INVESTOR PSYCHOLOGICAL TRAITS: OVERREATION AND UNDERREACTION IN MALAYSIAN STOCK MARKET

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DECLARATION

We hereby declare that:

(1) This undergraduate research project is the end result of our own work and that due acknowledgement has been given in the references to ALL sources of information be they printed, electronic, or personal.

(2) No portion of this research project has been submitted in support of any application for any other degree or qualification of this or any other university, or other institutes of learning.

(3) Equal contribution has been made by each group member in completing the research project.

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DEDICATION

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LIST OF ABBREVIATIONS

ARR   Average Residual Returns

CAPM   Capital Asset Pricing Model

CARR   Cumulative Average Residual Return

EMH   Efficient Market Hypothesis

GDP   Gross Domestic Product

IPC   Infrastructure Project Company

KLCI   Kuala Lumpur Composite Index

KLSE   Kuala Lumpur Stock Exchange

MPT   Modern Portfolio Theory

NASDAQ   National Association of Securities Dealers Automated Quotation

REIT   Real Estate Investments Funds

RR   Residual Return

SPAC   Special Purpose Acquisition Company

PREFACE

Nowadays, investor's and country's wealth are influences by the performance of the stock market as the stock market plays an important role as a source of capital. Based on opinion and assumption of many financial economists and investors, the country's future economy can be predicted by the stock markets as well.

Nevertheless, there are two conflicting theories, which are Behavioural Finance and Efficient Market Hypothesis (EMH), in explaining the stock market behavioural. There are many unpredictable events happened in the past such as financial crisis which can challenge these theories. This study intends to show the evidence of investor's irrational behaviour such as overreaction and underreaction in the Malaysian stock market.

The researches will have a clearer picture of current condition of Malaysian stock market, where they can predict and forecast the future economic outlook. Besides, Investors will have better understanding of the behaviours of Malaysian stock market and better management skills, where they can make investments rationally in order to maximize their investments profits.

ABSTRACT

This study is to investigate and observe whether any overreaction or underreaction phenomenon take place in the Malaysian stock market, which is widely known as Bursa Malaysia. Based on several historical studies, a huge attention, controversy and doubts has been drawn to the two main conflicting theories, which are Behavioral Finance and the Efficient Market Hypothesis (EMH). As Behavioral Finance highlights that the market is inefficient, where events such as overreaction and underreaction does takes place in some surprise or extreme events for example, shocking political news or crisis, however the EMH will always assumes that the market is efficient. The main objective of this study is to show evidence of investor's irrational behavior such as overreaction and underreaction in the Malaysian stock market. The study concludes that the overreaction phenomenon does take place in the Trading and Service sector and the Industrial Products sector in the Malaysian stock market. This eventually provides evidence that the investors in the Malaysian stock market overreacted in the inefficient market.

Chapter 1: Research Overview

1.0 Introduction

The major highlight of this chapter consists of the background of the study that will provide a brief picture of the entire research as a whole, the problem statement, research objectives, research questions, significance of the study and chapter layout. Lastly, it includes a conclusion that will conclude the entire chapter.

1.1 Background of the Study

1.1.1 Behavioural Finance

The Efficient Market Hypothesis (EMH) states that the prices in the security market reflect all available information. However, behavioural finance is a total opposite of EMH, where it explains that the market is inefficient and the historical prices does not reflect information available in the market. Behavioural finance is a relatively new field where it seeks to explain the stock market in a behavioural viewpoint. It focuses on the combination of limit of arbitrage and cognitive psychology. Cognitive psychology propose that in the way investors think, they tend to systematically make mistakes, and it leads to investment decision which are inappropriate and price distortions in the market. However, in terms of limit of arbitrage, it is claimed that the impact of irrationality in market price can be long-standing and very substantial. This study emphasize only on the cognitive psychology, because the goal is to examine the existence of market inefficiencies as a consequence of the investors' behavioural biases in Malaysian stock market. Most investors do not always make rational decisions due to make wrong decision regarding to what they think. These systematic errors will cause the stock prices to

differ from their actual values, which are overvalued or undervalued. Noise traders, irrational traders or feedback traders are the investors who are responsible for those price variation (Hoef, 2009). According to conventional financial theory, the world and its participants are mostly rational wealth maximizers. However, there are many instances where emotion and psychology influence our decisions, causing investors to behave in irrational ways, so then overreaction occurs.

1.1.2 Overreaction and Underreaction

In financial market, there are two unexpected and unavoidable situations that will have an adverse impact on stock prices, which are overreaction and underreaction. Overreaction is the reverse movement occurs after a stock price experiences rising and declining, which is because of the overemphasis of investors according to current information. In other words, overreaction causes stocks that perform best over an initial period tend to perform worst in the subsequent period. For example, investors who overreact towards financial or other information will cause the stock price to shoot up until it exceeds its maximum or target equilibrium level and it is expected to fall, back to its true equilibrium price level in the subsequent period.

According to DeBondt and Thaler (1987), overreaction is found more significant in January, which means that overreaction is more likely to happen during the first month of the year. The stock market inefficiencies such as overreaction and underreaction are resulting from the price reversal and momentum effect, serve as the sources of the market trends or some extreme events like bubbles and crashes.

Overconfidence of investors is the main factor that causes investors to overreact to stocks. Overconfidence means that people are overconfident about their judgments and abilities and overestimate the precision of private information (Glaser, Nöth and Weber, 2004). Investors tend to have strong overconfidence of their knowledge, skills and the information accuracy regarding investments (Odean, 1998). Overconfidence caused investors to act irrationally, which

encouraged them to trade more compared to those rational investors and lowered down the expected return. Thus, this results excessive trading in the market which is overreaction. The overreaction caused the bursting of dot-com bubble in the market. The dot-com bubble also referred to as the dot-com boom, the Internet bubble, the dot-com collapse, and the information technology bubble. During 20th century, software development companies were the high profitable investment and it performed well in stock market. These stocks had profited many individual investors and consequently it built a high degree of confidence level among the traders. Therefore, investors who believed current great performance of stocks will reflect information in future tend to invest aggressively and this lead to a stock market overreaction. During 1997 to 2000, National Association of Securities Dealers Automated Quotation (NASDAQ) stock composite index which emphasizes on technology stocks, exploded vigorously from 600 points to over 5000 points. However, with a climax on March 10, 2000, the NASDAQ peaking at 5,132.52 points in intraday trading before closing at 5,048.62 points, the dot-com bubble collapsed and stock prices fell unexpectedly, caused investors sell their holding shares like a flash. This financial bubble was resulted by market overreaction; due to the irrational behaviours of investors and it caused NASDAQ Composite index had lost 78% of its value.

In opposite, stock market underreaction shows that security prices underreact to news such as earnings announcements. If the news is good, prices keep trending up after the initial positive reaction. However, if the news is bad, prices keep trending down after the initial negative reaction. Stock market that underreacted, are normally sensitive to a several news especially events, for instance, profit surprises, repurchases of open market share, negative modification to predictions of analyst and also stock splits. According to Shleifer and Summer (1990), it is believed that investors limited arbitrage hypothesis is able to justify underreaction. 'Trend 3 chasing' is used as one of the approaches by investors where, when the expected future price skyrocketed, then buy it during the price rises. Part of rational arbitragers implement the same concept as well, purchase when the security prices rises and sell when it falls. Next strategy that could see in the market, it is 'stop loss' orders, where the investor sells off after reaching certain agreed level of loss regardless of future forecasts. Due to investor's behaviour will

intensifies and extends the recession and the rapid decline in the market, investors' behaviour lead to an underreaction phenomenon in this model. Underreaction is raised by biased self-attribution of market participants (Daniel, Hirshleifer & Subrahmanyam, 1998). Fischhoff (1982) stated that the theory of self-attribution illustrates that an individual will have a higher tendency of recognizing their former successes, however during failures investors tend to eventually put the blame on external factors. Moreover, Barberis, Shleifer and Vishny (1998) recommended investors' conservatism causes underreaction, it is because investors may neglect the announcement of public news of complete information available and they tend to sling partially to the estimated revenue. According to Hong and Stein (1999), he recognized that the gradual 3 incorporation of confidential information to market participants caused underreaction. Yet, one of the research that proposed by Frazzini (2006), stated that the effect of disposition could lead to investors bearing losses and gain profits; hence, underreaction occurred to news. Based on Frazzini's model, it explained that, investors will sell their security that could earn more profit, therefore, securities can traded under fundamental level when good news released into market. Inversely, investors might trap in a loss and they tend to sell the securities, which lead to security price premium when bad news released into market.

1.1.3 Background of Industries

Bursa Malaysia exists since 1930, when Singapore was still a part of Malaysia. It was founded in 1964 as Malaysia Stock Exchange. In 1965, the Malaysia Stock Exchange was named Stock Exchange of Malaysia and Singapore due to the secession of Singapore from Malaysia. Later on, when there was a currencies problem, this stock exchange then divided into two individual stock markets which Malaysia's has named the Kuala Lumpur Stock Exchange (KLSE). On 14 April 2004, KLSE is given the name Bursa Malaysia, with an objective of enhancing competitive position and responding to global trends in the exchange sector by having customer-driven and market-oriented practices. Bursa Malaysia

is a marketplace for investors, issuers, brokers, shareholders to trade their investments. Bursa Malaysia consists of securities market, derivatives market, Islamic offerings and others. Bursa Malaysia is the biggest stocks exchange market in Malaysia which consists of different sectors in its securities main market. These sectors are Close-End Funds, Construction, Customer Products, Finance, Hotels, Industrial Products, Trading and Services, Infrastructure Project Company (IPC), Mining, Plantations, Properties, Real Estate Investments Funds (REITs), Special Purpose Acquisition Company (SPAC) and Technology.

1.1.3.1 Background of Trading and Services Sector

Malaysia is one of the important trading and services market in Asia. Trading and services sectors in Malaysia are a very huge and constantly growing element in term of expanding Malaysia's economy. In 2008, trading and services sector helps to account around 55% of Malaysia's gross domestic product (GDP) and also 13% of cross-border trade. Strategy of Malaysia's government is to target on encouraging competition among Malaysia's trading and services sector by carrying out programs and activities in order to increase this industry productivity to make investment either in local or in foreign area. Trading and services also helps Malaysia increase employment rate. For instance, during 2004 to 2008, employment rate in trading and services sector had increased approximately 3.5%. There are nearly 6.0 million workers in 2008 in trading and services sector. Overall, Malaysia's total employment rate raised averagely 2.6% during this period (Alejandro, Powell, Brady & Wohlet, 2010).

1.1.3.2 Background of Industrial Products Sector

Industrial product sector is the main objective of development of Malaysia's economy. Based on Kamaruddin & Masron (2010), they stated as industrial product sector developing rapidly and it is leading in Malaysia's growth experience, Malaysia's structure transformation had turned into an exporter of

high-value-added industrial product from an exporter of primary merchandises. Malaysia's economy had increasing rapidly due to the structure transformation. Malaysia is a well-known industrialized country who produces palm oil, rubber and tin since late 20th century. Malaysia was doing well and had rapid growth on industrial products sector during that time. In the early 1908's, when tin's market shrunken, Malaysia's government was enforced to expand the economy. Malaysia has a rating of 37th of industrial production growth rate compared all other countries (Ramli & Affandi, 2015).

1.2 Problem Statement

Studies on behavioural finance effect, overreaction and underreaction on the stock price is a relatively new field in the financial market. In the equity and commodity market, overreaction and underreaction phenomenon have been proven by a few research studies. However, most of the previous researches only focuses in term of theoretical and literature review but there are very limited studies on empirical testing on behavioural finance. For instance, looking into the research done by Stracca (2004) and Ritter (2003), both researches have shown in detail on how asset pricing can be affected by investor's psychological traits which are conflicting towards traditional theories and framework that are assuming market efficiency with rational investors. It is mainly due to their inability to capture and observe market anomalies. There are still very little researchers paying attention on this area, even though the detailed and comprehensive methods have been provided in terms of testing on behavioural finance.

David and Eric (2000) proved that fundamentals show little or no change and continue the trend when there is a sharp change in the performance of the stocks. The extreme price performance couldn't be attributed to risk. As per the findings overreaction is evident before the portfolio formation. The work suggests that overreaction and underreaction are part of the same process and overreaction followed by, underreaction, not equilibrium is normal in investment markets. The

evidence shows that the price reversals are not due to changes in fundamentals and it cannot be attributed to risk also.

In Malaysia, there are some researches showing that overreaction phenomenon and it has provide evidence that financial markets are not completely efficient. For example, from the researches that conducted by Ahmand and Tjan (2004), it stated that overreaction does exist and attributes the phenomenon to the investors based on their overconfidence and irrationality. Based on past researches, it is clearly shown that investors' behavioural perspective and how investors relate to aftermarket inefficiency are limited. From 1991 to 2003, an average of 91.35% individual investors consists in market participation ("Bursa Malaysia Research and Data Centre", n.d.) who are normally not knowledgeable in this area and trade based on noises. Besides, local researchers Mat Nor, Lai and Hussin (2002) has also proven inefficiency of the Malaysian market, where the traditional EMH does not hold. Although there are still many investors greatly accept the traditional efficiency market hypothesis, however many unexpected events happened are most likely to challenge the theory.

Investors are always difficult in making the best and rational investment decisions. Indeed, numbers of researches and studies showed that investors are always irrational. Investment decision making is a complex process and the decision making processes are subject to cognitive biases. Therefore, individual that invests in stocks which investment returns are very uncertain and unpredictable as well as lead to a comparatively high market risk which could be affected by others' actions and their weaknesses of own emotional. Furthermore, there are still many of factors that previous researches didn't consists of which will influence investors' decision making for example demographic details, socio-economic relations, education level, income range, gender and much more (Wong & Lai, 2007).

Since there are conflicting theories and point of view by many different researchers in explaining these market anomalies recently, it is important to study and investigate whether investor's behaviour, their psychological traits has a profound impact towards the stock market.

1.3 Research Question

The research question formed is as follows:

- Whether is there any existence of overreaction and underreaction phenomenon in the Malaysian stock market specifically the trading and service sector and industrial products sector from 2006 to 2014?

1.4 Objective of Study

The objectives of the study are as below:

1.4.1 General Objective

The general objective of this study is to address the psychological trait that triggers irrational behaviour among investors in the Malaysian stock market.

1.4.2 The Specific Objectives

To determine whether that the psychological traits namely overreaction and underreaction occur in the trading and services and industrial products sector from June 2006 to June 2015.

1.5 Hypothesis of Study

The hypothesis constructed in this study, includes a null hypothesis and an alternative hypothesis.

H_0 : The Malaysian stock market portrays investors' psychological traits in terms of overreaction or underreaction in two largest sectors namely trading and services sector and industrial products sector from 2006 to 2015

H_1 : The Malaysian stock does not portray any investors' psychological traits in terms of overreaction or underreaction in two largest sectors namely trading and services sector and industrial products sector from 2006 to 2015.

1.6 Significance of Study

The major finding of this study brings not only theoretical implication but also empirical implications. Looking at the perspective as in individual or institutional investors, this study can come handy by acting as a guideline in terms of managing their portfolios. From the perspective of behavioural finance, this study explains the behavioural of stock market. This study permits investors to enhance their understanding towards the condition of stock market in Malaysia as it illustrates how the actual behaviour of individual and institutional investors' makes a different when both receive the same information. Through this study, it is able to provide an insight to investors to be more conscious towards the tendency of behaviour and enhance their return. This could give a major positive impact to investors, where it would assist them in improving investment strategies, enhance their predictability of stock market thus, accurate and legitimate analysis could be done.

In the researcher's point of view, this study acts as a stepping-stone for many future researches regarding the behavioural factors in the stock market. As mentioned by Toh & Ahmad (2010) in both emerging and developed stock market, behavioural finance field that is rapidly growing. Therefore take into account human psychological factor will be essential to explain the condition of the Malaysian stock market.

1.7 Chapter Layout

The study is separated into of five distinctive sections: Chapter 1 comprises an introduction of the study including the background of study, problem statement, research questions, objectives, hypotheses, and significance of the study. Chapter 2 presents a literature review, which reviews some theories that lies behind the study. Chapter 3 includes the proposed methodology of the study, namely its scope of study and research design. Next, Chapter 4 emphases on the data analysis, including the interpretation of the result and the discussion of major findings of the study. Lastly chapter 5 files a conclusion with some policy implications, study's limitations and recommendations for future researchers.

