

## MARKET AND COMPANIES CONFIDENCE INDEX AND THEIR RELATION WITH STOCK RETURN

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### ABSTRACT

*This paper analyzes the relationship between market confidence and stock return. In addition, it also aims to analyze the relationship between company's confidence and stock return. Based on principal component analysis (factor analysis), a confidence index will be developed for the Kuala Lumpur stock exchange with data from 2000 to 2010. The sample consisted of companies listed on Kuala Lumpur stock exchange which will be grouped into quartiles, each representing a portfolio. Next, the average return of each portfolio for every quarter is going to be calculated. Finally, the results will indicate a significant and negative or positive relationship between the market as well as company's confidence index and the stock return.*

**Keywords:** *Market confidence index, company confidence index, investors' sentiment, stock return*

### Background Of The Study

Stock market history is peppered with events whose level of drama seems to defy explanation. They are striking enough to earn names of their own: The Great Crash of 1929, Tronics Boom and Go-Go years of the 1960s, The Nifty-Fifty bubble of the 1970s, Black Monday Crash of October 1987, the Dot.com bubble of the 1990s, 1997's East Asian financial crisis and the global financial crisis of 2007.

To what extent investors' sentiments influence the stock return behaviour are still an unknown fact. Two theories explaining this relationship are classical finance and behaviour finance. The classical finance theory asserts that investor sentiment does not affect prices because their demands will be neutralized by the transactions of arbitrageurs and thus discounts the possible effects of sentimental investors (Wang, Li, & Lin, 2009). Behavioural finance, however, believes that stock prices can and will be affected by sentiment. Therefore behavioural finance researchers have been working to expand the standard model using two

basic assumptions (De long, Shleifer, Summers, and Waldmann; 1990, Shleifer and Vishny; 1997).

In behavioural finance model, the first assumption (De long, Shleifer, Summers, and Waldmann, 1990) is that investors are subject to sentiment. Researchers are interested in sentimental or irrational traders who so strongly affect the financial market, creating special incidents that are not easily explained, thus forming the idea of limitation of arbitrage (De long, Shleifer, Summers, and Waldmann, 1990, Shleifer and Vishny; 1997). The second assumption, which is laid out by Shleifer and Vishny (1997), supports the idea that going against sentimental investing can be costly and ultimately risky. The result of these assumptions is that arbitrageurs, as rational investors are often called, do not as aggressively force pricing that the standard model suggests.

Investor sentiment can be defined as represents market participants' beliefs about future cash flows relative to some objective norm, namely the true fundamental value of the underlying asset (Baker and Wurgler, 2007).

Investor's sentiment is an ambiguous concept, not straightforward to measure, and has not yet been developed (Sehgal, Sood, & Rajput, 2010). Because there are so many uncertain concepts, it is difficult to clarify the idea of investor's sentiment and its effect on trading. When a target is ambiguous, it is best to pursue and find alternatives to validate the method of measurement. Varied information is used as a proxy of investors' sentiment, for example, Qiu and Welch (2006) used survey information and Kamstra, Kramer, and Levi (2003) used investor mood. Individual investors with limited experience are more susceptible to sentiment. On this point, Kumar and Lee (2006) use a measure for sentiment which is based on retail investor trading.

Researchers employed different quantitative means to measure investors' sentiment, such as mutual fund flows (Frazzini and Lamont, 2005), closed-end fund discounts (Neal and Wheatley, 1998), public offering initial volumes and premiums, and insider trading patterns. Bandopadhyaya and Jones (2005) have suggested using a rank of daily return and historical volatility for an equity market sentiment index, while Wang (2003) used current net positions and historical extreme values for the basis of his sentiment index. The leading edge of this field has been set by Baker and Wurgler (2000) who forecast market returns may be shown using equity issues over total new issues, which include equity and debt issues.

