#### CHAPTER II

#### Literature Review

## 2.1 The relationship between analysts' recommendations and stock returns

Nowadays, Analysts become more important role for the financial sector. Brokerage firms spend a lot of money to invest in security analysts who do research and analyzing the information to provide earning forecast and recommendation to their clients. There are some benefits to analyzing and researching stocks information. If information has no value, brokerage firm will not spend the money on hire analysts to analyze such information (Grossman and Stiglitz, 1980). However, the question still exist that markets are efficient. The efficient market hypothesis [EMH] indicates that stock price should already incorporate all available of information including analysts' recommendation which market participant can not adopt any investment strategies to obtain higher return than the market. According to the efficient market theory, future stock prices are unpredictable since they are driven by future event and information. As a result, it seems like analysts' recommendation is unvalued to follow. As early, The EMH seems to be right thing that analysts' recommendation cannot drive the market returns. The study from Alfred Cowles, in 1933, Can Stock Market Forecasters Forecast?" raises the fundamental question of whether "experts" can beat the market. He collects the data of 20 insurance companies and 16 financial services attempted to forecast excess return of listed companies' stock prices during 1928 to 1932. But he fined that the recommendations of most analysts did not produce abnormal returns.

Using more comprehensive databases and careful empirical analysis, prior papers can be providing new dimension about the security analysts that have some potential to offer the recommendations for beat the markets. Elton, Gruber and

Grossman (1986) investigated an extensive database composed of 33 brokerage firms from 1981 to 1983. They focused on size of firm recommended by choosing firms from larger capitalization stocks by eliminating stocks where there were not at least 3 analysts following the company. The data were sell-side analysts' end-of the month ratings on a 1 to 5 scale same as code in I/B/E/S. Not surprisingly, 48% of the ratings were buys (1's or 2's) while only 2% were sells (5's). Approximately 11% of ratings changed each month.

The important analysis in Grossman et. Al. (1986) focused on changes each month to a new analysts' recommendation rating from a upgrades or downgrades. Upgrades, especially to the most favorable category (to "1" or "Strong buy"), resulted in significant excess returns of 3.43% in the month of the announcement plus the next two. Downgrades (to "5" or "strong sell") resulted in negative excess returns of – 2.26%.

Important paper about value of analysts' recommendations has been found in 1996 by Stickel (1995) and Womack (1996). Womack (1996) examine excess return generate by analysts' recommendation. He divides sample stocks into add-to-buy and add-to-sell list portfolios then holding portfolios for a period after the actual recommendation date. He reports that the average return in the three-day period surrounding changes to "buy", "strong buy" or "added to the recommended list" was over 3%. A stock that was added to the "sell" recommendation list experience, on average, a price drop of 4.5%. Perhaps more importantly, Womack reports a positive price drift for up to three months after positive changes in recommendations, and negative price drifts after downgrades in recommendations. Using size-adjusted, industry-adjusted, and the Fama-French three factor models, he finds that for new buy recommendations, the one-month excess return (beginning on the third day after the

recommendation is made) is more than 2 percent. The post-3-month excess returns are roughly the same as the post-1-month. Obviously, these numbers are averages across many recommendations and do not reflect any one actual recommendation. Individual stock returns (even excess returns) are quite volatile: the average one-month post-event return of 2% has a standard deviation of about 8%. Therefore, if these returns repeat in future periods, to implement an excess return trading strategy would require a portfolio approach. A randomly chosen recommended stock has about a 40% chance of underperforming its benchmarks over the post-event one or three month periods. Only in larger portfolios have the averages of abnormal performance been consistently positive.

The long-term drift after sell recommendation is negative and highly significant. The average decline is somewhere between four to nine percent (depending on the benchmark used) over the six months period after the recommendation is made.

Barber, Lehavy, McNichols, and Trueman (2001) provide evidence on the value of analyst recommendations using specific strategies and charged transactions costs. Barber, et. al. focus on a calendar-time perspective. Specifically, they analyze whether changes in the analysts' consensus recommendation rating from average security analysts following stocks provides returns that are sufficient to justify the transactions costs to capture excess returns. After controlling for Fama-French and momentum factors, the most highly recommended stocks earn a positive alpha of over 4% per year while the least favorably recommended stocks earn a negative alpha of almost 5% per year.

However, Barber et. Al. shows that these returns are very time sensitive. For investors who react after two weeks, the excess returns are declined and not reliably

different from zero. Barber, et al suggest that very frequent rebalancing portfolio of recommended stocks (and the associated high transactions cost) is essential to capturing the excess returns. Moreover, they claim that under the assumption of daily rebalancing of the buy and sell portfolios, the turnover would be in excess of 400 percent annually. Less frequent rebalancing leads to not only lower turnover but also lower excess returns.