1.8 Conclusion

As a conclusion, in chapter 1 this study have discussed about the background of the study which includes some introductive information regarding the study such as background of the industry chosen in the study, behavioural finance and some explanations regarding overreaction and underreaction. Thus, in this chapter it also includes problem statements, which discuss some of the issues and problem faced in the stock market. Furthermore, it also comprises two research questions following with to research objective in order to answer both of the research questions. In addition, chapter 1 also includes the significant of the study, in this section, impact and implication of the study towards the readers and investors are discussed. Lastly, is the chapter layout, where the chapters included in this study were discussed.

Chapter 2: Literature Review

2.0 Introduction

The main objective in this chapter is to review literatures relating to the study. These literatures included researches focusing on the market overreaction and underreaction of stocks with the theories supporting as well as the conflicting theories.

2.1 Review of Relevant Theoretical Model

2.1.1 Emergence Behavioural Finance

Behavioural finance is comparatively fresh in finance field which compounding the behavioural and cognitive psychological theory together with the conventional economics and finance. According to Shiller (2013), behavioural finance provides the evidences and explains the stock market unequally through implying the psychological and behavioural factors. During investment decision making, the influential behavioural finance such as emotion and mentality of investors will lead to an unreasonable or irrational behaviour of the investment decision making. Behavioural finance can be divided into two parts which are cognitive psychology and limitation in arbitrage (Barberis and Thaler, 2003).

Ritter (2003) claims that cognitive psychology is the irrational behaviours of those investors who like to make decision according to their own preferences and self-belief. Unlike the assumption of EMH, investors are having rational behaviours in financial decision making. Lee and Lin (2006) suggest that the cognitive biases of investors will lead to continuous systematic errors in judgments. The cognitive biases are the overconfidence, representativeness, loss aversion, herding,

anchoring and others in investment decision making (Lo, 2005). According to Statman (1995), the cognitive factors will influence both of personal investors and portfolio managers in financial decision making through their risk determination as well as how they process available information and make decisions. Thereby, the stock prices will trend to have a large gap with the fair price, which caused pricing problem of the stocks.

The behavioural finance is developed mainly for the reason of frequent happen of market anomalies and the incapable of EMH to explain the anomalies (Shiller, 2003). According to Alrabadi (2012), market anomalies have correlation with the inefficiencies in the stock market. Investors who have irrational behaviour, unreasonable judgments and decision making usually have their own psychological biases in certain stocks. The irrational behaviour of investors will then lead to the market inefficiencies, overreaction and underreaction of stock market. Tripathi and Aggarwal (2009) state that these market efficiencies caused of investors' irrational behaviour lead to an unpredictable in stock prices as well as returns. Hence, some investors who are able to beat the market will earn abnormal returns, which violates the assumptions of EMH.

Meanwhile, Sharma (2014) states that the behavioural finance model could explain the behaviour of investors which is overreact or underreact towards unexpected news in the market, leading to the stock return regularities or some intense events such as stock market bubbles and financial crisis. Kaestner (2006) also claims that the behavioural biases which are overconfidence, conservatism, anchoring and loss aversion into consideration can give a better understanding of the inefficiencies in stock market.

2.1.2 Efficient Market Hypothesis (EMH)

As one of the traditional financial market theories, back in the 1970s the efficient market hypothesis theory (EMH) is one of the very well known and many statisticians, financial economist and researchers has taken this theory as the

central of attention. The EMH assumes that the stock market is efficient, in which the market participants behave rationally and process correctly all the available information, thus a security's price reflects its fundamental value (Sewell, 2011). In other words, all the available information basically reflects and is fully incorporated with the prices of the securities, where no mispricing of security happens.

Efficient Market Hypothesis (EMH) states that the financial markets are efficient and said the price is fully reflect to all available information set (Sewell, 2011). Based on Hamadi, Rengifo and Salzman (2005), they stated that EMH suggests that the market price is fully reflect all available information on a stock market. Not only that, they also stated that EMH reflects the methods which the investors can get the information they want. An efficient market is a platform where all the market prices are fully reflects all available information to the members in the market (Fama, 1970). Besides, Fama (1998) also stated that EMH is still remaining effective because the market prices of overreaction and underreaction are still very common.

Based on Malkiel (2003), there are two forecasting analysis to identify the mispriced securities which are technical analysis and fundamental analysis. He stated that by using technical analysis to study the previous stock prices in order to predict the future stock prices. Hence, there is no investors can predict the stock price because there is no one can access to the unavailable information (Hamadi et al., 2005).On the other hand, the fundamental analysis can analyse the financial information such as company's earnings and asset value and help the investors to choose the undervalued stocks to generate high return. Basically, technical analysis and fundamental analysis are helping the investors to generate greater return than normal market return.

Clarke, Jandik and Mandelker (2001) states that there are three forms of the efficient market hypothesis which are weak form efficiency, semi-strong form efficieny and strong form efficiency. The weak form of the EMH explains that the current price is only fully reflects the information of the history price. Hence, there is no one can analyse the historical prices when there are mispriced

securities happen. The securities prices from weak form efficiency are the most easily available information as they are in public. Where the semi-strong form efficiency states that the current price is fully reflects all the public available information. As the public information does include historical prices and also data of financial statements. So, the public information is not necessary to be financial nature. The strong form efficiency suggests that the current price fully reflects all available information which include public and private. Strong form efficiency states that one is not able to get the insider information and generate profit by buying company's shares where they did not do any public announcement.

The efficient market hypothesis is closely related to "random walk". Random walk is an idea that follows the flow of information of the price changes which is unpredictable and random (Gupta and Yang, 2011). Therefore, the investors cannot generate additional risk-weighted returns in effective market. Fama (1965) found that if the random walk was true, there will be a zero correlation. Consistent with random walk, the serial correlation coefficients for a sample of 30 Dow Jones Industrial stocks is used. So, when the stock price follows random walk, the historical prices cannot help to raise the expected returns.

There are two approaches to determine the stock prices that are exposed commonly which are "chartist" or "technical" theories and the theory of fundamental analysis. The chartist or technical theories assume that the historical prices are repeating and the patterns of the historical prices in a security will recur in future. Besides, the fundamental analysis assume that a security has its intrinsic value at any point in time which the security is depends on its earning potential. As the potential of that security is depends on their quality, outlook and also the economy (Fama, 1965).

2.1.3 Anomalies in Efficient Market Hypothesis

Anomalies in Efficient Market Hypothesis are systematic observations or findings that cannot be predicted or explained by the conventional economic theory, for example, Weekend Effect, January effect, Winner's curse, Equity premium puzzle

and others. The EMH states that stock prices will fully reflect all available information and will adjust immediately to the arrival of new information (Adam, 2004). However, even investors have information of the stock prices, they cannot do anything with the market during the market is closed which is weekends. So there will be the existence of anomalies. (Muhammad and Rahman, 2010). Proponents of Traditional Finance accorded these findings as 'anomalous', as known as anomalies. Hence, the anomalies are being discovered through empirical results that were inconsistent with the view that market returns were determined according to the CAPM and the EMH.

Some psychological factors are playing an important role to influence investors' decisions. De Bondt (1998) uses the psychological factors to narrow the selection of empirical anomalies into two parts which are overreaction and overconfidence. The factors are short-term returns momentum and also long term returns reversal (Barberis et al., 1998). Four classes of anomalies are identified and reviewed according to individual investors that have to do with, which are investors' perceptions of the stochastic process of asset prices, investors' perceptions of value, the management of risk and return, and trading practices in market.

Momentum indicates the fact that past winner stocks continue to outperform past losers in terms of their returns in stock market. Short term returns momentum shows that winner stocks outperform losers over the past six months by a certain percentage per month in the following 6 to 12 months (Jegadeesh and Titman, 1993). This short term returns momentum occurred when investors are having slow revision on their priors to new information arrivals (Barberis et al., 1998). Investors would expect that the earnings will be mean reverting which is the stock price will move back towards the average level. However, during a later stage, investors are proven to be wrong when stock prices show a slow response to the earnings announced in the past.

According to Daniel et al. (1998), momentum occurred when market overreact to new information when the available information confirms it. Grinblatt and Han (2002) then show a theoretical model in which short run returns momentum is resulted by disposition effect. This effect was first documented by Odean (1998)

with stating that investors are likely to still holding loser stocks at the same time selling winners instead of selling loser stocks. Whenever any change in stock prices occurs, investors will take longer time to adjust to that change and underreact. In the end, it can be said that due to the slow reaction of the investors, towards earnings announcement or any event such as mergers and stock splits, market tends to be inefficient.

Reversal indicates the fact that loser stocks will outperform winner stocks in terms of their returns in finance literature. The study of DeBondt and Thaler (1985) shows that the losing stocks in the past three to five years had outperformed the winners by 25 percent over the next three years. Long term returns reversals occurred when investors finally do adjustments, as they are overreacting to stock market (Barberis et al., 1998). According to Daniel et al. (1998), long term returns reversals occured as the overreaction is corrected in the long term. Since capital gains are taxable only when realized, in order to delay paying capital gains taxes, investors with locked in gains can choose to keep winners first.

As a consequence, investors' reservation prices for the sales of winning stocks are elevated by the benefit of capital gains deferral. Therefore, stocks with huge embedded capital gains will have higher price quotes but lower expected returns, than other stocks with no embedded capital gains (George and Hwang, 2004). To conclude with the long term returns reversal as one of the anomalies of EMH, it is proving that investors are overreacting to unexpected and dramatic information and news (DeBondt and Thaler, 1985).

Previous studies show that these short run returns momentum and long run returns reversal are not related. George and Hwang (2004) reviewed the proximity of a stock prices in predicting returns to its 52-week high, while the traditional momentum measures show that the short term momentum will not reverse in the long run. According to Grinblatt and Han (2002), the disposition effect leads to price momentum does not reverse in the long term. If they are related, then momentum predicted by the measure would reverse. DeBondt and Thaler (1987) argue that investors will overreact to available information and news. Hence, long term returns reversals have a very strong seasonal pattern which they found

significant long term returns reversals associated with loser stocks occur only in January of the year.

2.1.4 Overreaction

Market overreaction is a miscalculation of optimism or miserablism which is propagating around the stock market (Das and Krishnakumar, 2015). In another word, investors' irrational actions through the stock such as overestimate the value of winning stocks will lead to market overreaction. Investors overreact to both good news and bad news, this caused the stock price to fluctuate and at last, investors may have chances to make irrational decisions. Efficient market hypothesis argues that historical price movement will reflect all information and will affect current price. However, the overreaction is suggests that stock price will act like human behaviour; it can overreact to both extremely good and bad news (Ali, Nasir, Hassan and Abidin, 2010). The behaviour of this overreaction is usually caused by those market participants or investors who act regarding to new information. Market overreaction shows that the best performing stocks at first will tend to perform worst in the following period; while the worst performing stocks at initial will tend to perform best subsequently.

According to Atkins and Dyl (1990), in market overreaction, losers will outperform the winners. Losers will earn average positive abnormal returns in the following period, whereas winners will have negative abnormal return. They also argued that the overreaction is not a violation of efficient market hypothesis but the bid-ask spread. In order to earn consistent abnormal return, investors should buy losing stock and sell winning stock. Ariff, Shamsher and Annuar (1998) states that it is impossible to have consistent predictions of future price just simply based on the historical price fluctuation patterns. This is because of the price will differ not due to stock behaviour, but new information which includes new interpretation of old information and more details. So, by just looking on past price pattern will not always let investors to earn consistent abnormal returns.

According to Das and Krishnakumar (2015), stock market inefficiency will also lead to market overreaction. Inefficient stock market would not reflect the real value of a stock and hence the stock price will need to be readjusted back to its fair value, resulting in a return reversal pattern. Therefore, over-engaged of short term information instead of long term by irrational investors will lead to market overreaction. Contrarian Strategy assumes that those events caused market overreaction, extreme negative news will pull down the stock prices so much until below its fair value while extreme positive news will skyrocket the stock prices until above their supposed value (Ali et al., 2010). This means that investors will overreact to this extreme information which provides such price movements, after that, when they realize they have reacted wrongly, they will take a new correction action, so the price will move oppositely as at initial and then back to equilibrium.

According to Lin and Rassenti (2008), psychological explanation argues that investors are overconfident to their privately owned information and this led to market overreaction. Overconfident investors will more likely to overestimate their ability, knowledge, skills and the precision of the information regarding investments (Odean, 1998). Overconfidence caused investors to act irrationally, which encouraged them invest more than rational investors and lowered down their expected return. Moreover, their biased self-attribution will increase their confidence again when the public information is matched with their private signal. When public information doesn't match with their private signal, this biased self-attribution will lead them to dismiss or ignore the information. Therefore, this will led the investors overreact to stock market. Thus, this results excessive trading in the market which is overreaction.

Investors who are overconfident will believe in their own judgments and actions are right and will bring positive return, they also overestimate the private information obtained will be true and reflect price movement (Glaser et al., 2004). According to Barber and Odean (2001), male is more likely to be overconfident than female due to they have higher trading turnover ratio and for those online traders, they can obtain databases easily. Overconfident investors found to have more trades conducted compared to those lesser confident investors. Because of

their over optimism behaviour and the illusion control, investors will underweight the uncertainties and they believe that they can control or affect the outcomes.

2.1.5 Underreaction

The market underreaction is where the stock prices underreact when there are unexpected news or events arisen (Baberies et al., 1998). Underreaction leads to a short term momentum in profits. In an efficient market, there is no any undervalued stock after announcement (Ikenberry, Lakonishok and Varmaelen, 1995). Based on the research of Archana, Safeer and Kevin (2014), the momentum has brought the effect in where the winning(losing) stocks will still staying winning(losing) in the future for short run, this condition is prescribed as underreaction. Latif, Arshad, Fatima and Farooq (2011) claims that the trends in returns over the short run can proof that the stock market is predictable, consistent with the assumptions in EMH.

According to Jegadeesh and Titman (1993), investors who have psychological biases will make slow adjustment to the information caused the stock prices to continue move in the same direction over next periods, usually would be a quarter to one year. In another word, a stock's price will continue to rise right after profit announcement; continue to fall in the back of losses announcement. Chan, Jegadeesh and Lakonishok (1996) has proved that the underreaction in US stock market was caused by the stock prices' slow response to new information such as positive and negative earnings announcements. The continuous movement of market returns have resulted that past winners outperformed the past losers.

In fact, investors could make absolute advantages when there is underreaction in the market. According to Ikenberry et al. (1995), underreaction is important where it could significant motivating trading volume of share repurchase. By using the momentum strategy, investors can gain advantage through buying past winning stocks and sell past losing stocks (Lam, Liu and Wong, 2010). The same continuous movement of market returns is caused by the underreaction of stock

market towards the new information and incorporation of information with stock prices (Jegadeesh and Titman, 1993). According to Barberis et al. (1998), recognizing the movement of the stock prices enabled investors to earn abnormal profits by predicting positive returns in the future regarding to available positive information. Since the stock market will underract to the unpredictable news, initially there would be stocks mispricing and later on there will only have price correction. Therefore, the momentum strategy enabled investors to earn abnormal profit since the winners will still stay winners in the future.

Meanwhile, Barberis et al (1998) claims that underreaction is usually caused by the conservatism of investors. Minority of investors will choose to ignore the complete available information and news from a public announcement and still invest partially to the stocks according to their prior estimation that will bring positive earnings. Hong and Stein (1999) proved that underreaction happen when there is slow incorporation of private information by market participants. Yet, the research of Frazzini (2006) shows that the disposition effect could cause the investors to realize profits or bear losses, basically due to the underreaction to news. The deposition effect states that when there is positive news, investors will buy profitable stocks, this caused the stocks are trading under fundamental value. Inversely, when there is negative news, investors will tend to sell the stocks which might lead to losses and this resulted an added premium into stock prices.

The short run market underreaction can be a result of anchoring. Anchoring is an information-transformation bias. It is where the market participants overlook their information while making investment decisions. Barberis et al. (1998) have proposed the model of investor settlement in order to explain market under and overreaction. This model is based on the literature of psychology when making decision in the stock market. Part of it, they still suggest that market underreaction is consistent with a phenomenon documented in term of psychology. It also can know as the slow response in this model where any new information updated or announced. Mikhail Walther and Willis (2003) found that majority of analysts are underreacting more or less to prior information.

2.1.6 Prospect Theory

According to Kaustia (2010), prospect theory has two assumptions. Firstly, it assumes that reflection of history and anticipated gain and loss relative to the stock price purchased. Secondly, assume that investors will not integrate returns across stocks, which means investors consider stocks separately.

