UNIVERSITI TEKNOLOGI MARA

SHOCK AND VOLATILITY TRANSMISSION BETWEEN OIL PRICES AND STOCK RETURNS: CASE OF OIL-IMPORTING AND OIL-EXPORTING COUNTRIES

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ABSTRACT

This study employs BEKK-GARCH and VAR-GARCH models to examine shock and volatility transmission between oil prices and stock return in oil-importing and oil-exporting countries, include the United States, China, Saudi Arabia, Malaysia and the Brent oil market. The data series uses daily, weekly and monthly data basis from January 1, 2004 until December 31, 2014. Empirical results show that before structural breaks, there are both consistent and also contradictory results based on daily, weekly and monthly basis for each stock market index using both models. Similarly, there are inconsistent findings after structural breaks. The results show that there are unidirectional and also bidirectional shocks and volatility transmission occur between oil prices and stock returns. Moreover, the results imply that the shock and volatility transmission occurs more from the oil market to the stock market rather than from the stock market to oil market. Our findings suggest that for most cases before and after structural breaks, VAR-GARCH is superior to BEKK-GARCH to compute the optimal portfolio weight and hedge ratio, which it is supports Arouri et al. (2011) study. The results also suggest that the investors should hold more stock assets than oil assets in their portfolios. Thus, this study provides a better understanding of risk management portfolio towards the movement of the oil price, particularly for those financial market players who pursue investment opportunities.

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