Furthermore, Jegadeesh and Kim (2003) also examine the empirical evidences of analysts' recommendation stocks in G7 countries and evaluate the value of analysts' recommendations over 1993 to 2002 period. Researchers study by engaging a mixture of strategies to capture an abnormal return. The evidence indicates that security analysts are reluctant to issue sell recommendation to stocks. This case study caused by conflict of interest problem between accuracy in recommendation and brokerage firms who introduce stocks with IPO. Moreover, this paper finds that stock prices react significantly to recommendation revisions on the day of recommendation and on the following day in all of these countries. Authors further find the largest price drifts in the U.S., followed by Japan (two largest equity markets in the world). This evidence indicates that the value of analysts' recommendation is the largest in huge market where analysts can do more accuracy caused by fully information. However, the result shows that the profits from these trading strategies are probably smaller than the transaction cost bound. Authors suggest that investors can be able to profitability use recommendation revisions in combination with other signal in their trading strategies.

Finally, Jegadeesh, Kim, Krische, and Lee (2003) combine analysts' recommendation with trading strategies. Authors show that in the U.S. recommendation revisions in combination with several momentum and value signals

earn significant profits. The evidence indicates that, consistent with economic incentives, analysts generally recommend "glamour" (i.e., positive momentum, high growth, high volume, and relatively expensive) stocks. They find that analyst recommendations are positively correlated with momentum indicators but negatively correlated with contrarian indicators. Furthermore, researchers suggest that explanatory power of the change in the consensus analyst recommendation is more robust than that of the level of the recommendation.

## 2.2 Analysts' recommendations and trading volumes

Prior research about the impact of analysts' recommendation on trading activity is to investigate investors react to recommended stocks that they received from individual analysts. Womack (1996) examine abnormal trading volume for each portfolio of recommended stocks as a ratio of the volume for each event day to the average volume from three months (60) trading days before to three months after the event (revision in recommendation). He reported that add-to-buy portfolio has 190 percent over normal trading volume and 300 percent for add-to-sell portfolio.

Aitken, Muthuswamy, and Wong (2000) use bid (ask) order volume to examine the impact of analysts' recommendation on trading activity. Stock recommendations are one of the most visible research outputs of securities firms and there is anecdotal evidence to suggest that investors place a great reliance on them as a source of investment advice. Based on a sample of 115,720 recommendations spanning over a recent 7-yearperiod, research analysts. Recommendations Ire observed to be associated with significant abnormal returns on the day they Ire officially released to clients. Stocks issued with sell recommendations continued to experience negative abnormal returns in the post-recommendation period implying that sell recommendations Ire informative. The returns to buy recommendations were

mean-reverting indicating that the recommendation day price impact was partly due to price pressure. Hold recommendations Ire informative but as buy rather than sell signals.

They further found that trading activity was abnormally higher in the recommendation period suggesting that research analysts' recommendations generate stock broking business for the recommending securities firms. The recommending securities firms also gained market share in the stocks that they recommended for purchase or to hold. This may explain why securities firms have an incentive to issue more buy and hold rather than sell recommendations.

# 2.3 Analysts' recommendations in South-East Asian countries

The study about analysts' recommendation in Singapore is about comparing the returns earned by company shares with the results expected in a semi-strong efficient market. Prices in an efficient market reflect known information and recommended shares in the financial press are not expected to outperform the market. The results of this study are mixed but tend to match the outcome that is expected for an efficient market. Although the sixty-eight shares selected between January 1977 and October 1982 increased sharply in value on average during the following year, all of the gain during the first six months can be attributed to market changes. Only at nine and twelve months did the shares appear to outperform the market, but the level of statistical significance for the excess returns was low.

In Thailand, research about analyst recommendation cannot find easily, because they are not appropriate data to fulfill the requirement of researchers in order to expand knowledge about analyst. But they are some papers in Thailand study about value of analyst recommendation impact on stocks price. In the Thai stock market, Khanthavit (1999) evaluated the value of recommendations using weekly survey data

during March, 7, 1993 to March 3, 1997. These data Ire obtained from the Manager Information Services: MIS. Results found that price increase for recommend stocks occurred on Monday and Tuesday for the week that recommendations are published. Investors could benefit from the recommendations if they received the information before Monday or Tuesday, and held the recommended stocks for one week. He found that the recommendation value was significant at 1.181 per cent for a one-week holding period if the investors made the investment on Monday or Tuesday. Longer than this, the prices fell afterward. The one-month recommendation value was negative regardless of the day the investment was made. Khantavit (1999) also indicated that brokers and sub-brokers do not have both market timing ability and stock selection ability.

Longkani et al. (2006) examines analysts' recommendation in the Thai stock market (Stock Exchange of Thailand: SET) and evaluate the 'value' associated to these analysts' recommendations. They collect the recommendation data from I/B/E/S database which covers the period from November 1993 to December 2002. They use average rating of consensus recommendation to create 5 consensus portfolios. They find that the mean market adjusted returns of 'strong buy' portfolio is 0.41% on the event dates while the mean adjusted abnormal returns on the 'sell' portfolio is -0.25% for the 5-day pre-event dates window.