Prospect theory suggests that people express a different degree of emotion towards gains than towards losses. According to Zhang and Semmler (2009), economic agents or investors are putting more concerns on the changes in their assets value rather than with the final state in investments. They are more sensitive when they are having losses compared to gains. This theory shows that investors are more painful with a loss than the satisfaction with a gain even then size of loss and gain is the same. Barberis, Mukherjee and Wang (2004) and Kaustia (2010) also found that investors are risk-seeking with respect to losses and risk-averse with respect to gains. Prospect theory explains that investors holding losing stocks because investors' tendency to take more risks to avoid losses than to realize gains. Therefore, investors are taking risks to remain in losing stock position and hope for a bounce back in stock price. In other word, loss aversion can be used to describe this phenomenon.

The loss aversion model in the research of Barberis et al. (2004) pointed out that the return of the stocks in previous period will affect the investors' risk aversion in current period. Therefore, this will also affect the stock market behaviour and caused the stock returns to change unexpectedly. According to Barberis et al. (2004), investors will become risk seekers in the aftermath of profits; in contrast, investors will become risk aversion when they have losses. If initially the stock price increases, more investors will invest and enlarge their investment size, and this will lead to further increase in stock price. However, if the stock price decreases, investors will turns into risk aversion and they will reduce their investment size in the particular stocks.

This situation gives an implication that the demand of stocks will change responding to profit or losses; stock prices will also change due to addition or reduction in investment sizes which is decided by those investors (Barberis et al., 2004). This behaviour will result in volatility enlargement in stock prices and returns. Moreover, this theory suggests that there should be a strong correlation between stocks returns between two continuous periods.

The loss aversion model also pointed out that investors choose to hold losing stocks and sell winning stocks because they believe that losing stocks will soon outperform winning stocks in later period. According to Kaustia (2010), investors might sell their winners and hold onto losers just simply because of their expectation on stocks; return will reverse in future. The mean-reversal investors will have propensity to sell outperforming stocks and hold underperforming stocks, without regard the final result: realizing gains or facing losses. In the other word, prospect theory is interrelated with overreaction and underreaction.

2.2 Conclusion

The literatures review above should have convinced people to have better ideas on the stock market behaviours. The stock prices should be unpredictable in real stock market, violating the EMH assumptions. The investment decision making will lead to different situation of the stock market. If investors are making irrational decisions, the stock market will tend to be inefficient. By right, the market overreaction and underreaction can happen due to different behaviour of investors, such as herding, overconfidence, conservatism, anchoring and loss aversion. Moreover, the inefficiency of market enabled investors to earn abnormal profit though their predictability and momentum strategy.

Chapter 3: Methodology

3.0 Introduction

In this study, time series analysis is applied in order to examine the overreaction and underreaction the two largest and most active sector in the Malaysian stock market.

This chapter includes 3 distinct sections. The first section describes the data collection method used in this study to answer the hypothesis and research questions. The second section describes about the sampling design in this study, it includes the target population and also the software used in order to run the test and obtain the results. Lastly, the third section describes the research design of this study.

3.1 Data Collection Method

The data collected in this study accommodates all stocks from the Trading and Services sector, Industrial Product sector and the price index of Kuala Lumpur Stock Exchange (KLSE). The entire set of data in terms of the price and price index are collected through DataStream and Yahoo! Finance. In this study, the data collected from the two sectors and KLSE are based on monthly basis, mainly from July 2006 to July 2015.

3.2 Sampling Design

3.2.1 Target Population

To observe and investigate the existence of the overreaction and underreaction phenomenon in the Malaysian stock market, widely known as Bursa Malaysia, a targeted population is selected. There are 14 distinctive sectors in the main market of Bursa Malaysia, during the process of selecting the targeted sectors to be observed, a few conditions have been accounted. Based on the Modern Portfolio Theory (MPT), a well-diversified portfolio is needed in order to effectively reduce the unsystematic risk to the minimal level. Based on the research of Statman (1987), the author applied MPT to investigate the number stocks needed to achieve an effective diversification. As a result of the research, a well-diversified portfolio needs to have at least 30 or more stocks to achieve diversification. Thus, the theory of the Central Limit Theorem stated that a sample size must be at least 30 in order to obtain a proper and true result. Therefore, the study eliminates sectors with less than 30 stocks that has a complete data from year 2006 to 2015, in order to perform the data analysis without any result discrepancy, such as, IPC, REITs, Hotels, Close-end Funds, SPAC, Mining and Finance.

After eliminating the irrelevant sectors, this study selected the Trading and Services sector and the Industrial Products sector. It is mainly because both sectors has the highest frequency of being listed as one of the top active sector in Bursa Malaysia and both Trading and Service sector and Industrial Products sector has the highest number of listed stocks among all the other sectors. This allows the study to be able to observe more stocks and able to obtain a better insight of the overreaction and underreaction phenomenon in the Malaysian stock market.

3.2.2 Selected Companies

Two sectors have been selected, which are the trading and services sector and the industrial products sector. In this study, before any further calculation is made, a filtration process of the company monthly prices data is carried out, the study will exclude companies with incomplete or missing data in the time frame of the study, because it is impossible for the all stocks in both of the sectors to have a complete data within the study's time frame which is from July 2006 to July 2015, where some companies might be listed later then year 2006. After filtering out companies without complete data set, companies with complete data are selected for observation. The table below summarizes the number of stocks with complete data in both of the sectors. However, the lists of the selected companies are listed in Appendix 3.2.2.1 and Appendix 3.2.2.2.

Table 3.2.2.1 Number of Selected Companies

Types of Sector	Number of stocks
Trading and Services	136
Industrial Products	199

Source: Developed for the research

3.2.3 Software

In this study, in order to generate and run the result of the model and methodology explained in the later part of this chapter, the only software used in this study is the Microsoft Excel, where data is placed in the spreadsheet accordingly and formulas are input correctly to generate the result of this study.

3.3 Research Design

In this study, it applies, modifies and improves the methodology used by Ali, Ahmad and Anusakumar (2011) to analyze the overreaction and underreaction in Malaysian stock market and relationship between trading volume and overreaction and underreaction effect. This study also employs the methods used by Aguiar and Sales (2010) for analyzing the underreaction and overreaction effect within industries.
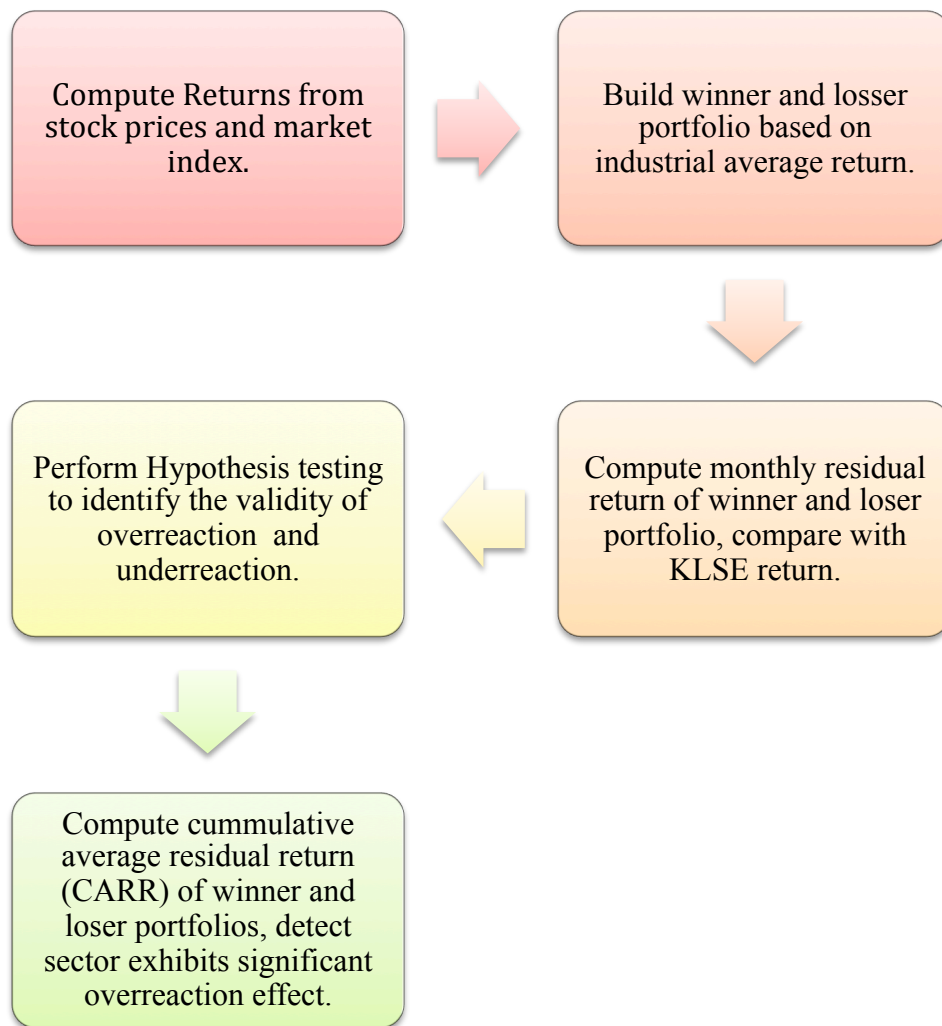
Source: Developed for research

Step 1: Compute the return of selected stocks from the prices and market index.

In this step, we compute and generate the monthly return of stocks from the stock prices and KLSE market price index sourced from Datastream and Yahoo!

Finance. The monthly stock prices and KLSE market price indexes are transformed to return with the following equation:

Monthly stock returns of the selected listed companies are calculated as: P^i_{n+1}

$$R_n = \frac{(P^i_{n+1} - P^i_n)}{P^i_n}$$

Where, R_n = Financial return of stock i in month n.

P^i_n = Price of the stock i in month n.

P^i_{n+1} = Price of stock i in the next month. (Month $n+1$)

Monthly KLSE return is computed as,

$$r^{KLSE}_n = \frac{(INDEX_{n+1} - INDEX_n)}{INDEX_n}$$

Where r^{KLSE}_n = Financial return of the KLSE in month n.

$INDEX_n$ = Price index of KLSE in month n.

$INDEX_{n+1}$ = Price index of KLSE in the next month. (Month $n+1$.)

Step 2: Build winner and loser portfolio based on the industrial average return.

Calculate the $t+1$ average returns of each stock

Calculate the average of all stocks' average fianacial return of the particular sector

Stocks with lower (higher) return than industrial average return will be classified in loser (winner) portfolio for year t.
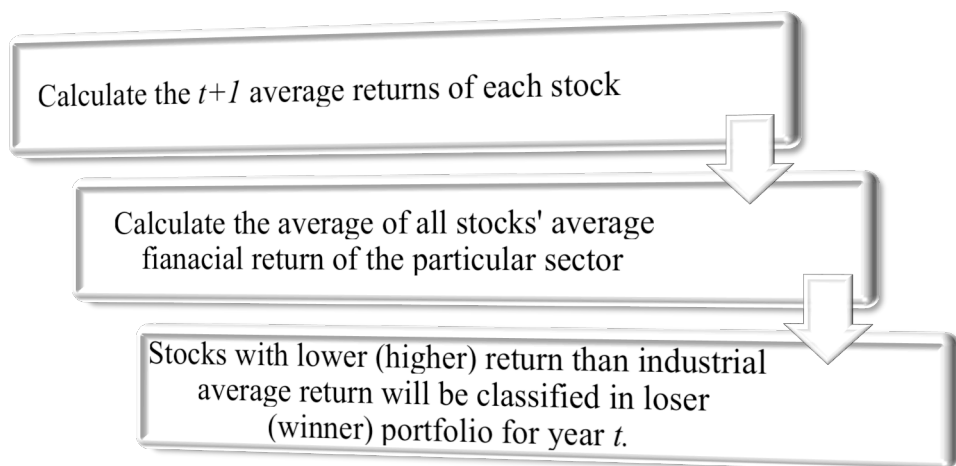
Source: Developed for the research

In this step, a classification of stocks into winning and losing portfolio will be carried out. For each period, which is each six months, based on their performance of the future period $t+1$ the winning portfolio is formed with a combination of promising stocks and the losing portfolio will be formed with a combination of non-promising stock based on each sector. The classification of both winning and losing portfolio will be made in terms of every six months for the period from July 2006 to July 2015 that comprises 18 periods of observations. However, due to the winning and losing portfolios are determined by the future period $t+1$ average return, the study is only able to obtain the winning and losing portfolio for 17 semi-annual periods from July 2006 to December 2014 with the price data from July 2006 to July 2015.

First of all, since the data collection frequency is in a monthly, the average return of six months for each stock is computed. Furthermore, an average value of the average stock returns for every $t+1$ period is computed to group the promising stocks and non-promising stocks into their respective winning and losing portfolio. To group the stocks for every period t, the stocks with a higher average financial return will be placed in the winning portfolio, however, stocks with lower average return will be grouped in the losing portfolio.

By using period $t+1$ during the construction of the winning and losing portfolio, the study is able to identify the future winner and loser stocks. Therefore, the study is able to investigate and observe how the winning stocks and the losing stocks in period $t+1$ perform during period t. This will be able to provide an insight of the pervious stock performances, whether the stocks performed well before they transform into a losing stock in the future? Vice versa.

Step 3: Compute monthly residual return of winner and loser portfolio, compare with the KLSE return.

According to overreaction studies conducted by Aguiar & Sales (2010), Ali et al. (2011) and Aguiar, Sales and Sausa (2008), the winning portfolios' monthly

residual returns and the losing portfolios' monthly residual returns were computed, according to the equations listed as follows:

$$RR_{t,\,n}^{W} = r_{t,\,n}^{W} - r_{t,\,n}^{KLSE}$$

Where $RR_{t,n}^{W}$ = Residual return of the winning portfolio in month n of period t,

$r_{t,n}^{W}$ = Financial return of the winning portfolio in month n of period t,

$r_{t.n}^{KLSE}$ = Financial return of KLSE price index in month n of period t.

$$RR_{t,\,n}^{L} = r_{t,\,n}^{L} - r_{t,\,n}^{KLSE}$$

Where $RR_{t,n}^{L}$ = Residual return of the losing portfolio in month n of period t,

$r_{t,n}^{L}$ = Financial return of the losing portfolio in month n of period t,

$r_{t.n}^{KLSE}$ = Financial return of the KLSE price index in month n of period t.

From the residuals returns corresponding to the 6 months of each semi-annual period, for the year 2006 to 2014, average residual returns of both winning portfolio ARR_{t}^{W} and losing portfolios ARR_{t}^{L} were computed. The idea is to determine and investigate the phenomenon of overreaction and underreaction on **semi-annual** basis. By using the equations listed below the average residual returns were computed:

$$ARR_{t}^{W} = \frac{\sum_{i=1}^{n} RR_{t,k}^{W}}{n}$$

Where ARR_{t}^{W} = Average residual return of winning portfolio in period t.

$RR_{t,k}^{W}$ = Residual return of winning portfolio in month k of period t.

n = Number of months in period t.

$$ARR_t^L = \frac{\sum_{i=1}^{n} RR_{t,k}^L}{n}$$

Where ARR_t^L = Average residual return of losing portfolio in period t

$RR_{t,k}^L$ = Residual return of losing portfolio in month k of period t

n = Number of months in period t.

The study then investigates the exhibits of overreaction or underraction by relating the performance of the winning and losing portfolios throughout the entire study period.

Step 4: Performing the hypothesis testing to identify the validity of overreaction or underreaction.

The study practises parametric t-test for two independent samples, in order to test whether there is a significant difference between the average residual returns. According to Aguiar & Belardi (2013), Aguiar (2012), Aguiar & Sales (2010), and Aguiar et al. (2008), the null hypothesis and the alternative hypotheses are as follows:

$$H_0: ARR_t^W - ARR_t^L = 0 \text{ (No effect)}$$

$$H_{1(A)}: ARR_t^W - ARR_t^L < 0 \text{ (Overreaction)}$$

$$H_{1(B)}: ARR_t^W - ARR_t^L > 0 \text{ (Underreaction)}$$

The null hypothesis will be rejected if the t-statistics figure is lower than the significance level.

The test statistics is listed as follows:

$$\text{T-statistics} = \frac{ARR_t^W - ARR_t^L}{\sqrt{\dfrac{S_{ARR_t^W}^2}{n_{ARR_t^W}} + \dfrac{S_{ARR_t^L}^2}{n_{ARR_t^L}}}}$$

Where ARR_t^W = Average residual returns of winning portfolio

ARR_t^L = Average residual returns of losing portfolio

$S_{ARRt}^2{}^W$ = Standard deviation of the average residual return of winning portfolio

$S_{ARRt}^2{}^L$ = Standard deviation of the average residual return of losing portfolio

$n_{ARRt}{}^W$ = Number of months accounted in calculating winning average residual returns

$n_{ARRt}{}^L$ = Number of months accounted in calculating losing average residual returns.

