Profitability, MSE

A Comparative Study of Informal Financing in Developing Selected Countries

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***Abstract** –*The main purpose of writing the current paper is to survey the driving affecting factors on SMEs institutionalization in Iran. The research is applicable from goal view and descriptive from data collection. Also data collection method is library and fieldwork. To measure driving affecting factors on SMEs institutionalization entrepreneurship, market orientation and innovation were utilized. Statistical society includes employees of small and medium enterprises in Iran. A questionnaire includes questions was designed and after proving its validity and reliability distributed among statistical sample. The results of applying Chi Square and Friedman tests illustrated that entrepreneurship, market orientation and innovation affect significantly and positively on SMEs institutionalization. Meanwhile innovation was selected as the most important dimension and finally market orientation was placed in favourable level as Binomial test indicated.

Keywords:-Entrepreneurship, Market Orientation, Innovation, SMEs, Institutionalization

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Women Migrants in Risk Society and Social Policy Practices

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Abstract – The number of migrants in the world is increasing day by day. Accordingly, the concept of migration is discussed from many different angles today. In today's conditions, where poverty and inequality in access to opportunities are increasing, especially in underdeveloped countries, the causes of migration and the ways in which the issue is handled in the literature are also changing. In this study, the concept and causes of migration, which are frequently mentioned in the literature, are discussed on the basis of gender, and its relationship with the concept of "risk society" is mentioned. For this purpose, secondary data on the subject were analyzed and current trends and debates were examined. In this direction, the role and importance of social policies for migrants in eliminating or recreating inequalities was discussed.

Keywords – Migration, Gender, Risk Society, Social Policy

Navigating Convergence: Renewable Energy, Industry 4.0, and Resilience for Sustainable Transformation

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Abstract – This research accentuates the imperative of integrating renewable energy, sustainability, Industry 4.0, and resilience within Pakistan's context. The nation is on the verge of potential energy shocks, compounded by escalated energy prices that disrupt industrial operations. However, the abundant and cost-effective solar energy potential of Pakistan offers a practical renewable energy solution. Emulating North America's industry 4.0 strategies could expedite the adoption of renewables, boost energy security, and augment resilience, culminating in a reliable, highly renewable, and decarbonized power system.

This qualitative study delves into the obstacles confronting Pakistani businesses in embracing renewable energy and Industry 4.0. In-depth interviews with industry strategists illuminate the primary challenges, encompassing deficient awareness, inadequate technical knowledge and infrastructure, dearth of skilled labor, limited government support for renewable energy sources, governmental policy focus on fossil fuels, absence of cohesive energy production and consumption planning, toxic competitive practices, strategist reluctance to embrace innovative solutions, insufficient financial backing from public institutions, and the burden of elevated financing costs.

The discernment of these multifaceted challenges serves as a compass for alleviating energy crises, implementing Industry 4.0 practices, nurturing economic growth, ensuring sustainability, and cultivating a resilient economy. By customizing strategies to the unique regional landscape, Pakistan stands poised to emerge as a vanguard in sustainable energy practices, pioneering advanced manufacturing capabilities, and cultivating robust mechanisms for resilience. This paradigm shifts safeguards enterprises from the tumult of energy crises, positioning them for steadfast growth and enhanced adaptability.

Keywords: Industry 4.0, Renewable Energy, Resilience, Sustainability

Global Supply Chain Recovery: Challenges And Solutions

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Abstract-A very discontenting situation started with the COVID-19 pandemic and became inextricable with the Ukraine War in the global economy and production due to the interruptions in the supply chains. In addition to the rapidly increasing inflation due to the limited supply that could meet the rapidly increasing demand after the pandemic, the sharp increases in energy prices due to the Ukraine War have devastating effects on sustainable, cheap, and convenient production. Disruptions in the supply chain exaspered the material transfers and shipping which caused extra burden on global production. Protectionist policies of the governments and increasing labor costs are also caused global supply chain disruptions. In this study, supply chain problems will be analyzed for the pandemic and post-pandemic period. Besides, alternative policy suggestions for the safe and sustainable operation of the supply chain will be put forward.

