Technical Analysis and Stock Price Prediction? Evidence from Malaysian Stock Market

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ABSTRACT

This study aims to examine the ability of technical analysis in predicting the stock price and generating profits. Two of the technical analysis indicators, which are (i) Variable Moving Average (VMA) and (ii) Elliot Wave Principle incorporated (Fibonacci numbers) are utilized in this study. In addition, this study also examines the relationship between the signals emitted by VMA and the stock returns. This study uses daily data of 569 stocks listed in the main market of Bursa Malaysia from 2005 to 2012. The empirical findings indicate that the VMA are useful technical indicator in analysing the medium capitalization stocks. This result is further supported using the sub-sample and out-of-sample test. Moreover, the signals emitted via VMA rules are found to be significant influencing the stock returns. Furthermore, the results also show that the Elliot Wave Principle (Fibonacci numbers) is found to be significant influencing the stock price movements of large capitalization stocks. The results of this study have a significant implication towards investors and technical analysts.

Keywords: Elliot wave, Fibonacci sequences, Moving average, Technical analysis,

1. INTRODUCTION

Since the establishment of Dow Theory in 1900, technical analysis has gained interest among practitioners, researchers and academicians. Technical analysis is a common heading for a wide range of trading techniques or strategies (Brock, Lakonishok & LeBaron, 1992). Each of the technical trading rules under the roof of technical analysis follow the common philosophy that future stock prices can be predicted using past stock prices (McKenzie, 2007). Technical analysis was first introduced at the early 1700s. The legendary Japanese rice trader, Munehisa Homma was the first person who predicted the future price movement using the past prices in the Dojima Rice Exchange in Osaka (Nison, 2001, p.15). The trading techniques applied by Homma also evolved into the candlestick chart. The influential studies of Brock et al. (1992) and Bessembinder and Chan (1995) revealed that technical trading rules do have the ability to generate profit in stock market. However, if the price movements are forth putting profitably by way of technical analysis, it is against the Efficient Market Hypothesis (EMH) established by Fama (1970).

Even though it has been widely applied, the technical analysis remains a puzzle among the researchers. Zhu and Zhou (2009) had pointed out three reasons to further explain the arguments. Firstly, there was no theoretical basis exists for the technical analysis. Second, earlier studies found that the technical analysis cannot bring any profits as the earlier studies assumed the random walk model for stock prices. Third, there were mixed and inconclusive empirical findings presented by the previous studies. Therefore, this issue is still open for further empirical examination. In the context of Malaysia, studies on this issue are rather limited. Thus, this paper aims to examine the ability of technical indicators which are Variable Moving Average (VMA) and Elliot Wave Theory incorporated with Fibonacci numbers in predicting the movement of stock prices in Malaysia. We hope to contribute further to the body knowledge on this subject matter. The results of this study have major implications towards both investors and practitioners. The rest of this paper is organized as follows. In the next section, we discuss literature review. Methodology is presented.