Step 5: Compute cumulative average residual return (CARR) of winner and loser portfolios; detect sector exhibits significant overreaction effect.

As mention by Aguiar and Sales (2010), in order to prove there is an evidence of significant overreaction (underreaction), the Cumulative Average of Residual Return (CARR) have to be calculated. Therefore, to observe the overall influence of the overreaction and underreaction in the particular sector as a whole, the cumulative average residual return of the wining portfolio ($CARR_n^W$) and losing portfolio ($CARR_n^L$) are computed with the equation listed below:

$$CARR_n^W = \sum_{i=1}^{n} ARR_t^W$$

Where $CARR_n{}^W$ = Cumulative average residual return of winning portfolio from 2006 to 2014

ARR_t^{W} = Average residual return of winning portfolio in
period t

n = Number of periods of the semi-annual periods from
year 2006 to 2014

$$CARR_n^{L} = \sum_{i=1}^{n} ARR_t^{L}$$

Where $CARR_n^{L}$ = Cumulative average residual return of losing
portfolio from 2006 to 2014

ARR_t^{L} = Average residual return of losing portfolio in
period t

n = Number of periods of the semi-annual periods from
year 2006 to 2014

3.4 Conclusion

In this study, time series analysis has explained in details in term of the study of overreaction and underreaction effect. The data collected in this study comprises all the stocks from Trading and Services and Industrial Product sector and stock index in KLSE based on monthly basis where collected from Yahoo! Finance and Datastream. Some formulas have been implemented in this study and hypotheses testing have been carried out in order to examine the results and to show the difference in winning and losing portfolio performance. In this study, the methodology used are adapted and modified from the study of Ali et al. (2011), Ali et al. (2010) and Aguiar and Sales (2010), which analyze the underreaction and overreaction effect within industries. Therefore, the descriptive analysis and the major findings of this study will be discussed in the following chapter.

Chapter 4: Data Analysis

4.0 Introduction

In this chapter, the descriptive data and major findings will be presented. In general, it comprises the detailed data analysis of our results obtained through proper methodology proposed in chapter 3. As for the methodology proposed shows that in the study, portfolios are formed from stocks that are listed in the Bursa Malaysia from the trading and service sector, industrial products sector and also the 50 most active stocks in the main market for equity. Thus, the test for overreaction (underreaction) semi-annually is carried out, the study uses hypothesis testing at three different level of significant which comprises 1%, 5% and 10% to verify results obtained from the test and prove that result obtained shows significant overreaction (underreaction) that persist for at least six months.

4.1 Descriptive Analysis and Interpretation of Results

To start this off, this study accommodates all shares that contains nine years of complete monthly data dated from June 2006 until June 2015 from the trading and service sector and the industrial products sector from the Malaysian stock market also widely known as Bursa Malaysia. Subsequently, with the data obtained, the return of each shares are computed. Furthermore, the winning and losing portfolio of each year is constructed with the average stock returns base on term t+1, with the winning and losing portfolio, the residual return for each year is computed for the respective portfolios (ARR_W and ARR_L) by comparing the portfolio returns with the market index (KLCI index). Thus with the residual returns, a test of overreaction and underreaction is carried out through comparing between the winning and losing portfolio, if the losing portfolio significantly outperform (underperform) the winning portfolio, it exhibits an overreaction (underreaction) issue.

Basically, the empirical findings in the study shows that overreaction is possible to happen in the Malaysian stock market, namely in both trading and service sector and the industrial sector. It is shown that both overreaction happens during the period in between year 2008 to 2009 where that is the crucial period of the Global Financial Crisis, however in the industrial sector, there is also exhibits of overreaction even in the early 2012 and early 2014. Further justification of the overreaction that happens in the two sectors will be explained in detail in the following section. To be precise, the study tabulated a table that shows the average residual returns (ARR_w and ARR_L), the difference between the average residual returns and the significant of the results in three different levels 1%, 5% and 10%. Moving on, charts below will be showing the movement of the winning and losing portfolios to show overreaction effects during the respective periods that overreaction actually happened. Referring to the hypothesis proposed in the previous chapter, the hypothesis testing is performed as below:

Table 4.1.1 Hypothesis Testing

	Overreaction	Underreaction
H_0	$ARR_W - ARR_L = 0$	$ARR_W - ARR_L = 0$
H_1	$ARR_W - ARR_L < 0$	$ARR_W - ARR_L > 0$
Decision Rule	The value of $ARR_W - ARR_L$ is only significant when t-statistics < the significant level	The value of $ARR_W - ARR_L$ is only significant when t-statistics > the significant level
Significance level: 10%	-1.476	1.476
Significance level: 5%	-2.015	2.015
Significance level: 1%	-3.365	3.365

Source: Developed for the research

Table 4.1.2: The average residual return, difference (ARRW-ARRL) and the t-statistics: Trading and services sector

	Date	Period	ARR_w	ARR_L	ARR_W-ARR_L	T-Statistic	
2006	Jul - Dec	T1	1.9827	2.0686	-0.0860	-0.0917	
2007	Jan - Jun	T2	1.5889	2.6642	-1.0754	-1.0402	
	Jul - Dec	T3	1.7811	1.0203	0.7607	0.6258	
2008	Jan - Jun	T4	-1.2462	-1.7761	0.5299	0.6073	
	Jul - Dec	T5	-4.9269	-1.9423	-2.9846	-2.6170	**
2009	Jan - Jun	T6	2.4240	4.1903	-1.7663	-1.3318	
	Jul - Dec	T7	1.5362	1.6532	-0.1171	-0.1380	
2010	Jan - Jun	T8	0.3696	-0.1596	0.5292	0.5628	
	Jul - Dec	T9	2.3482	1.2529	1.0954	0.9814	
2011	Jan - Jun	T10	0.8460	1.2599	-0.4140	-0.3665	
	Jul - Dec	T11	-0.0866	-0.3387	0.2521	0.2005	
2012	Jan - Jun	T12	0.4208	1.3600	-0.9392	-1.0005	
	Jul - Dec	T13	0.3268	0.3000	0.0268	0.0324	
2013	Jan - Jun	T14	1.7159	2.0617	-0.3458	-0.2716	
	Jul - Dec	T15	1.5939	0.7082	0.8857	0.9164	
2014	Jan - Jun	T16	1.1983	1.2641	-0.0658	-0.1195	
	Jul - Dec	T17	-0.2960	-0.4822	0.1862	0.1854	

Source: Developed for the research

Note: *, ** and *** indicates a significant in 10%, 5% and 1% respectively.

Figure 4.1.1 Residual returns for July-December 2008 (T5): Trading and Service sector

	Jul '08	Aug '08	Sep '08	Oct '08	Nov '08	Dec '08
RR_W	-5.3875	1.0722	-2.4319	-4.7550	-12.8772	-5.1816
RR_L	-4.7225	0.3390	-1.1940	-1.7899	-5.9017	1.6153
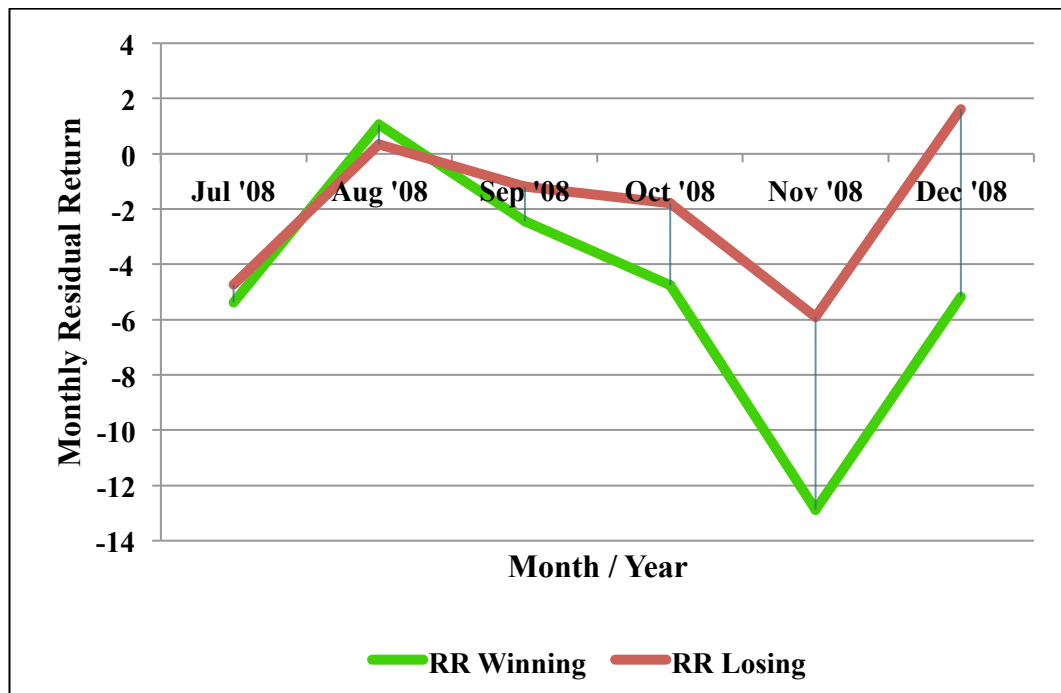
Source: Developed for the research

With the tabulated data at Table 4.1.2, it is proven that a significant overreaction do exist and take place in period T5 which is from July to December year 2008 in the trading and services sector. The average residual return of the losing portfolio (ARR_L) is significantly more than the average residual return of the winning portfolio (ARR_W) at a 5% significant level. Besides, in the entire trading and service sector, there is also evidence of overreaction throughout the period ranging from July 2006 until Dec 2014. It is proven with the computation of the cumulative average residual return of the losing portfolio ($CARR_L$= 15.1047%) that outperforms the cumulative average residual return of the winning portfolio with only ($CARR_W$= 11.5766%).

Thus, in Figure 4.1.1 plotted the monthly residual return of the winning portfolio (RR_W) and the losing portfolio (RR_L), for period T5 that is from July 2008 to Dec 2008. With the chart, the overreaction effect can be showed obviously where in general the line of the RR_L stays above the line of the RR_W due to higher residual return, it clearly portrays the losing portfolio outperforms the winning portfolio in that particular period and serves as an evidence to support the event of overreaction.

Table 4.1.3: The average residual return, difference (ARRW-ARRL) and the t-statistics: Industrial products sector

	Date	Period	ARRW	ARRL	ARRW-ARRL	T-Statistic	
2006	Jul - Dec	i1	3.1074	2.9335	0.1739	0.1283	
2007	Jan - Jun	i2	2.6133	1.9971	0.6162	0.4998	
	Jul - Dec	i3	0.0344	1.0015	-0.9671	-0.6923	
2008	Jan - Jun	i4	-1.5854	-0.9558	-0.6296	-0.5526	
	Jul - Dec	i5	-7.4574	-3.6589	-3.7984	-2.9730	**
2009	Jan - Jun	i6	2.6884	5.1291	-2.4407	-1.4997	*
	Jul - Dec	i7	3.6527	5.4553	-1.8026	-1.6331	*
2010	Jan - Jun	i8	1.1399	1.1789	-0.0391	-0.0282	
	Jul - Dec	i9	1.7762	2.0938	-0.3177	-0.2880	
2011	Jan - Jun	i10	0.3907	1.8428	-1.4521	-1.3337	
	Jul - Dec	i11	0.1879	-0.0493	0.2373	0.1517	
2012	Jan - Jun	i12	0.6625	3.1645	-2.5020	-2.1827	**
	Jul - Dec	i13	-0.1441	-0.2946	0.1505	0.1530	
2013	Jan - Jun	i14	2.3202	3.3470	-1.0268	-0.6787	
	Jul - Dec	i15	2.2135	1.0154	1.1981	0.9325	
2014	Jan - Jun	i16	1.5100	3.0182	-1.5082	-1.6544	*
	Jul - Dec	i17	-0.0422	0.1947	-0.2369	-0.1827	

Source: Developed for the research

Note: *, ** and *** indicates a significant in 10%, 5% and 1% respectively.

However, for industrial products sector in the Malaysian stock market, Bursa Malaysia, there is also evidence of overreaction taking place in several different time periods. With the tabulated data in Table 4.1.3, the average residual return for the winning and the losing portfolio (ARR_W and ARR_L) is shown along with the difference between AAR_W and ARR_L with the t-statistics to portray different significant levels 1%, 5% and 10%. By implementing the proper methodology that is detailed in past chapters, this study found that there are significant evidence to prove that the phenomenon of overreaction does take place in the industrial products sector in the Malaysian stock market, mainly from late 2008 to 2009, early 2012 and also early 2014. Moreover, in period i5 and i12 which is late 2008 and early 2012 it is shown that the AAR_L has outperformed the AAR_W at a 5% significant level whereas for period i6, i7 and i16 it is a 10% significant to prove that the AAR_L has outperform the AAR_W and exhibits that overreaction happens.

Furthermore, the CARR for the industrial products sector is computed to assess the overall overreaction effect in the industrial products sector. As a result, it signifies that the industrial sector as a whole is influenced by the overreaction effect over the eight and a half years period, where obviously that the losing portfolio's $CARR_L = 27.4133\%$ has outperformed the winning portfolio's $CARR_W = 13.0680\%$.

The result of the study shows an identical pattern where there is evidence of overreaction in both trading and services sector and industrial products sector in the period between 2008 and 2009. This identical coincidence can be supported where at that period of time between year 2008 to 2009 is the outburst of the Global Financial crisis, therefore it is believe that it is one of the factor that leads to an abnormal event to occur.

Moving on, below is the section where line graphs plotting the residual returns of the winning and losing portfolios are plotted for periods with the evidence of overreaction to prove a better insight of an overreaction.

Figure 4.1.2 Residual return for July-December 2008 (i5): Industrial Products sector

	Jul '08	Aug '08	Sep '08	Oct '08	Nov '08	Dec '08
RR_W	-9.4064	-0.6560	-4.8631	-8.2493	-16.6997	-4.8697
RR_L	-6.5604	-1.8397	0.8116	-3.0564	-10.8275	-0.4811
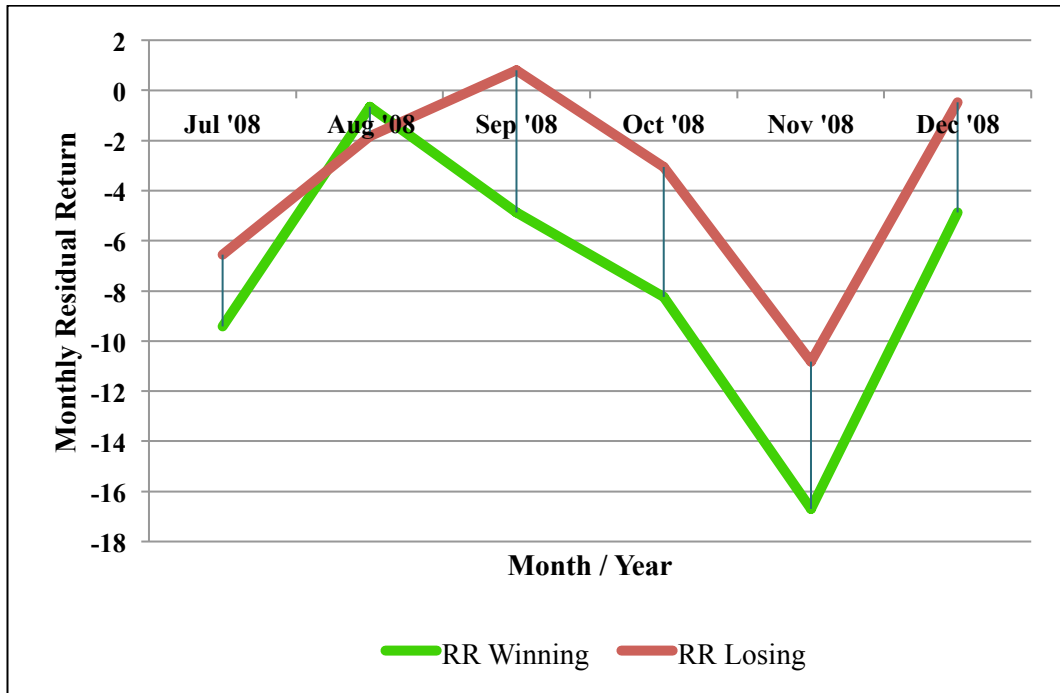
Source: Developed for the research

