CONTAGIOUS EFFECTS OF OIL PRICES ON ASIAN STOCK MARKETS’ BEHAVIOUR

Jok-Tong Wan
Faculty of Economics and Business, Universiti Malaysia Sarawak (UNIMAS)
(joktong@gmail.com)

Evan Lau
Faculty of Economics and Business, Universiti Malaysia Sarawak (UNIMAS)
(lphevan@unimas.my)

Rayenda Khresna Brahmana
Faculty of Economics and Business, Universiti Malaysia Sarawak (UNIMAS)
(raye_brahm@yahoo.com)

ABSTRACT

The main objective of this study is to examine the stock markets’ shock due to the effect of the price of oil in the East Asia Region. Particularly, this study examines if there is stock market interdependence during global oil price shocks (sudden changes) for a sample of five total oil importers (the Philippines, Hong Kong SAR, Taiwan, South Korea, and Japan), four net oil importers (Indonesia, Singapore, Thailand, and China), and one net oil exporter (Malaysia) between 1999 and 2014. From the result, an oil price change is collectively found to have a small but significant positive impact on the stock markets, in particular where a sudden decrease in oil prices tends to cause a stock market downturn and volatility. The world economy’s spending, financial investments in oil futures and foreign investment by oil rich nations are some underlying motives for inducing this oil-stock positive relation. The same direction of time-varying conditional correlations is found across East Asian stock markets during negative oil price shocks. The integration among East Asian stock markets is inducing the oil shock contagion to be transmitted from direct oil-affected countries (South Korea, Hong Kong, and Singapore) to non-direct oil affected countries’ (Japan and Taiwan) stock markets. In spite of a long practiced ASEAN+3 macroeconomics surveillance process and Early Warning System (EWS) which can be customized for stock markets to prevent or detect the oil risk, hedging against initial oil-affected stock markets and a stronger influence by the East Asian countries in the global world of oil and capital investment are strongly suggested.

Keywords: oil price; capital market integration; stock market behaviour

INTRODUCTION

During the late 2000s, global stock trading was exposed to a series of critical conditions, such as high commodity prices and the U.S. financial crisis. Worldwide stocks’ performance was closely paralleled with unusually sharp price increases and a subsequent strong reverse in globally traded raw commodities, including crude oil (see Figure 1). However, does this happen in a particular and noteworthy way, or is it just a coincidence and has been overstated?

From common sense and the conventional literature, oil price increases may drive stock markets into stress since expensive energy can cause higher costs for transportation and industrial production. Since the world’s benchmark price for oil and the aggregated world stock index are found to move closely with the same increasing and volatile trends in Figure 1, hence, there is an uprising about oil prices and stock markets which may have a positive relation, or are asymmetrically (or nonlinear; not strictly proportional) dependent, in spite of moving in a previously common but opposite fashion.