

**Oil Prices, Stock Markets and Economic Growth of the United States:
Empirical Evidence based on Dynamic Statistical Models**

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Abstract

The crude oil prices have fallen over the past several years. The global economic growth and a weak US dollar are argued to boost profits of the major U.S. transnational companies resulting in higher economic growth and record high of the U.S stock indexes since 2010. Global growth was projected to reach 3.9 percent in 2018 and 2019 by World Economic Outlook and by International Monetary Fund . However, the U.S. administration current nuclear deal with Iran and its new policies with Saudi Arabia have caused serious concern about the future oil prices with having impact on future economic growth. The high performance of the U.S. stock markets with lowest unemployment and inflation over past several years led many analysts to further examine the relationship between the oil prices, stock market, and the economic growth. This paper thus investigates the long-run relationship among oil prices, stock market, and the economic growth of the U.S. using the quarterly data from 2010Q1 to 2019Q2. The GDP growth rate and the oil prices are collected from the Bureau of Economic Analysis and the World Bank World Economic Indicators. The data of the U.S. market index S&P 500 is collected from the Bloomberg Financial Database.

The statistical models are estimated applying the most recent version of Econometric software (EViews 11). In addition to descriptive statistics, the estimated models include Johansen Cointegration technique to test the long-run (equilibrium) relationship among oil prices, stock market, and economic growth; and pair wise Granger causality test to examine any unidirectional or bidirectional causality between macroeconomic variables. Johansen Cointegration test results indicate that there is a long-run relationship among these three variables. However, the Ganger causality test fails to detect any causality between the oil prices and economic growth, between oil prices and stock market or between economic growth and the stock market.