Figure 4.1.3 Residual return for January-June 2009 (i6): Industrial Products sector

	Jan '09	Feb '09	Mar '09	Apr '09	May '09	Jun '09
RR_w	-0.7671	2.6163	-0.9202	-0.5682	13.0152	2.7543
RR_L	5.1689	-2.9842	-5.1296	-1.5507	21.4405	13.8296
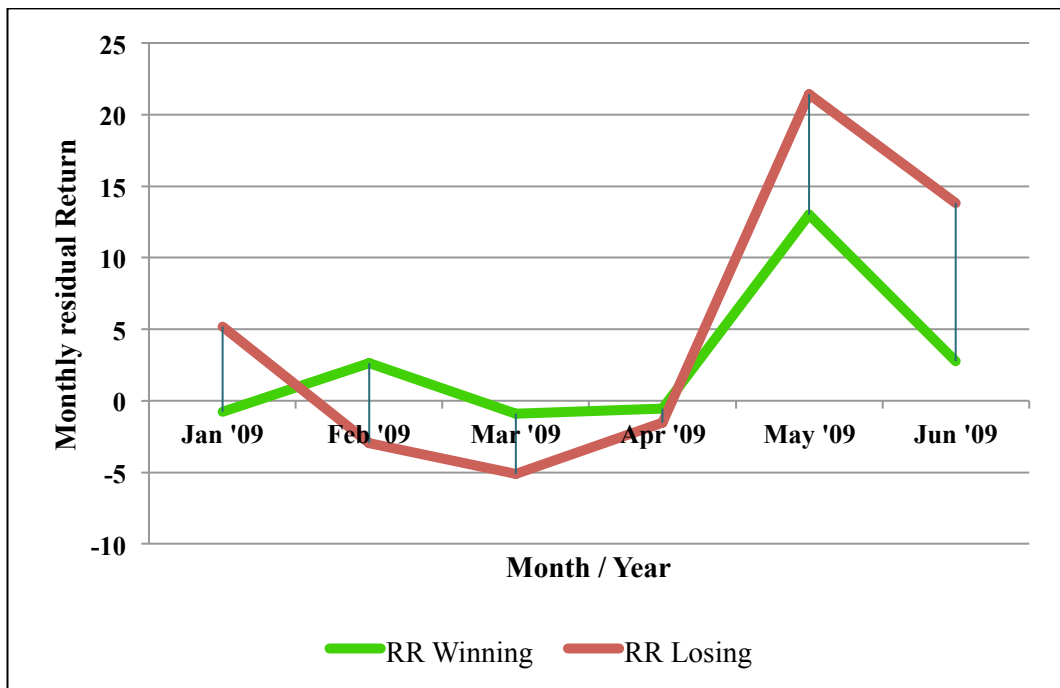
Figure 4.1.4 Residual return for July-December 2009 (i7): Industrial Products sector

	Jul '09	Aug '09	Sep '09	Oct '09	Nov '09	Dec '09
RR$_w$	2.5304	9.2313	2.4475	1.7435	6.8083	-0.8448
RR$_L$	8.3674	9.2852	3.5490	6.7023	5.5051	-0.6772
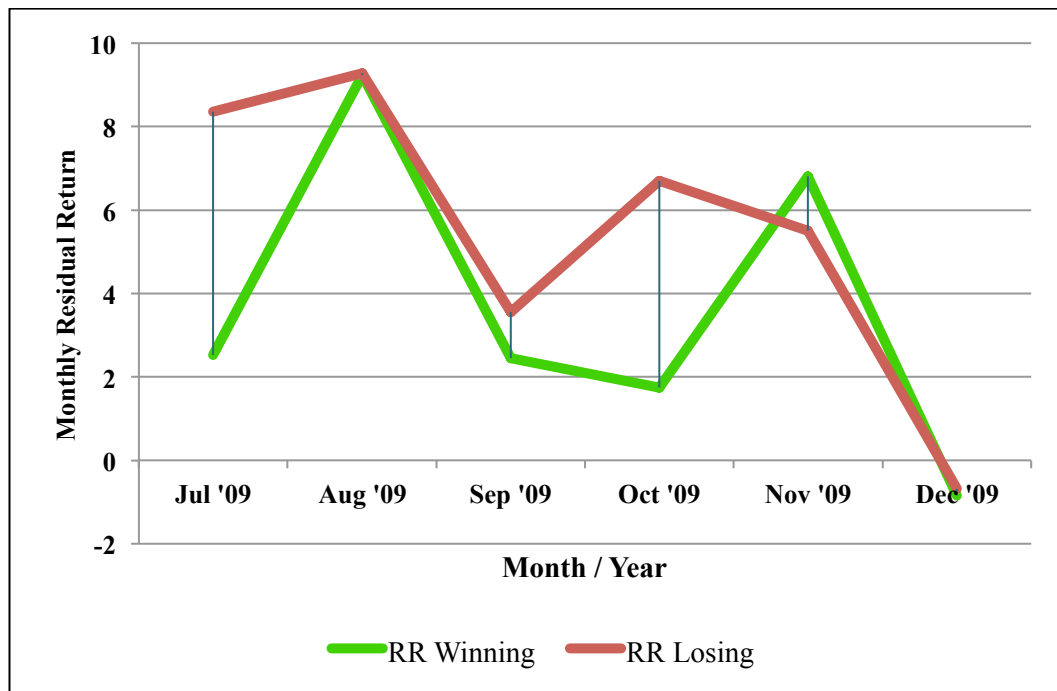
Figure 4.1.5 Residual return for January-June 2012 (i14): Industrial Products sector

	Jan '12	Feb '12	Mar '12	Apr '12	May '12	Jun '12
RR$_w$	1.7716	5.4238	1.0098	-1.1452	0.6114	-3.6964
RR$_L$	0.0115	7.7068	-1.1669	-1.6585	4.3582	9.7362
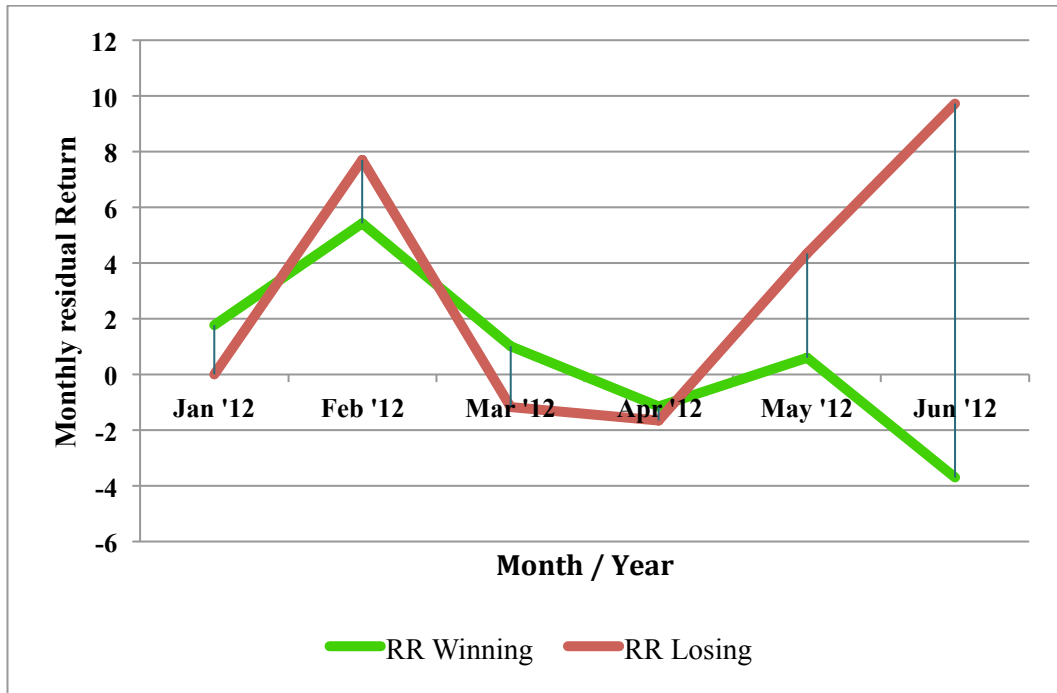
Source: Developed for the research

Figure 4.1.6 Residual return for Jan-Jun 2014 (i16): Industrial Products sector

	Jan '14	Feb '14	Mar '14	Apr '14	Jun '14	Jul '14
RR_w	1.0829	1.7540	3.1096	1.8045	2.4145	-1.1054
RR_L	-1.3396	1.4416	4.5235	8.3490	4.7910	0.3439
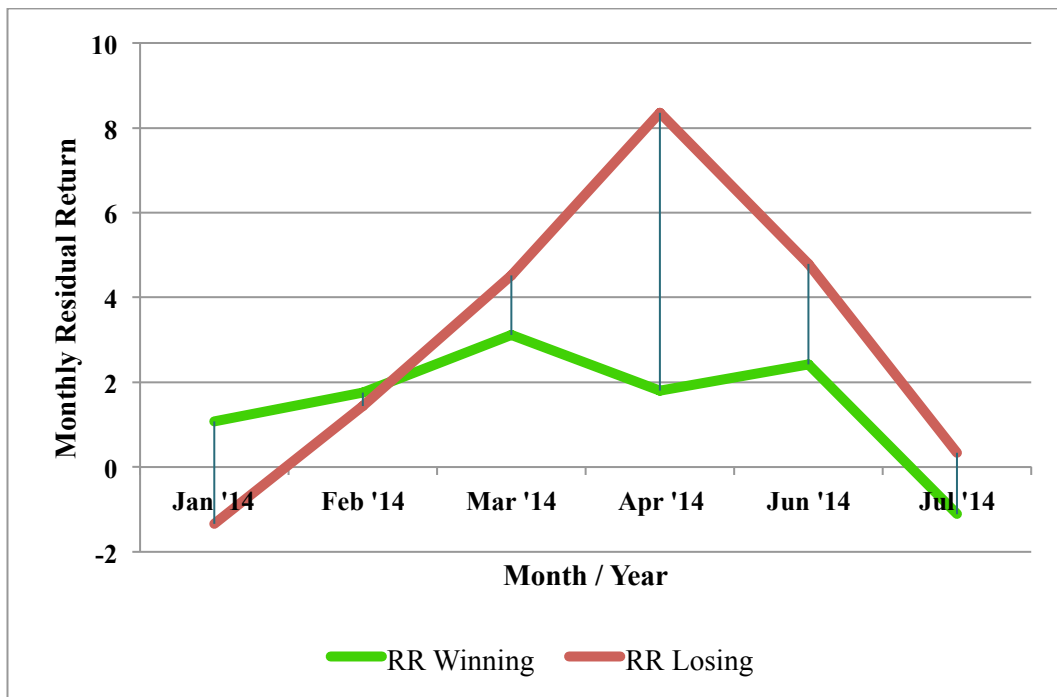
Source: Developed for the research

With the plotted figure, Figure 4.1.2, 4.1.3, 4.1.4, 4.1.5 and 4.1.6 the overreaction effect can be shown clearly where in all the five graphs averagely most of the period the residual return line of the losing portfolio stays above the residual return line of the winning portfolio. With this, the study is able to prove that overreaction does happen in the few particular period mention above graphically. Besides, periods with better significant of the negative difference of ARR_W-ARR_L for instance, period i5 and i12 their respective graph will show more and higher difference between both residual return lines and the gap between both line will be larger. In order to provide a better picture of the computation on how to obtain the residual return (RR), average residual return (ARR) and t-statistics, workings in terms of excel computation for periods with overreaction effects are shown in Appendix 4.1.1 and Appendix 4.1.2

4.2 Major Findings of the Study

The results of the study clearly show that overreaction could possibly happen in the Malaysian stock market, widely known as Bursa Malaysia. With the model, the study is able to examine and obtained a result where in the trading and service sector, overreaction happens in the late 2008 (July – December), which is in the period T5. However, as for the industrial products sector the frequency of the event where overreaction happens is more compared to the trading and services sector. There are evidences of overreaction in the industrial products sectors in the late 2008 until year 2009, early 2012 and also early 2014, which happens to be in the period i5, i6, i7, i12 and i16. There are many factors that could actually ignite the problem of overreaction or underreaction in the stock market. According to the research of Ali et al. (2010), overreaction in the Malaysian stock market can be ignited by many factors, mainly overreaction will take place if there is any abnormal economic events, adverse political events and certain surprise domestic events is significant to cause overreaction in the stock market to happen. Surprisingly, there is no significant evidence that the Malaysian stock market

exhibits overreaction behaviour, although both of these international events, Gulf Crisis and the Invasion of Iraq takes place, where both involves and affect oil production countries (Ali et al., 2010). Besides, it is believe that normally a certain bad news in that particular country might also be one of the reasons that leads to stock market to have adverse effects such as overreaction (underreaction). The findings in research of Kahneman and Tversky (1982) support that, most of the investors or individuals will put a larger emphasis on the unexpected bad news rather than the good news. This eventually shows that as compared to the positive news on the stock market, investors tend to overestimate the effect of the negative news. Thus this will propel a greater overreaction and return reversal of loser stock subsequently.

Furthermore, in both sectors, overreaction takes place in between late 2008 until year 2009, the main reason of such event could happen in this time frame is mainly due to the outburst of the Global Financial Crisis, it is believed that the Global Financial Crisis is at the peak during that period of time. This shows that Malaysian investors will generally have overreacting responds towards crisis. There will be a significant effect in terms of the investor's behaviour during a systematic crisis is taking place, especially in terms of investor's decision making in buying, selling or holding of stocks (Osili and Paulson, 2009). In the case of Malaysia, when investors react to bad new during crisis, they tend to change their behaviour and decision made more than they normally would. Moreover, according to the research of Tai (2014), in responding to crisis, investor's behaviour tends to cause overreaction also in the United States and the Chinese stock market.

4.3 Conclusion

This study analyzes the data of shares of trading and service sector and industrial sector, from June 2006 until July 2015. Firstly, stock returns of each share are computed after obtained from Datastream. Then, by comparing stock returns and the market index, winning portfolio and losing portfolio of every period and the residual return for each period is also computed. The last step of data analysis in

this chapter is to test the occurrence of overreaction and underreaction of the stocks, by using t-statistic test. Interpretations, tables and graphs also included in this chapter to explain and show the overreaction and underreaction in Malaysian stock market. For trading and service sector, there is an overreaction in period T5, whereas in industrial sector; there are overreactions in period i5, i6, i7, i12 and i16. The overreactions occurred during year 2008 to 2009 are believed that they were caused by the global financial crisis. According to Ali et al. (2010), the overreaction and underreaction that happen in Malaysia could be a result of other factors such as abnormal economic events, adverse political events and certain surprise domestic events.

Chapter 5: Discussion, Conclusion, Implications

5.0 Introduction

In this chapter, a table of summary of statistical analysis of both trading and service sector and industrial sector is presented. Policy implications are included in this chapter, including the policy implications for investors, current researchers and also future researchers. Moreover, the limitations of this study as well as the recommendations for future researches are also showed in this chapter.

5.1 Summary of Statistical Analysis

Table 5.1.1: Summary of findings and statistical result

Date		Period	Trading and services	Industrial products
2006	Jul - Dec	1		
2007	Jan - Jun	2		
	Jul - Dec	3		
2008	Jan - Jun	4		
	Jul - Dec	5	✓	✓
2009	Jan - Jun	6		✓
	Jul - Dec	7		✓
2010	Jan - Jun	8		
	Jul - Dec	9		
2011	Jan - Jun	10		
	Jul - Dec	11		
2012	Jan - Jun	12		✓
	Jul - Dec	13		
2013	Jan - Jun	14		
	Jul - Dec	15		
2014	Jan - Jun	16		✓
	Jul - Dec	17		

Source: Developed for the research

Note: ✓ represents the presents of overreaction effect.

As a summary for the result obtained from the model of the study, Table 5.1.1 is tabulated. In terms of the trading and service sector, overreaction only happened in the late year 2008 (July-December), which is in the period T5. However, for the industrial products sector, evidence of overreaction is found from the late 2008 including the entire year 2009, early 2012 and also in January – June in year 2014. Therefore, this could prove that rather than reacting rationally in the efficient market, Malaysian investors tend to react adversely or disproportionally on any surprise events or news. As also mention in the study of Ali et al. (2010), investors might react in an irrational way that leads to overreaction if there are any abnormal economic events or any surprises in the political news. It is found that the overreaction effect in both sectors during the time period from year 2008 to year 2009 is mainly related to the event of the Global Financial Crisis. During such adverse economic event, investors tend to lose confidence or panic which eventually results in disproportional in investment decision making.

