Chapter 11
The Relationship Between Stock Prices and Exchange Rates: Evidence From MENA Countries

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ABSTRACT
The relationship and causality between stock prices and exchange rates has preoccupied the minds of economists, investors and policy makers for a long time. However, the relationship or the direction of causality between these two variables still remains unresolved in both theory and empirics. This study examines panel Granger causality relationship between stock price and exchange rate for selected six MENA countries (Bahrain, Lebanon, Morocco, Pakistan, Qatar, and Saudi Arabia) over the period of 2005:01 and 2013:12. Panel DOLS and FMOLS methods are used to estimate long-run coefficients. On the other hand, panel based error-correction model is used to perform causality analysis. The findings of FMOLS and DOLS methods indicate that the appreciation of local currency in Bahrain, Lebanon, Morocco, Pakistan and Qatar leads to a reduction in stock prices. Contrary, in Saudi Arabia, the appreciation of local currency increases stock prices. Panel Granger causality analysis shows that there is a unidirectional causality from exchange rate to stock prices in MENA countries.

INTRODUCTION
Over the past few decades, the effects of macroeconomic variables on stock returns and investment decisions have become one of the important subjects discussed in economic literature. Many macroeconomic variables such as interest rate, inflation, exchange rate, money supply, GDP, investment and expenditures consumption etc. have been examined to estimate the stock returns. Policy makes can use these information and macroeconomic variables to stimulate the real economy, especially during the crisis. For example, central banks sometimes reduce the interest rate to trigger the economy. However,
the relationship and the direction of causality between stock prices and macroeconomic variables still give conflicting results in empirical studies (Aydemir et al., 2009; Aydemir & Demirhan, 2009).

Changes in international financial system via the abolishment of capital flow barriers, adoption of flexible exchange rates regime, increasing global economic integration and diversification of international portfolios have increased the dependency of financial markets. Therefore, understanding the relationships between stock prices and exchange rates became more important for investors and policy makers (Ndako, 2013: 47).

Exchange rate is affected from the economic conditions of the country. Also, changes in exchange rate affect the country’s economy. It is expected to have positive effect of devaluation of domestic currency on economic activity of a country via increasing export. Also, devaluation of currency causes expansionary monetary policy and thereby has positive effect on economic activity and stock prices (Tabassum & Gulzar, 2015, Chortareas et al., 2012: 120).

Whenever the demand of local currency increases, the value of the currency will rise and vice versa. On the other hand, if the supply of local currency is higher than the demand of it, the value of the local currency will decrease. There are several factors increasing or decreasing the demand of local currency such as stock prices in the country. Therefore, understanding these factors and thereby predicting future exchange rate are so important to give proper investment decision or policy implications (Tabassum & Gulzar, 2015).

The performance of stock market and fluctuation in exchange rate affect foreign capital inflow and outflow. Therefore, they both play important roles in a country’s economic development. The return of foreign investors from stock market depends on not only the performance of the assets they invest but also changes in exchange rates. When the value of currency that the investment is made in increases, investors will earn more from this investment (Tudor & Popescu-Dutaa, 2012: 276). In other words, the continuing increases in the world trade and capital movements have made the exchange rates as one of the main determinants of business profitability and changes in stock prices (Kim, 2003).

On the other hand, if export-oriented firm has a lot of accounting receivables in foreign currency from its exports or foreign currency assets accompanying with investing abroad, depreciation of domestic currency may also have positive impact on its share price since its foreign currency assets and investments become more valuable. However, depreciation of domestic currency will increase foreign currency debts of firms in local currency and consequently may affect the stock prices negatively (Mir & Jalaee, 2014: 144).

Shifts in exchange rates can affect not only the stock prices of multinational and export/import oriented firms but also stock prices of firms operating only in local market. For a multinational company, changes in exchange rates will result in both an immediate change in value of its foreign operations and a continuing change in the profitability of its foreign operations reflected in successive income statements. Therefore, the changes in the economic value of firm’s foreign operations may influence its stock prices (Aggarwal, 1981). Domestic firms can also be influenced by changes in exchange rates since their raw materials used in production may be imported and these changes will affect their production cost. In other words, a devaluation of local currency causes imported inputs more expensive and decreases the profit. Contrary, devaluation of local currency will make domestic goods cheaper in terms of goods imported. Therefore, domestic firms may have competitive advantage and increase their sales. That is, devaluation may boost stock prices.

In order to explain the relationship between stock prices and exchange rates, there are two theories. These are traditional approach and portfolio balance approach. According to traditional approach, shifts