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Are the regional Gulf stock markets weak-form efficient as single stock markets and as a regional stock market?

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ABSTRACT

The purpose of this article is to examine the efficiency of the Gulf Cooperation Council (GCC) stock markets of Saudi Arabia, the United Arab Emirates, Kuwait, Oman, Qatar, and Bahrain. We attempt to answer whether GCC stock markets are weak-form efficient individually or as a group by applying a battery of parametric, nonparametric, unit root, and Johansen cointegration tests to daily index prices denominated in local currencies covering the period December 2003 to January 2013. The findings of our study show that GCC stock markets are not individually weak-form efficient. That is to say, current prices of each GCC stock markets can be predicted from past price changes in that market. The study also finds that collectively, GCC stock markets are not weak-form efficient, as the movements of past prices of one GCC market can be used to predict the current price movement of another GCC stock market. This inefficiency could be due to the weak degree of foreign participation and the high concentration in the banking and financial sectors. Finally, the study suggests a number of policy implications for academics, policy makers and investors, and directions for future research.

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1. Introduction

Over the last few decades, the economies of developing markets have experienced progressive growth, where the business environment has shown many signs of enhancement, resulting in the listing of new, productive and profitable companies. As a result, the investing in these emerging stock markets has attracted a significant amount of offshore, regional, and local migrant investment capital to consider emerging stock markets as new, lucrative and diversifiable alternative investment channels. However, this rising interest in investment opportunities in developing equity markets, including in the GCC[1] stock markets, has raised questions in relation to the efficiency of these stock markets. An empirical investigation of the efficiency of a stock market begins with identifying the economic environment where this market operates. The identification of this economic environment assists in understanding how a characteristic of a particular economy or equity market may impact on its market efficiency. The concept of market efficiency becomes very important when it begins to influence the economic growth of an economy or investment decisions of investors. From an economic viewpoint, lack of market efficiency of a stock market may influence economic growth through affecting factors such as flow of investment capital, cost of capital, and market returns. As an example, the weak-form of stock market efficiency implies that prices paid for stocks should reflect past prices, and accordingly reflect the underlying value of stocks. This results in efficient investment decisions and optimal allocation of financial resources, hence leading to more productive economic activities and investment choices. Efficiency of stock markets also works as a protective mechanism that prevents stock markets from distortions and arbitrage opportunities resulting from the presence of asymmetric information among market participants (Jensen, 1978). From an investment viewpoint, the presence of asymmetric information among market participants can allow informed investors to strategically utilise fundamental information of particular asset groups in a stock market to identify mispriced assets, leading to enhancing their risk-adjusted returns (Fama, 1970). Thus, the concept of market efficiency may be seen as both a tool to measure the degree of a country's economic development and as a forecasting tool to make excessive returns by utilising stocks' historical information to identify underpriced stocks.

Previous empirical studies concerned with investigating the efficiency of emerging equity markets showed that stock markets in the developing markets are to a significant extent weak-form efficient (Harvey, 1995; Kim and Shamsuddin, 2008). Up to the present time, research concerned with the examination of the efficiency of the GCC stock markets has been limited, produced fragmented results, and only examined the efficiency of GCC stock market from a single market perspective (Ariss et al., 2011; Elango and Hussein, 2008). For this reason, we aim to examine the efficiency of the GCC stock markets, and whether these markets are weak-form efficient either as single markets or as a regional market. Thus, the research question that we attempt to answer is, are GCC stock markets weak-form efficient as single stock markets and as a regional stock market?

This study is organised as follows. Section 2 discusses a number of important economic and stock market characteristics for GCC markets and their implications on the efficiency of these markets; in other words, it shows how these characteristics make GCC equity markets an attractive regional environment to examine the efficiency of emerging stock markets. Section 3 briefly reviews the empirical literature. Section 4 presents the methodologies applied, and the data that is used is described in Section 5. Empirical findings are presented in Section 6, followed by discussion of the results in Section 7. A number of policy implications are discussed in Section 8, and the conclusion is made in Section 9.

2. GCC economies and equity markets: brief review

We have chosen Gulf stock markets as an attractive laboratory to examine the efficiency of regional emerging equity markets because these markets share common and distinct economic and stock market features that influence their efficiency. GCC state members share similar economic, geographical,

[1] Gulf Corporation Council (GCC), namely Saudi Arabia, the United Arab Emirates (UAE), Kuwait, Oman, Qatar, and Bahrain.