5.2 Policy Implications

In previous chapter, the results show that there were changes of stocks' winning and losing status, and also the effect of overreaction and underreaction throughout the years. This study is mainly acts as a guidance for investors' understanding in the Malaysian stock market, where there will be possibilities that a "junk" share will turn into a piece of "gold" which is the situation where a losing stock has greater performance than a winning stock. Investors should have a more enhanced knowledge on the Efficient Market Hypothesis, which the historical price will reflect all the information of the stocks. This study shows investors that this theory will not always work in stock market; it actually claims that stock prices will be changing randomly but not following any trend. Moreover, this study has also advice readers to stop being overconfident on choosing stocks to invest. Investors should behave more rationally while trading shares, instead of keep following on wrong information and judgment and at last lead to a loss due to overreaction. As in research of Huang, Chan, Huang and Chang (2011), this study also suggest that investors need to look into a company's corporate governance

during investment because a company with better corporate governance will give positive stock return and also able to stabilize stock prices even in financial crisis.

To avoid chances of being involved in overreaction or holding a losing stock that is initially a winner, investors should not be influenced by the behaviour of other irrational investors and constantly buying winning stocks. The belief regarding winners will always be winners should have been removed to prevent from suffering huge losses. However, if investors are involved in this overreaction phenomenon, investors can embrace a strategy, which is selling winning stocks and buying losing stocks in previous period. Investors are encouraged to apply this strategy especially during future financial crisis, as this strategy is applicable in financial crisis in year 2007 to 2008, where overreaction takes place. While there is an underreaction phenomenon, another strategy should have applied. Investors are recommended to sell losing stocks and meanwhile buy winning stock in past period since the winning stocks will still outperform the losing stocks during underreation phenomenon. Investors and readers are encouraged to preview the stocks companies' performance so that risk will be slightly reduced during investment. Moreover, investors can implement the prospect theory into their investment toward gains and losses by using portfolio to identify future gains or losses (Barberis & Huang, 2008).

This study also provides a fundamental knowledge to potential researchers, as well as current researchers. This study shows that theory applied in behavioural finance is applicable in real world stock market. Efficient Market Hypothesis is weak when there is an overreaction; it is strong when there is an underreaction. As in other researches, this study has proved that the existence of the phenomenon of overreaction and underreaction in the Malaysian stock market.

There are different methodologies or formulae can be used to run the data test. In this study, few methodologies from different researches are applied. Stock return computation to obtain each and every stock's return in every period, residual return computation, to separate between winning stock and losing stock (Aguiar & Sales, 2010), (Ali et al., 2011) and (Aguiar et al. 2008), hypothesis testing to differentiate overreaction and underreaction (Aguiar & Belardi, 2013), (Aguiar,

2012), (Aguiar & Sales, 2010) and (Aguiar et al., 2008) and t-statistic formula to test the significances. These methodologies are applied together to compute on the stocks for both of the sectors, the trading and services sector and the industrial products sector in terms of number of companies and they are top active industries listed in Bursa Malaysia. The methodology used in this study has successfully test out the effect of overreaction and underreaction in Malaysia stock market. Through this study, potential researchers should have a brighter idea about basic of behavioural finance especially towards Malaysia stock market. Thus, in both developed and emerging stock market, behavioural finance is a rapidly growing field (Toh and Ahmad, 2010) Hence, researchers should consider serving this study as a basis and employ them to study if loser portfolios outperform winner portfolios causing overreaction phenomenon in the past, and thus allowing the prediction of future behaviours, in different countries and time scope.

5.3 Limitations of Study

In the midst of conducting the study, there are some limitations found. First and foremost, time constraint is one of the biggest challenge and limitation in this study. Because of the time constraint, the study is only able to observe two of the largest sector, which is the trading and services and the industrial products sector, due to the tedious calculation in the methodology and the need of observing a total of 335 companies is tremendously time consuming. This results in the inability to prove or to show evidence of overreaction (underreaction) in other sectors or the entire stock market as a whole.

Furthermore, in order to detect and investigate the overreaction phenomenon, the study used a set of monthly data from June 2006 to June 2015 and examine in a semi-annual manner, thus it will only able to capture any effects that persist for at least half a year or six months long. In other words, the model will not be able to detect any overreaction or underreaction if it only happens for less than six months long, for instance, maybe a month or a week.

5.4 Recommendations for Future Researches

There are a few recommendations for future researcher in this research topic area to improve the result and provide more implication in the aspect of this study. Researchers are recommended to wisely choose time period and terms of data research. Future researchers are suggested to use weekly or even daily data to carry out this study, therefore it will be able to detect the overreaction (underreaction) phenomenon in a higher frequency. Thus, even if the overreaction effect takes place for only a month or a week can be captured.

Sufficient time in preparing this research would bring benefit into this research. Researchers would be able to explore more relevant research by observing more relevant methodology and adapting into their research. However, some methodology might be very time consuming, therefore it will provide a better discovery and more significance in the aspect of this study.

Besides, it is recommended that, future researcher can accommodate more sectors or even all the sector in the KLSE. Therefore, it will be able to show evidence that, whether the overreaction phenomenon take place in the other sectors or the overall stock market as a whole.

5.5 Conclusion

In conclusion, this study has proved that there are investors who act irrationally towards the stock market in Malaysia. This irrational behaviour has caused the phenomenon of overreaction and underreaction to take place in the Malaysian stock market. Therefore, this study has look into two largest top active sectors in Malaysia stock market, which are industrial products and trading, and services, starts from year 2006 to 2015. Besides, by looking in depth in semi-annual basis, the effect of overreaction and underreaction will be more obvious. As it is one of the strength of this study, where this study is able to detect overreaction (underreaction) that persist even for six months long. Unlink many past

researches, which take into account an annual basis data, the researches are only able to detect the overreaction or underreaction phenomenon if it exists for at least one year long. This eventually make this study more accurate in terms of testing on whether overreaction or underreaction exist in the Malaysian stock market.

Lastly, the findings show that during July to December 2008, there was an overreaction happened in Trading and Services sector, and it is believed to be caused by the global financial crisis. Meanwhile, in Industrial Products sector, there are also overreactions happened started from July 2008 until December 2009, January to June of 2012 and also January to June of 2014. With the findings in this study, it is able to prove and show evidence that, investor psychological traits may have a profound impact toward the stock market in Malaysia. Thus, this study urges fellow readers and Malaysian investors to be more conscious in this area.

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APPENDIXES

Appendix 3.2.2.1 Selected company stocks for Trading and Service Sector

Listed Company Stocks	Stock Number
ADVANCE SYNERGY BHD	1481.KL
AEON CO(M) BHD	6599.KL
AHB HOLDINGS BHD	7315.KL
AIRASIA BHD	5099.KL
ALAM MARITIM RES BHD	5115.KL
AMWAY (MAL) HDG BHD	6351.KL
ANALABS RESOURCES BHD	7083.KL
ATLAN HOLDINGS BHD	7048.KL
AWC BHD	7579.KL
AYS VENTURES BHD	5021.KL
BERJAYA CORP. BHD	3395.KL
BERJAYA LAND BHD	4219.KL
BERJAYA MEDIA BHD	6025.KL
BERJAYA SPORTS TOTO BHD	1562.KL
BINTAI KINDEN BHD	6998.KL
BINTULU PORT HOLDINGS BHD	5032.KL
BORNEO OIL BHD	7036.KL
BOUSTEAD HOLDINGS BHD	2771.KL
BRAHIM'S HOLDINGS BHD	9474.KL
CENTURY LOGISTICS HDG BHD	7117.KL
CHEETAH HOLDINGS BHD	7209.KL
CHUAN HUAT RESOURCES BHD	7016.KL
CNI HOLDINGS BHD	5104.KL
COMPUGATES HOLDINGS BHD	5037.KL
CYCLE & CARRIAGE BINTANG BHD	2925.KL
DAYA MATERIALS BHD	0091.KL
DESTINI BHD	7212.KL
DIALOG GROUP BHD	7277.KL
DKSH HDG(MALAYSIA) BHD	5908.KL

EASTLAND EQUITY BHD	2097.KL
EDARAN BHD	5036.KL
EDEN INC. BHD	7471.KL
EFFICIENT E-SOLUTIONS BHD	0064.KL
EMAS KIARA INDUSTRIES BHD	7189.KL
ENGTEX GROUP BHD	5056.KL
ESTHETICS INTERNATINALGROUP BHD	5081.KL
FIAMMA HOLDINGS BHD	6939.KL
FITTERS DIVERSIFIED BHD	9318.KL
FREIGHT MANAGEMENT HDG BHD	7210.KL
FRONTKEN CORPORATION BHD	0128.KL
FSBM HOLDINGS BHD	9377.KL
GD EXPRESS CARRIER BHD	0078.KL
GENTING BHD	3182.KL
GENTING MALAYSIA BHD	4715.KL
GEORGE KENT (MAL) BHD	3204.KL
HAI-O ENTERPRISE BHD	7668.KL
HAISAN RESOURCES BHD	7110.KL
HAP SENG CONSOLIDATED BHD	3034.KL
HARBOUR-LINK GROUP BHD	2062.KL
HARRISONS HDG(MAL) BHD	5008.KL
HUBLINE BHD	7013.KL
INTEGRATED LOGISTICS BHD	5614.KL
IPMUDA BHD	5673.KL
JIANKUN INTERNATIONAL BHD	8923.KL
JOBSTREET CORPORATION BHD	0058.KL
KAMDAR GROUP (M) BHD	8672.KL
KBES BHD	5079.KL
KEJURUTERAAN SAMUDRA TIMUR BHD	7185.KL
KNUSFORD BHD	5035.KL
KONSORTIUM TRANSNASIONAL BHD	4847.KL
KPJ HEALTHCARE BHD	5878.KL
KPS CONSORTIUM BHD	9121.KL

KUB MALAYSIA BERHAD	6874.KL
KUMPULAN FIMA BHD	6491.KL
KUMPULAN PERANGSANG SELANGOR BHD	5843.KL
LFE CORPORATION BHD	7170.KL
LION FOREST INDUSTRIES BHD	8486.KL
M-MODE BHD	0059.KL
MAGNUM BHD	3859.KL
MALAYAN UNITED INDUSTRIES BHD	3891.KL
MALAYSIA AIRPORTS HOLDINGS BHD	5014.KL
MALAYSIAN BULK CARRIERS BHD	5077.KL
MARCO HOLDINGS BHD	3514.KL
MBM RESOURCES BHD	5983.KL
MEDIA PRIMA BHD	4502.KL
MEGA FIRST CORP. BHD	3069.KL
MESB BHD	7234.KL
METRONIC GLOBAL BHD	0043.KL
MISC BHD	3816.KL
MMC CORPORATION BHD	2194.KL
MULPHA INTERNATIONAL BHD	3905.KL
NAIM INDAH CORP. BHD	4464.KL
NATIONWIDE EXPRCOURIER SERVICES BHD	9806.KL
NCB HOLDINGS BHD	5509.KL
NOMAD GROUP BHD	8508.KL
OCB BHD	5533.KL
OLYMPIA INDUSTRIES BHD	3018.KL
PANSAR BHD	8419.KL
PARKSON HOLDINGS BHD	5657.KL
PBA HOLDINGS BHD	5041.KL
PDZ HOLDINGS BHD	6254.KL
PERAK CORP. BHD	8346.KL
PERDANA PETROLEUM BHD	7108.KL
PERISAI PETROLEUM TEKNOLOGI	0047.KL
PERMAJU INDUSTRIES BHD	7080.KL

PETROL ONE RESOURCES BHD	7027.KL
PETRONAS DAGANGAN BHD	5681.KL
PHARMANIAGA BHD	7081.KL
PJBUMI BHD	7163.KL
POS MALAYSIA BHD	4634.KL
PROGRESSIVE IMPACT CORP. BHD	7201.KL
RELIANCE PACIFIC BHD	8885.KL
RGB INTERNATIONAL BHD	0037.KL
SALCON BHD	8567.KL
SAMCHEM HOLDINGS BHD	5147.KL
SANBUMI HDG BHD	9113.KL
SCICOM MSC BHD	0099.KL
SCOMI GROUP BHD	0161.KL
SCOMI ENERGY SERVICES BHD	7045.KL
SEE HUP CONSOLIDATED BHD	7053.KL
SEG INTERNATIONAL BHD	9792.KL
SENI JAYA CORPORATION BHD	9431.KL
SIME DARBY BHD	4197.KL
STAR MEDIA GROUP BHD	6084.KL
SUIWAH CORPORATION BHD	9865.KL
SUMATEC RESOURCES BHD	1201.KL
SURIA CAPITAL HOLDINGS BHD	6521.KL
SYMPHONY HOUSE BHD	0016.KL
TALIWORKS BHD	8524.KL
TANJUNG OFFSHORE BHD	7228.KL
TELEKOM MALAYSIA BHD	4863.KL
TENAGA NASIONAL BHD	5347.KL
TEXCHEM RESOURCES BHD	8702.KL
TH HEAVY ENGINEERING BHD	7206.KL
THE STORE CORPORATION BHD	5711.KL
TIONG NAM LOGISTHDG BHD	8397.KL
TMC LIFE SCIENCES BHD	0101.KL
TRANSOCEAN HOLDINGS BHD	7218.KL

UEM EDGENTA BHD	1368.KL
UMS HOLDINGS BHD	7137.KL
UNIMECH GROUP BHD	7091.KL
UTUSAN MELAYU (MALAYSIA) BHD	5754.KL
WARISAN TC HOLDINGS BHD	5016.KL
WIDETECH (MALAYSIA) BHD	7692.KL
YFG BHD	7122.KL
YINSON HOLDINGS BHD	7293.KL
YONG TAI BHD	7066.KL
YTL CORPORATION BHD	4677.KL

Appendix 3.2.2.2 Selected company stocks for Industrial Products Sector

Listed Company Stocks	Stock Number
A-RANK BHD	7214.KL
ABLEGROUP BHD	7086.KL
ABRIC BHD	7061.KL
ACME HOLDINGS BHD	7131.KL
ADVANCED PACKTECH(M) BHD	9148.KL
ADVENTA BHD	7191.KL
AE MULTI HOLDINGS BHD	7146.KL
AJIYA BHD	7609.KL
ALUMINIUM COOF MAL BHD	2674.KL
AMALGAMATED INDLSTEEL BHD	2682.KL
ANCOM BHD	4758.KL
ANN JOO RESOURCES BHD	6556.KL
APB RESOURCES BHD	5568.KL
APM AUTOMOTIVE HDG BHD	5015.KL
ASIA KNIGHT BHD	9954.KL
ASTINO BHD	7162.KL
ASTRAL SUPREME BHD	7070.KL
ATURMAJU RESOURCES BHD	7181.KL
BIG INDUSTRIES BHD	7005.KL

BOON KOON GROUP BHD	7187.KL
BOUSTEAD HEAVY INDS BHD	8113.KL
BOX-PAK (MALAYSIA) BHD	6297.KL
BP PLASTICS HOLDING BHD	5100.KL
BRIGHT PACKAGING INDUSTRIES BHD	9938.KL
BSL CORP. BHD	7221.KL
BTM RESOURCES BHD	7188.KL
CAHYA MATA SARAWAK BHD	2852.KL
CAN-ONE BHD	3522.KL
CB INDUSTRIAL PRODUCT HOLDINGS BHD	7076.KL
CCM DUOPHARMA BIOTECH BHD	7148.KL
CENTRAL INDUSTRIAL CORP. BHD	8052.KL
CENTURY BOND BHD	7171.KL
CHIN WELL HOLDINGS BHD	5007.KL
CHOO BEE METAL INDUSTRIAL BHD	5797.KL
CME GROUP BHD	7018.KL
CN ASIA CORP. BHD	7986.KL
COASTAL CONTRACTS BHD	5071.KL
COMINTEL CORPORATION BERHAD	7195.KL
COMPUTER FORMS MALAYSIA BHD	8044.KL
CONCRETE ENGINEERING PRODUCTS BHD	8435.KL
CSC STEEL HOLDINGS BHD	5094.KL
CYL CORP. BHD	7157.KL
CYMAO HOLDINGS BHD	5082.KL
D'NONCE TECHNOLOGY BHD	7114.KL
DAIBOCHI PLASTIC & PACKAGING INDUSTRY BHD	8125.KL
DENKO INDUSTRIAL CORP. BHD	8176.KL
DOLOMITE CORP. BHD	5835.KL
DOMINANT ENTERPRISE BHD	7169.KL
DRB-HICOM BHD	1619.KL
EG INDUSTRIES BHD	8907.KL
EKSONS CORP. BHD	9016.KL

