Oil Price Uncertainty and Unemployment

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Abstract:

In this study, we empirically search the effects of oil price uncertainty and oil price shocks on U.S. unemployment rate using a GARCH-in-mean VAR model for the period 1974:q2-2017:q4. Based on our findings, we show that oil price uncertainty significantly increases unemployment rate in the U.S. economy. Likewise, our impulse-response analysis affirms that a positive oil price shock increases unemployment while the response of unemployment to a negative oil price shock is negative. Moreover, we reveal that unemployment rate reacts to positive and negative shocks asymmetrically. More specifically, the response of unemployment to negative oil price shocks is negative and slighter in size. Besides, oil price uncertainty is found to magnify the rise in the U.S. unemployment rate. These findings are in keeping with the real options theory which reveals that the uncertainty about goods' prices leads firms to postpone or abandon their production and investment and they seem to be robust to the use of different real oil price measures.

Keywords: Unemployment, Oil Price Volatility, Bivariate GARCH-in-Mean VAR

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