## **Problem Statement**

Many recent economic, global financial crisis, political, and social factors have caused stock market around the world to be unstable and volatile place for investors (Guiso et al., 2008); for example, Kuala Lumpur Stock Exchange (KLSE) index decreased by 36.45 percent (Abdmajid et al., 2009). The Kuala Lumpur Composite Index declined by 72% during the period from end-June 1997 to end-August 1998 (Zulkifli et al., 2007). Traditional asset pricing models strongly depend on the assessment of future returns and risk of assets. Fisher and Statman (2000) and, Baker and Wurgler (2006) however have discovered that investor sentiment could be an important factor that affects the cross section of stock returns. Indeed, a study by Baek, Bandopadhyaya and Du (2005) suggests that shifts in investor sentiment can explain short term movements in asset prices better than any other set of fundamental factors.

The classical finance theory assumes that investors are rational, that gives scholars sense to study only the events that occur in the stock market and display information as an exogenous in order to understand the nature of price movement. However, the importance of investors' sentiment underpins the react emphasis growing in the field of behavioural finance. The field of behavioural finance attempts to answer how individual and collective behaviours influence market prices (Walter et., al 2002). The principle of behavioural finance is based on two important assumptions, the first assumption is that investors are subject to irrational factors, and the second is there are limits to arbitrage (Baker and Wurgler 2006, and Ritter 2003). A basic belief is that people in general and individual investors in particular are not completely rational in their decisions. This situation creates market inefficiencies in the shape of mispricing in the stock market. The inefficiencies bring deviations between the current stock prices and the intrinsic values calculated with traditional mathematical models based on financial / economic theories (Walter et., al 2002). According to Shapovalova (2009) it is a common wisdom that stocks' returns are difficult to predict.

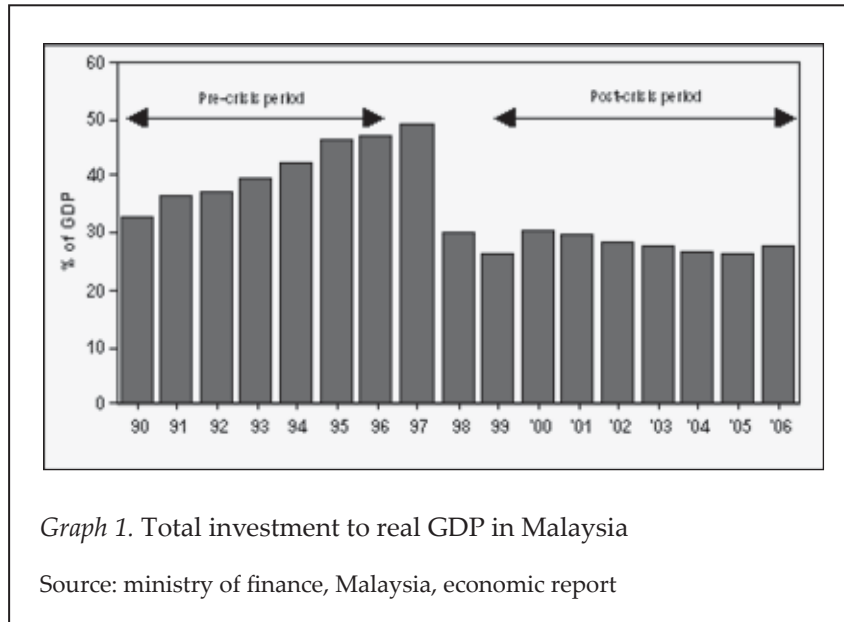
There are many ways to measure investors' sentiment, Baker and Wurgler (2006) used closed-end fund discount, turnover, and number of IPOs, first-day return on IPOs, dividend premium, and equity share in new issues as proxies to measure sentiment. Neal and Wheatley (1998) used closed-end fund discount, the ratio of odd-lot sales to purchase, and net mutual fund redemption. Wang (2001) used the positions held by large traders in the futures markets as a proxy for sentiment. Moreover, there are several papers that measured investors' sentiment based on surveys

(e.g., Brown and Cliff 2004, Brown and Cliff 2005, Otoo 2008). The sheer number of existing measures reflects the fact that there is no clear index that could be used to measure investors' sentiment among academic researchers and professional traders. Furthermore, existing sentiment measures are subject to several methodological problems (Philipp et al., 2006).

