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Measuring Oil Price Uncertainty Index Based on Internet Searches for Iran, and the Impact of Its Shocks on Exchange Rates

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Abstract

Research indicates that oil prices and the uncertainties they generate play a significant role in shaping the business cycles of both the global and Iranian economies. However, what has been measured as uncertainty in these studies remains ambiguous. Recent efforts have sought to clarify this ambiguity and differentiate between uncertainty and risk, proposing various methods to measure uncertainty. This study introduces a new indicator of oil price uncertainty based on Google search engine data (GT-OPUX), which appears to closely align with the core concept of uncertainty. The proposed index does not require oil prices to be calculated and offers advantages such as being available online. Additionally, by examining and comparing its pros and cons, this research uses the Vector Autoregression (VAR) model to assess the effects of its shocks on the exchange rate. The findings from the 2007-2020 period show that shocks to the oil price uncertainty index have no significant effect on the real exchange rate in Iran.

Keywords: Uncertainty; Oil Price Uncertainty; Uncertainty Measurement; Search Volume Index (SVI); Oil price.

JEL Classification: F31, D80, D83, Q43.

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