

ABSTRACT

We investigate the nature of the returns of Brent crude oil and the stock returns of socially responsible stock index. In order for the purpose of the study, we use the Dow Jones Sustainability Europe Index, this is employed in the proposed model. This helps to detect the Europe's leading companies which incorporate initiatives (business initiative) that are consistent to sustainable development. This paper incorporates MS-GARCH (Markov-Switching Generalized Autoregressive conditional Heteroskedasticity) model which is studied for a period from **January, 2013 to December 2022 using daily data**. The empirical results reveal that Brent crude oil and the DJSEI shows similar market conditions in their nature, and also this can be investigated through the MS-GARCH model. There are various other variables that could have similar markets conditions to DJSEI, but for our study we try to see the relationship and market conditions of Brent crude oil and the DJSEI only.

Keywords: Sustainability Index, Crude Oil, Investors, risk, volatility