Generally, the main problem with measuring sentiment is that researchers may not have a clear idea of what they are purporting to measure. And even if a clear conception of sentiment exists to one researcher, another may entirely disagree. Brennan et al., (1998), Datar et al., (1998), and Chordia et al., (2001) argue that trading volume (as a measure of investors' sentiment) reflects liquidity, but for Baker and Stein (2004), it is an indication of the different concept of investor's sentiment which reflects inconsistency in previous researches. Nevertheless, the transmission mechanism between the latent sentiment indicators and stock returns are still ambiguous.

The review of past documented literature on investors' sentiment shows that no research has been done about developing an investors' sentiment index in Malaysia as a developing country (Ibrahim, 2006). This could be even more applicable in Malaysia given the low level of market sophistication as well as the characteristics and profile of Malaysian investors. Since investor sentiment plays an obvious important role in the market, it is necessary to investigate the relationship between investor sentiment and stock returns (Yumei & Mingzhao, 2009). Furthermore, the investors' sentiment index will be a useful prompter of how investors feel about the economy as well as financial market. Thus, it is necessary to create a variable that can measure sentiment and then investigate its relationship with the stock return listed on Kula Lumpur stock exchange.

There is an issue that faced Malaysian economy in the post Asian financial crisis period, which was weak growth in private investment. It can be seen in Graph 1 that in 1998, the private investment in Malaysia plunged by 55 per cent and another by 23 per cent in 1999 due to the fallout of the Asian financial crisis. Following a brief recovery in 2000, private investment fell down again by 20 per cent in 2001, and another by 15 per cent in 2002. As a consequence of the decline in the rate of private investment and capital formation in the post Asian financial crisis period (1990-1996), the percentage of total investment to real GDP dropped significantly to around 28 per cent of GDP from 40 per cent of GDP during the pre-crisis period (1999-2006).



It can be observed that the total investment before the Asian financial crisis was more than the total investment after, which means, the investors were investing and having confidence to invest before the crisis, and they lost their confidence and investment after the crisis. However, “The Asian financial crisis” in the late 1990s highlights the importance of good corporate governance practices to help restore investors’ confidence in the East Asian market.

Few studies have been done about the effect of corporate governance on investors’ confidence in some developed countries, such as Shailer et al., (2008), Shailer et al., (2004), Walter (2002). However, good corporate governance restores investors’ confidence (Shailer et al., 2004, Shailer et al., 2008).

To our knowledge, such a measure of investor sentiment is currently not available for the Malaysian market. However, this will be a comprehensive study in terms of sentiment’s measurement to create a composite index of market confidence (sentiment), similar in spirit to that of Baker and Wurgler (2006) by using their variables (turnover, number of IPOs, first-day return on IPOs, dividend premium, and equity share in new issues) and some other variables such as P/E ratio for the market index, and advance decline ratio.

Most of the studies have tested the relation between market sentiment index and stock return, (Baker and Wurgler (2006), Stambaugh et al (2010), Finter et al (2010), Yoshinaga and Junior (2010), Grigaliuniene and Cibulskiene (2010), Ling et al (2010). In addition, to formulate market confidence index, this study will contribute in terms of formulating companies' confidence index in the Malaysian market which has not been done before, and therefore to investigate the relationship between the index of companies' confidence and stock return. This gap creates several motivations for us to undertake this study.

### **Research Objectives**

1. To create a unique market confidence (sentiment) index in the Malaysian market.
2. To investigate the relationship between market confidence (sentiment) index and stock return.
3. To formulate a companies' confidence (sentiment) index in the Malaysian market.
4. To investigate the relationship between companies' confidence (sentiment) index and stock return.

### **Significance of the Study**

In recent decades, there have been several studies trying to explore the existing relationship between investor's sentiment and stock return (Baker and Wurgler 2006, 2007, Wang, 2001, and Brown et al., 2004). However, those studies have used different variables among each other as proxies to measure investor's sentiment and therefore to relate the sentiments proxies with stock return.

The application of investor confidence index within the stock exchange of Malaysia may enable to boost investors' confidence on stock returns which could be even more suitable in Malaysian market given the characteristics of Malaysian and foreign investors. This study will be a significant endeavour for the enhancement of the strategies used by Kuala Lumpur stock exchange in order to position itself both in the domestic and global market.