EONMETALL GROUP BHD	7217.KL
EP MANUFACTURING BHD	7773.KL
EVERGREEN FIBREBOARD BHD	5101.KL
FACB INDUSTRIES INC. BHD	2984.KL
FIMA CORPORATION BHD	3107.KL
THREE-A RESSOURCED BHD	0012.KL
AMANAH HARTA TANAH PNB	4952.KL
GE-SHEN CORPORATION BHD	7197.KL
GOH BAN HUAT BHD	3611.KL
GOLDEN PHAROS BHD	5649.KL
GOODWAY INTEGRATED INDUSTRIAL BHD	7192.KL
GPA HOLDINGS BHD	7096.KL
GSB GROUP BHD	7077.KL
GUH HOLDINGS BHD	3247.KL
HARVEST COURT INDUTRIES BHD	9342.KL
HCK CAPITAL GROUP BHD	7105.KL
HEVEABOARD BHD	5095.KL
HEXZA CORPORATION BHD	3298.KL
HIAP TECK VENTURE BHD	5072.KL
HIL INDUSTRIES BHD	8443.KL
HO WAH GENTING BHD	9601.KL
HUME INDUSTRIES BHD	5000.KL
IDEAL UNITED BINTANG BHD	9687.KL
IMASPRO CORPORATION BHD	7222.KL
INTEGRATED RUBBER CORPORATION BHD	2127.KL
IRE-TEX CORPORATION BHD	7183.KL
IRM GROUP BHD	7220.KL
JADI IMAGING HOLDINGS BHD	7223.KL
JASA KITA BHD	8648.KL
JAVA BHD	2747.KL
JAYA TIASA HOLDINGS BHD	4383.KL
JMR CONGLOMERATION BHD	7043.KL
JOHORE TIN BHD	7167.KL

KARYON INDUSTRIES BHD	0054.KL
KECK SENG (MALAYSIA) BHD	3476.KL
KEIN HING INTERNATIONAL BHD	7199.KL
KIA LIM BHD	6211.KL
KIAN JOO CAN FACTORY BHD	3522.KL
KIM HIN INDUSTRY BHD	5371.KL
KINSTEEL BHD	5060.KL
KKB ENGINEERING BHD	9466.KL
KNM GROUP BHD	7164.KL
KOBAY TECHNOLOGY BHD	6971.KL
KOMARKCORP BHD	7017.KL
KOSSAN RUBBER INDUSTRIES BHD	7153.KL
KUMPULAN H&L HIGH-TECH BHD	7033.KL
KUMPULAN POWERNET BHD	7130.KL
KYM HOLDINGS BHD	8362.KL
LAFARGE MALAYSIA BHD	3794.KL
LB ALUMINIUM BHD	9326.KL
LCTH BHD	5092.KL
LEADER STEEL HOLDINGS BHD	9881.KL
LEWEKO RESOURCES BHD	8745.KL
LION CORPORATION BHD	3581.KL
LION DIVERSIFIED HOLDINGS BHD	2887.KL
LION INDUSTRIES CORPORATION BHD	4235.KL
LUSTER INDUSTRIES BHD	5068.KL
LYSAGHT GALVANIZED STEEL BHD	9199.KL
MALAYSIA STEEL WORKS(KL) BHD	5098.KL
SINO HUA-AN INTERNATIONAL BHD	2739.KL
MALAYSIA PACKAGING INDUSTRIAL BHD	8095.KL
MALAYSIA SMELTING CORPORATION BHD	5916.KL
MASTER-PACK GROUP BHD	7029.KL
MELEWAR INDUSTRIAL GROUP BHD	3778.KL
MENTIGA CORPORATION BHD	5223.KL
MERCURY INDUSTRIES BHD	8192.KL

METAL RECLAMATION BHD	7059.KL
METROD HOLDINGS BHD	6149.KL
MIECO CHIPBOARD BHD	5001.KL
MINETECH RESOURCES BHD	7219.KL
MINHO (M) BHD	5576.KL
ML GLOBAL BHD	7595.KL
MUDA HOLDINGS BHD	3883.KL
MULTI-CODE ELECTRONICS INDUSTRIES(M) BHD	7004.KL
MYCRON STEEL BHD	5087.KL
NAKAMICHI CORPORATION BHD	7002.KL
NWP HOLDINGS BHD	5025.KL
NYLEX (MALAYSIA) BHD	4944.KL
OCTAGON CONSOLIDATED BHD	7109.KL
OKA CORPORATION BHD	7140.KL
ORNAPAPER BHD	5065.KL
P.A. RESOURCES BHD	7225.KL
PENSONIC HOLDINGS BHD	9997.KL
PERUSAHAAN SADUR TIMAH MALAYSIA(PERSTIMA) BHD	5436.KL
PETRON MALAYSIA REFINING & MARKETING BHD	3042.KL
PETRONAS GAS BHD	6033.KL
PIE INDUSTRIAL BHD	7095.KL
PMB TECHNOLOGY BHD	7172.KL
PNE PCB BHD	6637.KL
POLY GLASS FIBRE (M) BHD	8117.KL
PREMIUM NALFIN BHD	9458.KL
PRESS METAL BHD	8869.KL
PRESTAR RESOURCES BHD	9873.KL
PRG HOLDINGS BHD	7168.KL
PRICEWORTH INTERNATIONAL BHD	7123.KL
PUBLIC PACKAGES HDG BHD	8273.KL
QUALITY CONCRETE HDG BHD	7544.KL

RALCO CORPORATION BHD	7498.KL
RAPID SYNERGY BHD	7765.KL
RUBBEREX CORP. M BHD	7803.KL
SAM ENGINEERING & EQUIPMENT (M) BHD	9822.KL
SAPURA INDUSTRIAL BHD	7811.KL
SARAWAK CONSOLIDATED INDUSTRIES BHD	9237.KL
SCIENTEX BHD	4731.KL
SCOMI ENGINEERING BHD	7366.KL
SEACERA GROUP BHD	7073.KL
SHELL REFINING COMPANY(FEDERATION OF MALAYA) BHD	4324.KL
SKB SHUTTERS CORP. BHD	7115.KL
SKP RESOURCES BERHAD	7155.KL
SMIS CORPORATION BHD	7132.KL
SMPC BHD	7099.KL
SOUTHERN ACIDS (M) BHD	5134.KL
SOUTHERN STEEL BHD	5665.KL
STONE MASTER CORPORATION BHD	7143.KL
SUBUR TIASA HOLDINGS BHD	6904.KL
SUCCESS TRANSFORMER CORP. BHD	7207.KL
SUPER ENTERPRISE HDG BHD	8656.KL
SUPERMAX CORP. BHD	7106.KL
TA ANN HOLDINGS BHD	5012.KL
TA WIN HOLDINGS BHD	7097.KL
TADMAX RESOURCES BHD	4022.KL
TASEK CORP. BHD	4448.KL
TECK GUAN PERDANA BHD	7439.KL
TECNIC GROUP BHD	9741.KL
TEKALA CORP. BHD	6378.KL
THONG GUAN INDUSTRIES BHD	7034.KL
TIEN WAH PRESS HOLDINGS BHD	7374.KL
TIMBERWELL BHD	7854.KL
TOMYPAK HOLDINGS BHD	7285.KL

TONG HERR RESOURCES BHD	5010.KL
TOP GLOVE CORP. BHD	7113.KL
TOYO INK GROUP BHD	7173.KL
TURIYA BHD	4359.KL
UCHI TECHNOLOGIES BHD	7100.KL
UMS-NEIKEN GROUP BHD	7227.KL
UNITED U-LI CORP. BHD	7133.KL
VERSATILE CREATIVE BHD	4995.KL
VS INDUSTRY BHD	6963.KL
WAH SEONG CORP. BHD	5142.KL
WATTA HOLDINGS BHD	7226.KL
WEIDA (M) BHD	7111.KL
WHITE HORSE BHD	5009.KL
WONG ENGINEERING CORP. BHD	7050.KL
WOODLANDOR HOLDINGS BHD	7025.KL
WTK HOLDINGS BHD	4243.KL
YI-LAI BHD	5048.KL
YLI HOLDINGS BHD	7014.KL
YUNG KONG GALVANISING INDS BHD	7020.KL

Appendix 4.1.1 Excel computation of RR, ARR, and T-statistics for Trading and Service sector

Appendix 4.1.1.1 Period (T5) July – December 2006

Winning Portfolio

	1/7/08	1/8/08	1/9/08	1/10/08	1/11/08	1/12/08
ADVANCE SYNERGY	-0.1739	0.0526	-0.0500	-0.0526	-0.1111	0.0625
AHB HOLDINGS	0.2576	0.0000	-0.3012	0.1379	-0.1212	0.1379
AIRASIA	-0.0980	0.2391	-0.0526	0.1481	-0.0726	-0.1522
AWC	-0.1724	0.1250	0.0000	-0.2222	-0.2381	0.0000
BERJAYA	-0.1098	-0.0180	-0.1207	-0.1692	-0.0234	-0.1128
BERJAYA MEDIA	0.0720	-0.0471	0.0495	-0.0100	-0.3074	0.2500
BINTAI KINDEN	-0.2427	0.2230	0.0000	0.0684	-0.1493	-0.4514
BORNEO OIL	-0.3333	-0.1458	-0.1220	-0.1111	-0.2813	0.0435
BOUSTEAD	-0.0090	-0.0816	0.0082	-0.0920	-0.4142	0.1883

HOLDINGS						
CENTURY						
LOGISTICS HDG	-0.1605	-0.1538	-0.0987	-0.0922	-0.2730	-0.0699
CHEETAH						
HOLDINGS	-0.0377	0.0196	-0.0192	0.0196	-0.3365	0.1159
CHUAN HUAT						
RESOURCES	0.0676	-0.1133	-0.0263	-0.0734	-0.1250	0.0000
CNI HOLDINGS	-0.1045	-0.0833	0.0364	0.0000	-0.2982	0.1500
DAYA MATERIALS	-0.0385	0.0300	0.0000	-0.0971	-0.1022	-0.2156
DIALOG GROUP	-0.1515	0.0073	-0.1311	-0.0978	-0.1176	-0.0211
DKSH						
HDG(MALAYSIA)	-0.0323	-0.1333	0.1923	0.0000	-0.2419	0.0000
EASTLAND EQUITY	-0.1000	-0.0556	0.0588	-0.1111	-0.1875	-0.1538
EDEN	-0.3333	0.2179	-0.1158	-0.1190	-0.1351	-0.0625
EFFICIENT E-						
SOLUTIONS	-0.1563	-0.0741	-0.0800	0.0870	-0.2400	0.0000
EMAS KIARA						
INDUSTRIES	-0.1250	-0.0857	-0.0625	0.2167	-0.2877	0.0000
FIAMMA						
HOLDINGS	-0.1500	0.0294	-0.0143	-0.1159	-0.3443	0.0000
GENTING	-0.1148	0.0926	-0.0085	-0.1026	-0.0629	-0.2033
GEORGE KENT						
(MAL)	-0.0613	0.0426	0.0817	-0.0756	-0.2125	-0.1176
GUNUNG CAPITAL	-0.1203	0.0256	0.0000	-0.1333	0.2788	-0.2180
HAP SENG						
CONSOLIDATED	-0.0418	-0.0897	0.0296	-0.0287	-0.2803	0.0744
HARRISONS						
HDG(MAL)	-0.1000	0.0556	0.1128	0.0338	-0.1830	0.0080
HUBLINE	-0.2332	0.1254	-0.1114	-0.0690	-0.2795	-0.1215
INTEGRATED						
LOGISTICS	0.0181	-0.0478	0.0115	-0.1489	-0.1483	-0.0763
KBES	-0.2105	0.1667	-0.0286	-0.1176	-0.2000	0.0417
KEJURUTERAAN						
SAMUDRA TIMUR	-0.0989	0.0122	-0.0843	0.0395	-0.4430	0.0227
KNUSFORD	-0.0420	0.0000	-0.1053	-0.0098	-0.1386	-0.0115
KONSORTIUM						
TRANSNASIONAL	-0.0930	0.0513	0.0244	0.1905	-0.3600	0.0000
KPS CONSORTIUM	0.0667	-0.1250	0.0714	0.0000	-0.2333	-0.0435
KUB MALAYSIA						
BERHAD	-0.2000	0.0882	-0.1622	-0.0645	-0.1207	0.0000
KUMPULAN FIMA	-0.0816	0.0222	0.0435	-0.0625	-0.0778	-0.0964
KUMPULAN						
PERANGSANG						
SELANGOR	-0.1525	0.0667	0.0097	-0.1430	-0.2279	-0.0282
LION FOREST INDS	-0.1075	0.0000	-0.0723	0.0779	-0.4096	-0.2857
MAGNUM	-0.1615	0.1171	-0.0986	-0.1232	-0.1257	-0.0798
MALAYAN UNITED						
INDS	-0.1552	0.0408	-0.0588	-0.1667	-0.1750	-0.0606
MALAYSIA						
AIRPORTS HDG	-0.0932	-0.0105	-0.0430	-0.0260	-0.0996	-0.1489
MALAYSIAN BULK						
CARRIERS	-0.0990	0.0165	-0.0595	-0.1207	-0.1961	-0.1220
MARCO HOLDINGS	0.0000	0.0000	-0.0455	-0.1429	0.0000	-0.0556
MEDIA PRIMA	-0.1502	-0.0221	-0.1469	-0.1325	-0.1756	-0.1574

METRONIC GLOBAL	-0.2500	0.1667	-0.0714	-0.1538	-0.1818	-0.1111
MMC	-0.2444	0.0037	-0.2308	0.0429	-0.1005	-0.3299
MULPHA INTERNATIONAL	0.1333	0.0084	-0.0250	-0.1923	-0.3757	-0.3729
NAIM INDAH	-0.1429	0.0000	0.0000	-0.0833	-0.0909	-0.1000
OLYMPIA INDUSTRIES	-0.0120	-0.0244	0.0250	-0.1098	-0.4521	-0.2250
PARKSON HOLDINGS	-0.1449	-0.0725	0.0175	-0.1881	-0.0947	-0.0119
PDZ HOLDINGS	-0.0769	0.0417	-0.0400	-0.0833	-0.3636	0.0714
PERDANA PETROLEUM	-0.1069	-0.0522	-0.0546	-0.1747	-0.5140	0.0357
PERISAI PTLTEKNOLOGI	-0.0756	-0.1004	-0.0723	-0.1292	-0.1714	-0.0401
PERMAJU INDUSTRIES	-0.0283	-0.0874	0.0000	0.0426	-0.2551	-0.2466
PETROL ONE RESOURCES	0.8986	0.0534	-0.1304	-0.1500	-0.0196	0.0000
SALCON	-0.2288	0.0440	0.0000	-0.1684	0.0253	-0.0247
SANBUMI HDG	-0.0959	0.1212	-0.0541	-0.0429	-0.2687	-0.0408
SCOMI ENERGY SERVICES	-0.0826	0.0300	-0.0291	-0.1800	-0.2073	-0.1231
SCOMI GROUP	-0.2667	0.1240	-0.0221	-0.2481	-0.3200	0.0588
SUMATEC RESOURCES	-0.1607	0.0585	-0.0905	-0.2265	-0.0929	-0.1260
SURIA CAPITAL HOLDINGS	-0.0940	-0.0425	-0.0887	-0.2216	-0.3090	-0.1256
SYMPHONY HOUSE	0.0362	-0.0175	-0.0854	-0.0545	-0.0206	-0.1807
TANJUNG OFFSHORE	-0.1179	-0.0472	0.0000	-0.2227	-0.2685	-0.0826
TENAGA NASIONAL	0.1643	0.0429	-0.0706	-0.1392	-0.0956	-0.0407
TH HEAVY ENGINEERING	-0.0132	0.1333	0.0000	-0.0824	-0.1859	-0.6378
TRANSOCEAN HOLDINGS	0.0000	0.0000	0.0000	0.0000	0.0000	-0.6471
UEM EDGENTA	-0.1347	0.0539	0.0057	-0.1299	-0.2338	0.1017
Portfolio Return	-5.4073	1.0183	-2.5062	-4.9072	-12.8743	-5.1694
Less: KLCI Return	-0.0198	-0.0538	-0.0743	-0.1522	0.0029	0.0122
Residual Return (RR)	**-5.3875**	**1.0722**	**-2.4319**	**-4.7550**	**-12.8772**	**-5.1816**

