Journal of Economics, Finance and Administrative Science 20 (2015) 105–117

JOURNAL OF ECONOMICS, FINANCE AND ADMINISTRATIVE SCIENCE

www.elsevier.es/jefas

Article

Malaysian finance sector weak-form efficiency: Heterogeneity, structural breaks, and cross-sectional dependence

Sook Ching Kok, Qaiser Munir*

Faculty of Business, Economics and Accountancy, Universiti Malaysia Sabah, Malaysia

ARTICLE INFO

Article history:
Received 23 March 2015
Accepted 13 October 2015

JEL classification:
G14
G15

Keywords:
Market efficiency
Financial firms
Banks
Heterogeneity
Panel data
Structural breaks
Cross-sectional dependence

ABSTRACT

This study examines the weak-form efficient market hypothesis (EMH) for the Finance Sector in Malaysian Stock Exchange, by exploring and scrutinizing the firm-level efficiency over for the period from 1st January 1997 to 31st December 2014. For this purpose, we apply panel nonlinear unit root test that accounts for heterogeneity, and panel stationarity test to allow for the presence of structural breaks and cross-sectional dependence (CSD). The main findings of this study suggest the following: first, there is a strong CSD among the price series of finance stocks; second, unlike the traditional panel unit root tests that provide mixed-results, the panel stationarity test which incorporates structural breaks and CSD suggests that these series are characterized as random walk processes implying the Finance Sector is weak-form efficient. The finding of weak-form efficiency has salient implications in terms of capital allocation, stock price predictability, forecasting technique, and the impact of shocks to stock prices.

© 2015 Universidad ESAN. Published by Elsevier España, S.L.U. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

Forma débil de la eficiencia del sector financiero malayo: heterogeneidad, brechas estructurales y dependencia transversal

Códigos JEL:
G14
G15

Palabras clave:
Eficiencia del mercado
Entidades financieras
Bancos
Heterogeneidad
Datos del panel
Brechas estructurales
Dependencia transversal

RESUMEN

Este estudio examina la forma débil de la hipótesis de los mercados eficientes (EMH) para el sector financiero de la Bolsa de Malasia, explorando y examinando la eficiencia a nivel empresarial durante el período transcurrido entre el 1 de enero de 1997 y el 31 de diciembre de 2014. A tal fin, aplicamos un test de raíz unitaria no lineal del panel para justificar la heterogeneidad, y un test de estacionalidad del panel para permitir la presencia de brechas estructurales y de dependencia transversal (CSD). Los principales hallazgos de este estudio sugieren lo siguiente: en primer lugar, existe una sólida dependencia transversal entre las series de precios de los valores financieros; en segundo lugar, a diferencia de los test tradicionales de raíz unitaria que aportan resultados mixtos, el test de estacionalidad del panel, que incorpora brechas estructurales y dependencia transversal, refleja que dichas series están caracterizadas por procesos de recorrido aleatorio que implican la forma débil de la eficiencia del sector financiero. El hallazgo de la forma débil de la eficiencia contiene implicaciones destacadas en términos de distribución del capital, previsibilidad de los precios de los valores, técnica de previsiones e impacto de las perturbaciones sobre los precios de las acciones.

© 2015 Universidad ESAN. Publicado por Elsevier España, S.L.U. Este es un artículo Open Access bajo la licencia CC BY-NC-ND (http://creativecommons.org/licenses/by-nc-nd/4.0/).

* Corresponding author.
E-mail address: qaiser@ums.edu.my (Q. Munir).

http://dx.doi.org/10.1016/j.jefas.2015.10.002
2077-1886/© 2015 Universidad ESAN. Published by Elsevier España, S.L.U. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

1. Introduction

Investors generally believe that stock prices are predictable based on the information of past trading, which this motivates short horizon trading and speculation in the stock market. Technical analysis hints that stock price series will enrol in trends which tend to repeat in future (Dana & Cristina, 2013). The basic tenet of technical theories stipulates that historical stock price behaviour tends to recur in future, thus successive price changes are dependent and can predict future price movements (Fama, 1965). For example, the Dow Theory states that markets are likely to move in trends until reversals are exhibited, in which a primary trend can be either bear or bull market and a secondary trend displays short-term reversal(s) in the primary trend (Ray, 2012). As investors expect to earn excess profits by exploiting any observable trends in stock price series, they prefer to trade for short-term (days, weeks, or months) as well as to speculate rather than using a strategy of simply buy-and-hold.

Short-term investment and speculation in the stock market may cause tremendous adverse impacts on an economy. First, the smooth functioning of stock market in facilitating long-term investment can be disrupted. Levine (1996) has mentioned that, some analysts view the stock markets in developing countries as casinos which have little impact on economic growth. Second, short horizon trading may cause the amplification of market shocks. Cella (2013) found that during market turmoil either as a consequence of actual shocks or due to the fear of future shocks, short-horizon institutional investors have tendency to sell their stockholdings to a large extent, causing the amplification of market shocks. Third, a market which is largely occupied by investors with short investment horizon is likely to be exposed to higher risk of capital inflow reversal. Radelet and Sachs (1998) highlight that, some Asian countries including Malaysia suffered from foreign capital sudden withdrawals during the outbreak of Asian financial crisis in 1997-1998.

