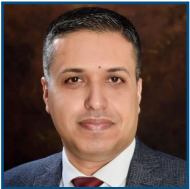


Understanding the Nexus Between Oil Price Volatility and Trade Balance in GCC Countries: A Comparative Investigation of Linear and Nonlinear ARDL Models



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The GCC countries, being rich in oil deposits, have always experienced volatility in the price of oil, and the consequences are predominantly in the form of the trade balance proportions. This research work attempts to unravel the complex interplay of oil price volatility and trade balance in GCC countries through the use of comparative analysis of Linear Autoregressive Distributed Lag (ARDL) and Nonlinear ARDL models.

This research uses annual time-series data covering the period 1989-2021, which includes the major GCC economies of Saudi Arabia, the United Arab Emirates, Qatar, Kuwait, Bahrain and Oman. First the research investigates the linear relationship between the volatility of oil price and trade balance that captures the traditional view of fluctuations in oil prices as a factor affecting trade balances in these countries. Then it presents an innovative method extending linear dynamics of ARDL model to complex, non-monotonic, interdependent relationships between oil price volatility and trade balance.

The main results derived from both linear and non-linear ARDL estimations are presented side by side to pinpoint the underlying different mechanisms by which oil price volatility affects trade balances in GCC countries. The implementation of nonlinear dynamics will help realize the existence of components and consequences which might not be shown in the standard linear models. This comparative study not only brings the issue of the interrelatedness of oil prices and trade balances deeper into light, but also sets the tone for the application of advanced econometric techniques to account for nonlinearity and asymmetry in such relationships.

Biography:

Ghazi Al-Assaf received his PhD degree in Economics from Swansea University, UK. He is currently Associate Professor of Defence Economics and Associate Dean for Scientific Research Affairs at Joaan Bin Jassim Academy for Defence Studies, Qatar. Before he joined Joan Bin Jassim Academy in 2021, He was working as Associate Professor of Economics at Business Economics Department/ The University of Jordan. He was also working a Directing Staff at the Royal Jordanian National Defence College. His teaching and research interests focus on Macroeconomics, Applied Econometrics and Economics of Defence.