INTERNATIONAL RESEARCH & DEVELOPMENT STUDIES AND INNOVATINON CONGRESS-II
April 17-18, 2025 / Tunceli-TÜRKİYE
(Munzur Universtiy)
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BSEC ÜLKELERİNDEKİ ENFLASYON, EKONOMİK BÜYÜME, SÜRDÜRÜLEBİLİRLİK VE TİCARETİN, ÇEVRESEL TEKNOLOJİ İNOVASYONLARI ÜZERİNDEKİ ETKİSİ

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ÖZET
Çevresel teknoloji inovasyonlarının, ekonomik ve ekolojik açıdan sürdürülebilirliği desteklediği hususu birçok çalışmada yer almaktadır. Ancak, burada tersi yönde de bir etkileme olduğunu belirten çalışmalara ise alakalı literatürde pek rastlanılmamaktadır. Söz edilen araştırma boşluğundan hareketle bu çalışmada; sürdürülebilirlik, ticaret, ekonomik büyüme ve enflasyonun, çevresel teknoloji inovasyonları üzerindeki etkileri araştırılmıştır. Araştırmanın örneklemi olarak Karadeniz Ekonomik İşbirliği (BSEC)'ne üye olan ülkeler seçilmiştir. 1990 ile 2022 yılları arasını kapsayan bir zaman periyodu için 13 adet üye ülkenin, Yıllık Enflasyon Oranı (INF), Kişi Başına Düşen Gayri Safi Yurtiçi Hasıla (GDPPR), Ticaretin Gayri Safi Yurtiçi Hasıla İçerisindeki Payı (TRSGDP), Kişi Başına Düşen Karbondioksit Emisyonu Miktarı (CO2PC) ve Çevresel Teknolojilerle İlgili Patent Sayısı (PRET) verilerine erişilmiştir. Bu veriler, detaylı bir yazın taramasından elde edilen bilgiler doğrultusunda oluşturulan bir ekonometrik model üzerinden panel veri analizi yöntemleriyle incelenmiştir. Araştırma değişkenlerinin zaman serileri; tanımlayıcı istatistikler, korelasyon, heterojenlik, yatay kesit bağımlılığı, birim kök, regresyon, eşbütünleşme ve nedensellik testleriyle değerlendirilmiştir. Regresyon analizi sonuçlarına göre GDPPR ve TRSGDP'nin PRET üzerinde olumlu etkilerinin olduğu belirlenmiştir. Ancak INF'nin PRET üzerinde negatif yönde bir etkisinin olduğu tespit edilmiştir. Öte yandan CO2PC'nin PRET üzerinde herhangi bir anlamlı etkisinin olmadığı görülmüştür. Gerçekleştirilen nedensellik analizi sonuçları incelendiğinde; uzun ve kısa dönemde GDPPR ile PRET arasında çift yönlü nedensellik ilişkisinin olduğu anlaşılmıştır. Bununla beraber uzun dönemde, PRET'ten CO2PC'ye ve TRSGDP'den PRET'e tek yönlü nedensellik ilişkilerinin bulunduğu saptanmıştır.
Anahtar Kelimeler: Çevresel Teknoloji İnovasyonları, Karbondioksit Emisyonları, Ekonomik Büyüme, Enflasyon, Ticaret.

THE IMPACT OF INFLATION, ECONOMIC GROWTH, SUSTAINABILITY AND TRADE ON ENVIRONMENTAL TECHNOLOGY INNOVATIONS IN BSEC COUNTRIES

ABSTRACT
The fact that environmental technology innovations support sustainability in economic and ecological terms is included in many studies. However, studies indicating that there is an effect in the opposite direction are rarely encountered in the relevant literature. Based on the aforementioned research gap, this study investigates the effects of sustainability, trade, economic growth and inflation on environmental technology innovations. The countries that are members of the Black Sea Economic Cooperation (BSEC) were selected as the sample of the research.

Annual Inflation Rate (INF), Gross Domestic Product per Capita (GDPPR), Trade Share in Gross Domestic Product (TRSGDP), Carbon Dioxide Emission Per Capita (CO2PC) and Number of Patents Related to Environmental Technologies (PRET) data of 13 member countries were accessed for a time period between 1990 and 2022. These data were examined with panel data analysis methods through an econometric model created in line with the information obtained from a detailed literature review. The time series of the research variables were evaluated with descriptive statistics, correlation, heterogeneity, cross-section dependence, unit root, regression, cointegration and causality tests. According to the regression analysis results, it was determined that GDPPR and TRSGDP had positive effects on PRET. However, it was determined that INF had a negative effect on PRET. On the other hand, it was seen that CO2PC did not have any significant effect on PRET. When the causality analysis results were examined, it was understood that there was a bidirectional causality relationship between GDPPR and PRET in the long and short term. However, in the long term, it was determined that there were unidirectional causality relationships from PRET to CO2PC and from TRSGDP to PRET.

Keywords: Environmental Technology Innovations, Carbon Dioxide Emissions, Economic Growth, Inflation, Trade.

Face to Face PRESENTATIONS

Session-2 / Hall-5

Address: Munzur University
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17.04.2025 / 14:30-16:30 (Ankara Local Time)

HEAD OF SESSION: Mustafa Göktuğ KAYA

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İlkay SALTIK GÜR	Munzur University	THE REBIRTH OF SCHUMPETER'S THEORY OF CREATIVE DESTRUCTION WITH INNOVATIVE ENTREPRENEURSHIP AND DIGITAL TRANSFORMATION
Oğuz Emre BALKAR	Erzincan Binali Yıldırım University	THE IMPACT OF INFLATION, ECONOMIC GROWTH, SUSTAINABILITY AND TRADE ON ENVIRONMENTAL TECHNOLOGY INNOVATIONS IN BSEC COUNTRIES
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