However, the prediction of stock prices based on past price information is refuted under the weak-form EMH. The hypothesis claims that stock prices already fully reflect the information contained in the history of past trading (Bodie, Kane, & Marcus, 2008). Consistent with the hypothesis, the theory of random walks affirms that stock price changes have no memory thus historical price data cannot predict the future price movements in any meaningful way (Fama, 1965). The random walk hypothesis (RWH) states that successive price changes are independent, and a random walk model is used to describe the stochastic system of security return generating process. The model is usually applied to examine the weak-form EMH.

To date, the weak-form EMH has remained vital to dictate the behaviour of stock prices. It has several salient implications. First, efficiency is essential in policy making as it enables an effective allocation of capital across different productive sectors in an economy. If market is efficient, stock prices give accurate signals to guide investor decision making. In that sense, efficiency helps to enhance stock market liquidity and in turn stimulates long-term investment and economic growth. Conversely, inefficiency causes higher information costs and fluctuations in stock prices (Hubbard, 2008). Second, if efficiency holds, the information of past trading is useless for predicting future stock price movements. Third, efficiency implies that stock prices fully reflect the information of past trading, thus technical analysis is not likely to be effective in stock price forecast. Fourth, if a stock price series can be characterized as a random walk process, shocks to stock prices are permanent. Following a shock, stock prices will reach a new equilibrium. Hence, future price movements cannot be predicted based on past price information (Narayan & Smyth, 2004; Munir, Kok, & Furouka, 2012). However, if a stock price series displays mean reversion, the impact of shocks to prices is transitory.

Distinct from the majority of past studies emphasizing on the aggregate stock markets, this present study aims to examine the weak-form EMH for the Finance Sector in Malaysian Stock Exchange by exploring and scrutinizing the efficiency of individual finance stocks. This study covers the period from 1st January 1997 until 31st December 2014. We notice that, there are a number of studies on the weak-form efficiency of Malaysian stock market. Some studies report that the market is efficient, for examples, Barnes (1986), Laurence (1986), Annuar and Shamsher (1993a; 1993b; 1994), Kok and Lee (1994), Kok and Goh (1995), Lim, Liew, and Wong (2005), and Munir and Mansur (2009). However, Lai, Balachandher, and Fauzias (2003) found that the Malaysian stock market is inefficient. Further, the findings of Lim (2008) and Cheong (2008) show the evidence of sectoral inefficiency in Malaysia. So far, very limited studies have examined the weak-form EMH using the sample of individual finance stocks. For instance, Lim, Tan, and Law (2007) examine the random walk property of the return series of four bank stocks namely, Hong Leong Bank, Malayan Banking, Public Bank, and Southern Bank, by employing the data until June 2004. Firm-level disaggregation is necessary to pinpoint the efficiency for individual finance stocks. The findings of Narayan, Narayan, Popp, and Ahmad (2015) show that only 15 percent from the total 34 banking firms listed on the New York Stock Exchange are weak-form efficient. This reflects financial firms are heterogeneous.

Finance stock weak-form efficiency in Malaysia is the focus in this study. The motivations for considering the finance stocks are as follows: Firstly, the efficiency of finance stocks in Malaysia has direct implication on the effectiveness of capital allocation across various domestic financial firms (i.e. financial holding companies, commercial banks, insurance companies, capital market intermediaries, and finance companies). This is concerned with economic growth, the core of the country's macroeconomic goal. There are two recent policies highlighting the importance of the domestic finance sector in fostering economic growth. Over the last ten-year period, the Financial Sector Masterplan 2001-2010 (FSMP) has successfully enhanced the capacity of the domestic finance sector and promoted greater stability in the financial system. Throughout this period, policy makers emphasized more on building institutional capacity and strengthening the financial system. After FSMP ends, the Financial Sector Blueprint 2011-2020 was introduced to transform Malaysia into a developed and high income country by the year 2020. In order to reach this target, the size of the financial system has to enlarge by eight to eleven percent per year (Central Bank of Malaysia, 2011). At this stage, the growth-stimulating role of the domestic finance sector is deemed important. As clearly outlined in the Financial Sector Blueprint 2011-2020, the domestic finance sector plays three key roles: the role as an enabler to facilitate the transition of Malaysia to become a high value-added and high-income country by the year 2020; the role as a driver to generate higher national income; and the role as a catalyst to foster a rapid growth in the new niche industries.

Secondly, the importance of finance stock efficiency is due to the critical concern that finance stocks are highly vulnerable as compared to other stocks. During the time of market turmoil, fluctuations in stock market may not show the true picture of vulnerable sectors. However, finance stocks are fragile particularly during financial and banking crises, and the impact of crisis shocks to stock prices can be widespread via potential contagion effect. For listed banks, default risk is systemic or non-diversifiable (Fiordelisi & Marqués-Ibañez, 2013). In addition, banks are more fragile than other firms because of inherent maturity mismatch on their balance sheets which exposes them to potential bank runs.[1]

[1] According to Cabral (2013), since some large banks in the U.S. obtained high profits through balance sheet expansion and growing default, liquidity, and term

Download English Version:

https://daneshyari.com/en/article/1025173

Download Persian Version:

https://daneshyari.com/article/1025173

Daneshyari.com