NOTE ON TECHNICAL ANALYSIS AND THE EFFICIENCY OF THE MALAYSIAN STOCK MARKET

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INTRODUCTION

Technical analysis, a study of how past prices can be used to forecast future prices, is one of the tools used by investors to earn excess return. Nevertheless, it is probably the most controversial aspect of investment management especially due to the existence of the random walk theory.

According to the random walk theory, new information about a company or industry that affects the prospects of the company is disseminated very quickly and randomly over time once it becomes public. This causes stock prices to move in a random fashion and results in a weak-form efficient market where it is impossible for an investor to make abnormal profits using historical price information which has been publicly known.

Technical analysis, on the other hand, is the study of the market itself. It involves the study of historical market data, basically prices and volume, to identify patterns that signal when to buy or sell and does not involve other information on the company.

However, random walk theorists argue that in an efficient market, technical analysis would prove fruitless since prices in an efficient market already fully reflect available information. Besides that, behaviour of the stock market in the past may not be indicative of behaviour in the future. Even though it has been successful in the past, there is no guarantee that it will be successful over the next decade.

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TECHNICAL ANALYSIS AND THE EFFICENCY OF THE MALAYSIAN STOCK MARKET: EMPIRICAL EVIDENCE

Results of studies on weak-form efficiency of the KLSE seem to be conflicting. This may be due to the utilisation of different samples, time period and methodologies. For example, a study by Lim (1980) on 30 actively traded stocks and six KLSE sectoral indices using serial correlation, runs tests and spectral analysis showed that KLSE is weak-form efficient. In addition, Annuar and Shamser (1993) who studied the weekly and monthly closing prices of all indices over the period of January 1977 to May 1989 found that KLSE is weak-form efficient for some active indices.

On the other hand, Saw and Tan (1989), who tested various KLSE "all-stock" sectoral indices on a weekly and monthly basis found that there was a considerable amount of non-randomness for the monthly data. This was supported by Neoh's (1990) study on the indices for the period 1970 to 1988. Hence, the local market can be concluded to be less "efficient" than the U.S. market, but how much less is not known. Nonetheless, due to evidence suggesting that KLSE is weak-form efficient, the reliability of technical analysis is questionable.

Neoh's Study

Neoh (1990) examined the efficacy of the Dow theory as an investment method in Malaysia over the last 19 years. The study consisted of comparing long-term returns obtainable from a buy-and-hold policy with a trading strategy using the moving average method as a surrogate for Dow theory. The samples comprised the Industrial, Finance, Plantation and Properties indices, with each comprising a minimum of 20 stocks traded from 1970 to December 1988. The moving averages ranged from 9 to 21 weeks in length. Neoh also used a series of buy or sell signals that were from 6% to 10% above or below the moving average.

The same tests were also conducted on the Dow Jones Industrial averages, Financial Times Index and Hang Seng Index over the same period. The results showed that the Dow theory had little applicability to the foreign markets tested but was applicable to the Malaysian market where the moving average did seem to be superior to buy-and-hold policy.

Chia's Study

Chia (1984) hypothesized that the naive buy-and-hold policy will perform significantly better than the Dow theory techniques. The data for this study consisted of 10 individual stocks each from the Industrial, Finance and Properties sectors for a 9-year period beginning January 1974 to the end of December 1982. The results of Friedman, Kruskall-Wallis, Mann-Whitney U test and 2-way ANOVA showed that the trading systems formulated by the Dow theory principles produced significantly lower rates of returns as compared to the naive buy-and-hold policy.

Annuar, Mohamed Ariff and Shamser's Study

Annuar, Mohamed Ariff and Shamser (1991) conducted a study of weak-form efficiency on 82 individual stocks traded between 1975 and 1989 using the unit-root model and time-trend factors. The findings showed that about 83% of the total sample had unit-root, which implied that there was a 13% chance that security prices had been inefficient over the 15-year period. Thus, it was suggested that although the market was generally weak-form efficient, there were inefficient areas that could be exploited by technical analysts.

Dawson's Study

Dawson (1981) tested the efficacy of KLSE and the behaviour of recommended stocks in the Malaysian stock market using the shares recommended and published in Malaysian Business. Two measures i.e comparison of stock prices at various dates over the following year with prices before the recommendations were published and adjustment to market changes as measured by the New Straits Times Industrial Ordinary Share index were used.

The results showed that recommended shares rose on average in value over the following years and outperformed the market over the six-month period but lost their ability to generate excess returns once the six months had passed.

Mansor's Study

In his study, Mansor (1989) attempted to examine if KLSE daily stock returns conformed to the random walk model. The data used comprised 26 companies from the Industrial index for the period beginning January 2, 1980 till August 30, 1986. Serial correlation and runs tests were utilised.

It was found that the daily stock returns were not normally distributed, which means that there existed strong dependency in the daily stock returns. Nevertheless, it was also found that price changes could only explain about 0.76% of the variation in future prices. On the whole, it was concluded that the Malaysian stock market does not exactly fit the random walk model since 70% of the sample showed significant first order serial dependence.

CONCLUSION

The empirical evidence on the reliability of technical analysis in Malaysia provides an inconclusive conclusion. Even though Neoh (1990) concluded that KLSE may be conducive to technical analysis, he cautioned investors against being too happy with it because his study was based on market indices rather than on individual stocks. Moreover, if more investors are starting to use Dow theory extensively, the market might adjust and the Dow theory would no longer work.

Chia (1984) concluded that technical analysis did not outperform the market and it is advisable to hang on to the naive buy-and-sell policy. Annuar et al (1991) suggested that there were still some areas that could be exploited by technical analysts. Nevertheless, investors must be able to earn above normal returns, net of costs, which is about 2.7% of the deal in order for technical analysis to be of any economic value.

Besides that, there was evidence that shares were able to outperform the market (Dawson, 1981). However, it lasted only about six months. In fact, not all stocks rose in value and if an investor did not diversify his/her investment, he/she would be particularly exposed to losses. Mansor (1989) came to a conclusion that the Malaysian stock market could not fit the description of the random walk model. However, he stressed that the ability to use historical prices in order to gain above normal profit is not known.

Even though there is evidence that technical analysis may still be worth undertaking, the studies do have several drawbacks. Thus, investors should exercise caution if they rely on technical analysis as the key to market profits. On the whole, technical analysis is more beneficial in deciding when to buy shares rather than which shares to buy. Hence, it is better for Malaysian investors to trust the current share prices than past prices in making stock purchase decisions.

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