Keywords: Supply chain, COVID-19 pandemic, the Ukraine War

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Global Food Insecurity: Problems And Policy Recommendations

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*Abstract-*The problem of food scarcity, which has been accepted as a problem of poor African countries for many years, has become a much more complex global problem for both developed and developing countries with the COVID-19 pandemic restrictions. During the pandemic period, the disruption of the global supply chain, and the interruptions in goods transportation, seriously impacted the global food supply. The Ukraine War, which started right after the pandemic restrictions were alleviated, was also an important event that threatened global food supply security. The fact is that Ukraine and Russia were the two countries that provided a significant portion of the global grain supply. In this study, the problems and obstacles for food supply security that has been experienced since the pandemic period will be discussed in detail. Various policy recommendations will also be put forth in the study.

Keywords: Ukraine, Russia, COVID-19 Pandemic, Food Supply Security

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The Impact of Borrowin Costs on Lending in North Macedonia

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Abstract - Banks and other financial institutions play a significant role in the economy of a country. In the past, loans and banking processes were considered taboo topics for some people, but nowadays they have become more familiar and widely used by individuals and companies. This has led to an increase in the number of loans and borrowers. In this research, we are going to focus on explaining why interest rates are decreasing despite the increasing demand for loans in the Macedonian market. Through the use of data from financial institutions, the study aims to identify the main factors that determine the cost of borrowing and the level of loans, taking into consideration the role of the National Bank and financial market regulations.

After the 2008/2009 crisis, both banks and companies faced economic difficulties, banks experiencing a decrease in profit and worsening portfolio while companies and individuals struggled with liquidity and unemployment.

The goal is to determine the main factors that led to the drop-in interest rates under crisis conditions and whether competition between banks hastened the reduction. Another goal is to identify the reasons for the increase in the supply of loans, such as credit lines from foreign institutions offered as financial assistance to overcome liquidity problems and recover entities or low financing costs. Ultimately, the analysis seeks to understand the effects of these factors on the Macedonian economy.

Key words: financial institutions, interest rates, cost of borrowing, loans

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Impacts of Ukraine War on Air Transport and Tourism Industry

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Abstract-The Covid-19 pandemic, which started in the first quarter of 2020, disrupted the performance of global economic growth. The long-term quarantine measures to control the virus caused severe damage to the global economy and many sub-sectors. The global economy, which started with the waning effects of the pandemic and resolved with normalization, was shaken again, this time by the Ukrainian crisis in February 2022. In both cases, the air transportation and tourism sectors are among the sectors that are most affected. In this study, the difficult conditions and economic losses of the transportation and tourism sectors will be explained with various data. The study also provides alternative policy suggestions to alleviate the negative effects of the Ukraine War on the two sectors.

Keywords: Ukraine War, Covid-19 pandemic, transport sector, tourism sector

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The Impact of the COVID-19 Pandemic on Families: Student's Experiences in North Macedonia

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Abstract – This study reflects the difficulties and concerns of the families of South East European University (SEEU) students during the period of health crisis, respectively COVID-19.

For conducting the analyses we used the quantitative approach, respectively the collection of data through an online questionnaire, where we received a total of 291 responses from the families of students of the South East European University. The questionnaire in question, focused on data collection according to five features, such as: 1) cases faced with infection by COVID-19; 2) personal difficulties of the head of the family (financial, supply of various products, limited mobility, health disorders, conflicts and other family worries); 3) the difficulties of the head of the family in the parent-child situation; 4) the concerns of the head of the household who had an elderly parent; and 5) gratitude for some aspects of life versus experience during the COVID - 19 health crisis.

The results showed that families who had lost family members to COVID-19 had experienced greater difficulties and worries during this time - difficulties that made them feel grateful for some aspects of life, versus those that the health crisis did not touch directly.

Keywords – COVID-19 Pandemic, Family Relationships, Parenting, Social Contacts

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