STATISTICAL INVESTIGATION OF THE IMPACT OF GLOBAL OIL POLITICS: AN INTERRUPTED TIME SERIES APPROACH

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Abstract

A time series model for the monthly crude oil price based on Box-Tiao technique is proposed in this study. The dataset for this study spanned from January 1998 to December 2021 and the intervention being the Declaration of Cooperation by the Organization of Petroleum Exporting Countries was introduced in December 2016. The results revealed that the Declaration of Cooperation has a significant, abrupt impact on the crude oil price after its introduction. Thus, the intervention was associated with a 33.72% increment in crude oil price.

Keywords and phrases: crude oil politics, time series analysis, event study. Received October 26, 2023

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