

Research Paper

Investigating the Effect of Currency Shock on Stock Returns in Middle East Stock Markets¹

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INTRODUCTION

The stock market stands as one of the most critical financial markets in the economies of numerous countries, serving as a vital tool for collecting and allocating savings to production activities. This function is crucial for the efficiency and growth of an economy. Financial analysts consistently endeavor to identify the most influential variables affecting stock market indices and performance to formulate appropriate economic policies through meticulous analysis. Beyond merely understanding the direct impact of variables, financial analysts also delve into the shocks caused by these variables on the stock markets and how these markets respond to such shocks. In economic literature, any deviation of variable values from the long-term trend of their expected values is termed a "shock." Given the sensitivity of stock markets to shocks, especially those from variables parallel and competing with the stock market (such as currency, gold, housing, and banks), the analysis of the effects of shocks from these markets on the stock market becomes a focal point for financial analysts. The challenge in this context lies in the variability of how stock markets respond to the mentioned shocks. The impact of these shocks can be either positive or negative. For instance, while Pen et al. (2003) reported a positive response of emerging stock markets in

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ASEAN countries to currency shocks, Huang et al. (2021) observed a negative response in BRICS markets. Consequently, past studies on how stock markets react to these shocks present contradictions. This study specifically focuses on the stock markets of Middle Eastern countries. The rationale for selecting these markets is rooted in the fact that the economies of countries in this region heavily rely on oil revenues. Most previous studies have primarily investigated the impact of oil shocks on the stock markets of developed countries. Therefore, this study aims to explore how the stock markets of selected developing countries respond to variables such as gold and foreign exchange.

MATERIAL AND METHODS

To analyze the response of the return index in the stock markets of selected Middle Eastern countries, including Iran, Kuwait, UAE, Saudi Arabia, Turkey, Qatar, and Oman, to incoming shocks, the Panel Vector Autoregression model (PVAR) is employed for the period 2010-2021. The proposed model for the present study is as follows:

$$Ret_{it} = \hat{\alpha} + \hat{B}_1(Ex_{it}) + \hat{B}_2(Gold_{it}) + \varepsilon_{it}$$

In which, Ret is stock market return index in selected countries, Ex represents Exchange rate and Gold stands for the world gold price.

RESULTS AND DISCUTION

Following figure shows the outcome of impulse response function (IRF) and response of the index of return in the selected stock markets to the shocks of exchange rate.



A sudden change in the exchange rate in the first period causes an increase in the return of the stock market, and after a period, it starts to decrease and returns to the initial equilibrium. Then the response given to the effect of currency shock will be eliminated after two or three periods. This result shows that the impact of exchange rate shocks on stock market returns is positive in the short term, but in the long term, the

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impact of this shock decreases over time and tends to zero. Because in the long run, the stock price of any company is a function of the actual performance of the company, as a result, investors make a more rational decision to buy stocks. The response of the selected stock market returns to gold price shocks is depicted in the following figure.



The gold price shock, increases the stock return index in the first period. Then it decreases and returns to the previous balance. Such shock caused that the microliquidities enter to stock market due to the decrease in purchasing power in the parallel markets, such as gold market. In fact, people turn to the stock market to maintain their purchasing power, and considering amount of liquidity (from large number of people in the stock market) circulates, and as a result, the stock return index increases. Bearing in mind that the gold market is considered as a parallel market and alternative option for investors to invest rather than the stock market, investing on gold compared to other capital markets, investing on gold has always welcomed by investors for hedging against the inflation. Therefore, as the price of gold increases, the desire of investors to invest in the stock market decreases.

CONCLUSION

The estimation of the model reveals that the response of the stock market return to the exchange rate shock is initially positive, causing an increase in the stock market return in the first period. However, this positive response gradually diminishes, returning towards the initial equilibrium. Eventually, the response to the exchange rate shock is eliminated after two to three periods. Similarly, the response of stock market returns to the gold price shock is positive. In the first period, the stock return index increases, then experiences a decrease, ultimately returning to the previous equilibrium. Understanding how the stock markets of selected countries respond to exchange rate and gold price shocks can enhance the investment efficiency of international investors in the short term, leading to increased profitability. Given that monthly data was utilized in this study, the results of impulse response functions suggest that when these shocks occur, both from the exchange rate and gold price, the stock market return ascends

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during the first month. Investors with a long-term perspective recognize that the effect of these shocks is short-term, and after a month, the market returns to its initial balance without crossing the initial support line. Armed with this knowledge, investors can derive greater benefits from their investments.

Keywords: Stock Markets, Exchange Rate Shocks, Gold Price Shocks, PVAR Model.

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