This paper is not the first to analyze the role of investors' sentiment in the financial market. This study, however, will be comprehensive in terms of measuring investors' sentiment, and as mentioned before, the

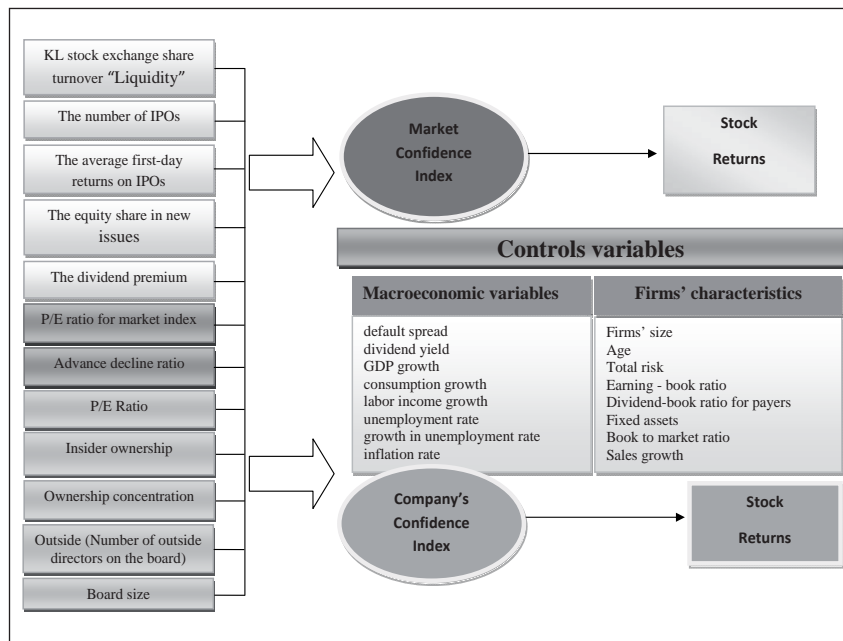
variables that have been used by Baker and Wurgler (2006, 2007) as well as some other variables are going to be included in this research. These variables are P/E ratio, and advance decline ratio as indicators for market confidence. In addition there will be some macroeconomic controlling variables that have been used by (Baker and Wurgler 2006) and some firms' characteristics/variables that have been used by Lemmon et al., (2005) to be used in this study.

Another significance of this study is, it will help investors in terms of knowing how they feel about the economy. Investors' sentiment index could be a good and useful prompter of how investors feel about the financial market as well as the economic environment.

The study will enable the companies in Malaysia to determine the strengths and weaknesses of corporate governance mechanisms and use this as an instrument to restore the investors' confidence. For instance, companies with low corporate governance have a low investor confidence as compared to companies with high corporate governance and have a high investor confidence.

The theories used in this study are behavioural finance theory by (Baker and Wurgler 2006, and Ritter 2003), signalling theory (Allen and Faulhaber, 1989), and agency theory (Fama, 1980; Fama & Jensen, 1983a, b; Jensen & Meckling, 1976). The signalling theory has been the dominant theoretical paradigm due to it being premised on the need to specifically resolve information asymmetry (e.g., Bhattacharya, 1979; Certo et al., 2001; Ross, 1977). However, a great deal of uncertainty surrounds the valuation of new issues because of information asymmetry attributed to the keener sense of the true value of the firm that insiders (CEOs, executives, and owners) have when compared with outsiders (Anderson, Beard, & Born, 1995; Keasey & Short, 1997, Lawless, Ferris, & Bacon, 1998). This indicates that the insiders' ownership acquire more and better information that belongs to the company than outsiders (investors) do, therefore investors' feelings should be related to the actions of insiders. For instance, when insiders buy their company's shares, this might be a signal that this institution is profitable or the shares' price will increase in the future, hence, the rational outsiders (investors) will undertake the same action by buying the shares of the company. In other words, it should be a relationship between insiders' ownership and the investor's sentiment.

## Framework Of The Study



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