ABSTRACT

This study analyzes the effect of crude oil prices fluctuations using the model approach of Fukunaga et al (2009) where crude oil prices fluctuations are influenced by several components such as oil supply shocks, global demand shocks, and oil-specific demand shocks. Then analyze the effect each of these components on the aggregate industry production index, food, beverage and tobacco industry production index, chemical and goods from chemical raw materials, petroleum, rubber and plastic industry production index, metal, non machinery and equipment production index.

The data used in this study are global crude oil production, global manufacturing industry production index, WTI crude oil prices, aggregate industry production index, food, beverage and tobacco industry production index chemical and goods from chemical raw materials, petroleum, rubber and plastic industry production index, metal, non machinery and equipment production index from January 1994 to December 2019. Research method is VAR in difference and the analysis methods are Granger causality test, Impulse Response Function (IRF), and Forecast Error Variance Decomposition (FEVD).

Global demand shocks and oil-specific demand shocks have a significant and positive effect on crude oil prices, while oil supply shocks have no significant effect. Oil-specific demand shocks have a significant effect on aggregate industry production index variables, while oil supply shocks and global demand shocks have no significant effect. The decomposition variables of oil price fluctuations, namely oil supply shocks, global demand shocks, oil-specific demand shocks, have no significant effect on food, beverage and tobacco industry production index chemical and goods from chemical raw materials, petroleum, rubber and plastic industry production index, metal, non machinery and equipment production index of metal, non machinery and equipment

Keywords: oil supply shocks, global demand shocks, oil-specific demand shocks, manufacturing industry, VAR in difference.