

CHAPTER 2 LITERATURE REVIEW

2.1 Review of relevant literature on insider trading

There are many empirical studies carried out on insider trading activities. Most of these studies were done in the US due to the convenience in obtaining data on insider trades. Reports on insider trading filed on the SEC's Form 4 are the source of data for almost all of the empirical studies of insider trading (Jeng, Metrick and Zeckhauster (1999)). These empirical testings were carried out to provide evidence for or against the forms of Efficient Market Hypothesis (EMH).

Fama (1970) crystalised the concepts on the EMH and defined three forms of market efficiency:

1. Weak-form efficiency

Stock prices fully reflect all security-market information including historical data. Hence, past data cannot be used to predict future returns. As such, no investor can earn abnormal returns by developing trading rules based on historical price or return information.

2. Semistrong-form efficiency

Stock prices fully reflect all public information. Hence, security prices adjust to unexpected new events announced to the general public. Therefore, no investor can earn abnormal returns from trading rules based on any publicly available information.

3. Strong-form efficiency

In the strong form of the EMH, all private and public information is reflected in securities' prices. Therefore, an investor cannot gain an advantage over the market through any analysis since all necessary information is generally known.

Most studies on insider trading carried out in the US shows that the US market is semistrong-form efficient. For example, no abnormal returns could be earned after announcement date of rights issue (Scholes (1972)). Similarly, Fama et al (1969) found that share prices adjusted and fully reflected stock splits immediately after announcement.

Nevertheless, studies have shown that the US market is not efficient in the strong sense. Empirical evidence has consistently found that insiders are able to earn abnormal profits by trading in their own company's securities. The studies showed that insiders are indeed better informed and earned abnormal profits. Jaffe (1974) found that registered insiders possess special information and can gain abnormal return. Finnerty (1976) also found that insiders were able to outperform the market. Seyhun (1986) found that insiders can predict abnormal future stock price changes. Insiders purchase stock prior to an abnormal rise in stock prices and sell stock prior to an abnormal decline in stock prices. The study suggests that insiders do trade in advance of information release. Seyhun also found that following dissemination of insider trading information to the SEC, outsiders cannot earn a positive abnormal return net of trading costs. In a later study, Seyhun (1992) showed that aggregate insider trading significantly predicts market movements.

Rozeff and Zaman (1988) carried out a study on abnormal returns before a takeover with experimental control over differences in firm size and price earnings ratio. The researchers found that the abnormal returns fell from 0.5% per month to only 0.3% per month between three to twelve months range. However, after taking transaction costs into consideration, the abnormal profits were negligible. On the contrary, Bettis, Vickrey and Vickrey (1997) show that outside investors can earn abnormal profits, net of transaction costs, by analysing the publicly available information about large insider transactions by top executives.

In studies done to test whether insiders can earn abnormal returns before a significant event, Halpern (1976) and Mendelker (1987) found that abnormal returns are higher towards announcement dates. These returns ranged from positive residuals of 50% in 2 months prior to announcement dates, to 58% one month prior and 62% in the month of announcement.

Lakonishok and Lee (1998) show that insider trading seems to predict market movements and could be used as a tool to time the market. They also found that market on average do well when insiders buy and markets do poorly when insiders sell, with an annual spread in returns exceeding 10 percent. Therefore insider purchases are more informative than insider sales. However, very little market movement is observed when insiders trade and when they report their trades to the SEC. The authors concluded that it may be a complicated task to develop an implementable investment strategies based on insider trading information due to limited insider activity value in large stocks which has large market capitalisation and costly trades on small stocks.

Jeng, Metrick and Zeckhauser (1999) found that insider purchasers earns abnormal returns of about 40 basis points per month, with about one-sixth of these abnormal returns accruing within the first five days after the initial transaction, and one-third within the first month. However, they found that sale portfolio does not earn abnormal returns. The researchers also found that abnormal returns to insider trades in small firms are not significantly different from those in large firms, and that top executives do not earn higher abnormal returns than do other insiders.

In relation to the disclosure based regime governing insider trades, Fishman and Hagerty (1995) found that mandatory disclosure required by financial markets can increase insiders' expected trading profits. A rationale for such increase is because disclosure leads to profitable trading opportunities for insiders even if the insiders possess no private information on the assets' value.

In Singapore, the results obtained provided conflicting conclusions. The Singapore Stock Exchange (SES) was found to be efficient in the weak form (Lim (1991)) but this was contradicted by Koo (1982) and D' Ambrosio (1980). The SES on the whole is efficient in the semi-strong form. Wong and Lee (1987) found that no abnormal returns can be earned after announcement date of bonus issue.

As for the strong form of the EMH, Lim (1991) found that there was statistical evidence to suggest the existence of insider trading on the SES and insiders were able to earn abnormal returns starting 13-day period before announcement of takeovers of companies listed on the SES.

Results of studies to test the hypothesis of weak-form market efficiency based on share price behaviour for companies listed on the KLSE have been mixed. A recent study by Kok and Goh (1994) found that the KLSE is weak-form efficient over the period from 1984 to 1992 with respect to monthly data but the results were fairly mixed using weekly data. The study concluded that the KLSE is weak - form efficient from late 1980's and early 1990's but weak - form inefficient in the mid 1980's.

The empirical test on semistrong-form efficiency in the Malaysian market also seems to give mixed results. Ng (1984) found that there are existence of price run-ups prior to and until the announcement day of bonus issues and thereafter the average residuals are randomly distributed about zero. Similar results were also found preceding the announcement of rights issues. However, Neoh (1989) and Ku-Ismael (1990) reveals conflicting results. The studies found that there was a strong upward movement of market residuals before and after announcement of bonus issues. In a more recent study, Isa and Tan (1997) reveal that there is a positive price reaction prior to rights issue announcement, but a significant portion is immediately lost after the announcement. However, the market reacts

strongly and positively to bonus announcement. This behaviour is a puzzling phenomenon and runs contrary to the rational of semi-strong efficiency.

As for the strong form of the EMH, there has not been any published studies carried out in Malaysia designed to test the hypothesis. Nevertheless, the results obtained in the test for semistrong-form efficiency in the KLSE may indicate that the Malaysian market is not efficient in the strong form. The results seem to show suspected insider trading such as studies carried out by Ng (1984) and Isa and Tan (1997).