

## Comovement of exchange rate and price indicators in Iran: An Application of Economic Physics in the Study of Mutual Relationships

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### Abstract

The purpose of this study is to investigate the relationship between price indicators and exchange rate in Iran with the approach of Wavelet coherence analysis in the period of April 2002 to December 2017. The results show that the relationship between the consumer price index and exchange rate in the mentioned period and at the one-year time scale has been homogeneous. And the intensity correlation between these variables for a short time scale, below two years, is very important. The interaction intensity between the exchange rate and the consumer price index increases when the exchange rate and inflation uncertainties have increased, and we are witnessing the formation of inflationary peaks in the inflation rate of the consumer price index. In addition, examining the relationship suggests a strong and positive relationship between the exchange rate and the producer price index during uncertain periods.

**Keywords:** consumer price index; exchange rate; producer price index; wavelet analysis.

**JEL Classification:** E31, C63, C14.

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