Losing Portfolio

	1/7/08	1/8/08	1/9/08	1/10/08	1/11/08	1/12/08
AEON CO(M)	-0.2577	-0.0207	0.0106	0.0942	-0.0478	-0.0151
AMWAY (MAL) HDG	-0.0146	0.0148	0.0000	-0.0146	-0.0222	0.0303
ANALABS RESOURCES	-0.0722	-0.0299	0.0123	-0.0122	-0.0617	0.1184
ATLAN HOLDINGS	-0.0066	-0.0066	-0.0100	-0.0613	-0.0577	0.0308
AYS VENTURES	-0.1084	0.0681	-0.0069	-0.0648	-0.1231	-0.0176
BERJAYA LAND	-0.1235	0.0329	0.0000	-0.1000	-0.0859	-0.0497
BERJAYA SPORTS TOTO	-0.0281	0.0164	-0.0731	-0.0177	0.0045	0.0623

BINTULU PORT HOLDINGS	-0.0233	-0.0635	-0.0085	-0.0769	0.0093	-0.0092
BRAHIM'S HOLDINGS	-0.2194	0.0744	-0.0615	-0.2131	-0.1250	0.0119
COMPUGATES HOLDINGS	-0.0435	-0.0455	0.0476	0.0000	0.2273	-0.0741
CYCLE & CARR BINTANG	-0.0506	0.4489	-0.3712	-0.0098	-0.0443	-0.0515
DESTINI	-0.1744	-0.1366	-0.1079	0.2339	-0.3922	0.0323
EDARAN	-0.1313	-0.1367	0.2500	0.0000	-0.4667	-0.1250
ENGTEX GROUP	-0.2544	0.3807	0.1143	-0.1628	-0.0704	-0.1647
ESTHETICS INTLGROUP	0.0000	0.2555	-0.0756	-0.0189	-0.1410	0.0224
FITTERS DIVERSIFIED	-0.0645	-0.0388	-0.0717	-0.0386	-0.1055	-0.0955
FREIGHT MANAGEMENT HDG	-0.0439	-0.0724	0.0419	-0.0402	-0.2724	0.0890
FSBM HOLDINGS	-0.1632	0.3922	0.0133	-0.1106	0.0147	-0.0758
GD EXPRESS CARRIER	-0.1205	0.0000	-0.0274	0.0000	-0.0634	-0.0226
GENTING MALAYSIA	-0.2019	0.1051	-0.0458	-0.0627	0.0276	-0.1303
HAI-O ENTERPRISE	0.0320	0.0241	-0.0414	-0.0968	-0.0414	-0.0499
HAISAN RESOURCES	-0.1013	-0.1127	0.0794	0.0735	-0.0274	0.0000
HARBOUR-LINK GROUP	0.0000	-0.1103	-0.0083	0.0083	-0.0496	0.0348
IPMUDA	-0.2647	0.3333	0.0900	-0.1055	-0.1333	-0.1716
JIANKUN INTERNATIONAL	-0.0516	-0.1020	-0.0076	0.0000	-0.0229	-0.0078
JOBSTREET	-0.0056	-0.0791	-0.0184	0.0562	-0.1243	-0.0676
KAMDAR GROUP (M)	-0.3256	0.0000	0.0345	0.0000	-0.2833	-0.0698
KPJ HEALTHCARE	-0.0272	-0.0222	-0.0632	-0.0599	-0.1762	0.1069
LFE	-0.4462	-0.4167	0.0000	0.0000	0.0000	0.9048
MBM RESOURCES	-0.1211	-0.0243	-0.0037	-0.1002	-0.0740	0.0799
MEGA FIRST	-0.1240	-0.0619	0.0189	-0.1250	-0.1323	-0.1098
MESB	-0.0667	0.0000	-0.0571	-0.0303	0.0000	-0.0313
MISC BHD	-0.1223	0.0727	-0.0170	-0.0057	-0.0174	-0.0059
M-MODE	0.1765	-0.1500	0.0588	-0.1111	0.1250	0.0000
NATIONWIDE EXPRCOURIER SERVICES	-0.0698	-0.1000	-0.0278	0.0286	-0.1667	0.0000
NCB HOLDINGS	-0.0549	-0.0065	-0.0260	-0.0100	-0.0976	-0.1119
NOMAD GROUP	0.0000	-0.0684	0.0056	-0.0449	-0.4706	0.5556
OCB	-0.0492	-0.0345	0.0714	-0.0333	-0.1034	-0.0769
PANSAR	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
PBA HOLDINGS	0.0306	-0.0941	0.0273	-0.0426	-0.0556	0.0000
PERAK	-0.0058	-0.0118	-0.3095	0.0862	-0.2063	0.1800
PETRONAS DAGANGAN	-0.0745	-0.0134	-0.0884	-0.0224	0.0229	0.0373
PHARMANIAGA	-0.0671	0.0383	0.0162	-0.0631	-0.0109	0.0000
PJBUMI	-0.1176	-0.1222	-0.0633	0.1351	-0.0476	-0.1000
POS MALAYSIA	0.1579	-0.1682	0.0109	-0.0270	-0.0056	0.0894
PROGRESSIVE	-0.0962	-0.2057	0.0089	-0.1062	0.0000	-0.1485

IMPACT						
RELIANCE PACIFIC	-0.0291	0.0100	0.0297	-0.0385	-0.0400	0.0417
RGB						
INTERNATIONAL	-0.2530	0.0323	-0.0938	-0.2069	-0.2609	-0.1176
SCICOM MSC	0.0286	-0.0521	-0.0147	0.0409	-0.1750	-0.0476
SEE HUP						
CONSOLIDATED	-0.1212	0.3218	-0.0174	-0.0442	-0.1481	-0.0435
SEG INTL	0.1635	-0.0413	0.1207	-0.0462	-0.0645	-0.0086
SENI JAYA	0.0169	-0.1500	0.0294	-0.0286	0.3725	-0.0143
SIME DARBY	-0.0161	-0.1421	-0.1338	-0.0294	-0.0379	0.0000
STAR MEDIA GROUP	0.0057	-0.0511	-0.0120	-0.0182	-0.0370	-0.0321
SUIWAH BHD	-0.1000	0.0185	-0.0182	0.0000	-0.1389	0.0323
TALIWORKS	0.0359	-0.1342	-0.0700	-0.0645	-0.1149	-0.0779
TELEKOM						
MALAYSIA	0.0185	0.0616	0.0347	-0.0839	0.0123	-0.0722
TEXCHEM						
RESOURCES	-0.0551	-0.0417	0.1130	-0.1172	-0.1504	0.1250
THE STORE	-0.0377	-0.0071	-0.0036	-0.0180	0.0037	-0.0255
TIONG NAM						
LOGISTHDG	0.0937	-0.0857	0.0000	0.0625	-0.1529	-0.0833
TMC LIFE SCIENCES	-0.1548	-0.0534	0.0134	-0.0451	-0.2000	0.3715
UMS HOLDINGS	0.2958	-0.2717	0.0224	0.2847	-0.3977	0.1509
UNIMECH GROUP	-0.0382	-0.0993	0.0147	0.0435	-0.0417	-0.0217
UTUSAN MELAYU						
(MALAYSIA)	-0.0526	-0.0667	-0.0714	-0.1026	-0.0429	-0.1045
WARISAN TC						
HOLDINGS	0.0769	-0.0048	-0.0191	-0.0244	-0.1600	0.1905
WIDETECH						
(MALAYSIA)	-0.2455	0.2048	-0.2800	-0.1250	-0.3492	0.3415
YFG	-0.2549	1.0000	-0.0526	-0.1806	0.0847	-0.0781
YINSON HOLDINGS	-0.0615	-0.0246	-0.0084	0.0508	-0.1452	0.0755
YONG TAI	-0.0875	0.0959	-0.1417	0.0437	0.1163	0.4292
YTL	-0.0743	-0.0365	-0.0305	-0.0230	0.0635	-0.0074
Portfolio Return	-4.7423	0.2852	-1.2683	-1.9421	-5.8987	1.6275
Less: KLCI Return	-0.0198	-0.0538	-0.0743	-0.1522	0.0029	0.0122
Residual Return (RR$_L$)	**-4.7225**	**0.3390**	**-1.1940**	**-1.7899**	**-5.9017**	**1.6153**

REF.	Equation		Excel Formula
	$ARR_W =$	-4.9269	=AVERAGE ( )
	$ARR_L =$	-1.9423	=AVERAGE ( )
A	$ARR_W - ARR_L =$	-2.9846	
B	STDEV of $ARR_W =$	4.5984	=STDEV ( )
C	$n =$	6	
D	STDEV of $ARR_L =$	2.8931	=STDEV ( )
E	$n =$	6	
F	$B/C + D/E =$	1.2486	
G	$\sqrt{F} =$	1.1174	
A/G	T Stat $=$	-2.6710	

Appendix 4.1.2 Excel computation of RR, ARR, and T-statistics for Industrial Products sector

Appendix 4.1.2.1 Period (i5) July – December 2008

Winning Portfolio

	1/7/08	1/8/08	1/9/08	1/10/08	1/11/08	1/12/08
ABLEGROUP	-0.0882	-0.0248	-0.0254	-0.2063	-0.3553	-0.0459
ABRIC	0.0714	0.1000	0.0303	-0.2353	-0.0385	-0.0400
ADVENTA	-0.1321	-0.1523	0.0109	-0.0559	-0.0738	-0.1797
AMALGAMATED INDLSTEEL	-0.2414	0.2159	-0.0374	-0.1845	-0.2262	-0.0615
ANN JOO RESOURCES	-0.0263	0.0000	-0.1189	-0.2331	-0.4080	-0.1824
APB RESOURCES	-0.1773	-0.0608	0.0118	-0.0698	-0.0688	-0.0336
APM AUTOMOTIVE HDG	-0.0465	-0.0390	0.0152	-0.0750	-0.1946	-0.0470
BIG INDUSTRIES	0.1011	-0.1837	0.0750	0.0000	-0.2093	-0.3235
BOON KOON GROUP BHD	-0.0833	-0.4156	0.0444	-0.2340	-0.2500	-0.0741
BOUSTEAD HEAVY INDS	-0.0928	0.0186	-0.0868	-0.0550	-0.2540	0.0532
BOX-PAK (MALAYSIA)	0.0220	-0.1613	-0.0256	0.0263	-0.3974	0.4894
BP PLASTICS HOLDING	0.0000	-0.1006	0.0000	-0.0476	-0.1000	-0.0833
BSL	0.0000	-0.0206	-0.1263	0.0241	-0.2000	-0.2353
CAHYA MATA SARAWAK	-0.1569	-0.0165	-0.0235	-0.0858	-0.2439	-0.0571
CB INDLPRODUCT HOLDINGS	-0.1060	-0.0312	0.0528	-0.1616	-0.2555	-0.1451
CHIN WELL HOLDINGS	-0.0826	0.0500	-0.0095	0.0096	-0.2571	-0.0513
CHOO BEE METAL INDS	-0.0796	-0.0385	0.0250	-0.1461	-0.2917	-0.0646
CN ASIA	-0.1754	-0.1915	-0.1053	0.0588	-0.4444	0.6500
COASTAL CONTRACTS	-0.0763	0.0642	-0.0086	-0.0348	-0.4505	-0.0984
COMINTEL	-0.4481	-0.0353	-0.1098	-0.2329	-0.1071	-0.2200
CSC STEEL HOLDINGS	-0.1589	0.0945	-0.0647	-0.0769	-0.3000	0.0000
DAIBOCHI PLASTIC & PACK INDUSTRY	0.1130	-0.2208	0.0000	0.0397	-0.1281	0.0406
D'NONCE TECHNOLOGY	-0.4203	0.4500	-0.3103	-0.1750	-0.1818	-0.1111
DRB-HICOM	-0.1273	0.0833	-0.0481	-0.1061	-0.1412	-0.0132
EG INDUSTRIES	-0.0111	-0.1011	-0.1250	0.5429	-0.3333	-0.2917
FIMA	-0.0317	-0.0273	0.0757	-0.0482	-0.1603	0.0326
GE-SHEN	-0.1212	0.2759	0.0000	-0.2973	-0.2308	0.2500
GOLDEN PHAROS	-0.1011	0.0125	-0.0864	-0.1622	-0.3548	0.3000

GSB GROUP	0.0000	-0.1000	0.0000	-0.2222	-0.1429	0.1667
GUH HOLDINGS	0.0076	-0.0175	0.0178	-0.0825	-0.1826	0.0233
HIAP TECK VENTURE	-0.1058	-0.0125	-0.1269	-0.2103	-0.3211	-0.1077
HIL INDUSTRIES	-0.1667	0.0571	-0.0541	-0.1429	-0.0833	-0.0909
HO WAH GENTING	-0.1803	0.2600	-0.1429	-0.0370	-0.1538	-0.0682
HUME INDUSTRIES	-0.2000	-0.0750	-0.0405	0.5775	-0.3214	-0.1842
JADI IMAGING HDG	-0.1261	0.0309	0.0000	-0.0700	-0.2043	0.0541
JAVA	-0.1222	-0.1772	0.0000	-0.4308	-0.2568	-0.1818
JMR CONGLOMERATION	-0.3103	0.3000	-0.0385	-0.0800	-0.3043	-0.3438
KARYON INDUSTRIES	-0.1803	0.1100	0.0000	0.0000	0.0000	-0.4234
KECK SENG (MALAYSIA)	-0.0972	-0.0421	-0.0095	-0.0643	-0.2392	-0.0348
KINSTEEL	-0.1515	-0.0857	-0.2305	-0.4061	-0.0427	-0.2768
KNM GROUP	-0.1260	-0.0288	-0.2199	-0.1543	-0.4682	-0.2165
KOSSAN RUBBER	-0.2097	-0.0184	-0.0203	-0.0112	-0.1129	0.0764
KYM HOLDINGS	0.0000	-0.2600	0.0000	0.0000	0.0000	0.0270
LAFARGE MALAYSIA	-0.0276	0.0900	0.0000	-0.2000	-0.1902	0.0537
LCTH	-0.2931	-0.0488	-0.0769	-0.0278	-0.0857	0.0313
LEADER STEEL HOLDINGS	-0.3043	0.2589	-0.1986	-0.1681	-0.1596	-0.2405
LION	-0.2319	0.0472	-0.1081	-0.2323	-0.2895	-0.2407
LION DIVERSIFIED HDG	0.0082	-0.0976	-0.2613	-0.3293	-0.2727	-0.1625
LION INDUSTRIES	-0.1143	0.0484	-0.2077	-0.3932	-0.4120	-0.1633
MALAYSIA STEEL WKS(KL)	-0.1707	0.0336	-0.1282	-0.2108	-0.1056	-0.0694
ML GLOBAL	-0.0500	0.0000	-0.4211	-0.0455	-0.2381	-0.1250
MYCRON STEEL	-0.2279	0.1238	-0.0508	-0.1071	-0.3100	-0.0145
PA RESOURCES	-0.0568	-0.0711	-0.1149	-0.1314	-0.2663	-0.2846
PIE INDUSTRIAL	-0.0857	-0.0042	-0.0251	-0.0773	-0.2883	0.0129
PMB TECHNOLOGY	-0.1469	-0.0738	0.0088	-0.1228	0.0000	-0.2400
PNE PCB	-0.1379	-0.2800	0.0556	0.3158	-0.3200	0.1471
PREMIUM NALFIN	-0.0833	0.0303	-0.1176	0.0333	-0.0968	0.0000
PRESS METAL	-0.1103	-0.0248	-0.0254	-0.1357	-0.3058	-0.0145
PRESTAR RESOURCES	-0.0750	0.0360	-0.0261	-0.0893	-0.1373	-0.1023
PRICEWORTH INTERNATIONAL	0.0308	0.0115	0.0000	0.0000	-0.1205	0.0233
PUBLIC PACKAGES HDG	0.1000	-0.0909	0.0500	0.0000	-0.2381	0.5000
SAPURA INDUSTRIAL	-0.3590	0.0000	0.0600	-0.1509	-0.3111	0.0645
SARAWAK CONSINDS	-0.1957	0.1081	0.0000	-0.1463	-0.1714	0.0345
SCOMI ENGINEERING	-0.1935	0.2000	-0.0111	-0.2247	-0.0580	-0.1385
SHELL REFINING COFOM	-0.0357	-0.0185	0.0377	-0.0455	-0.0476	-0.1400
SINO HUA-AN INTL	-0.0077	-0.0775	-0.0924	-0.2870	-0.3117	-0.1509
SKP RESOURCES	-0.1538	0.0909	0.0000	-0.0833	-0.1364	-0.0526

BERHAD						
SMPC	-0.0903	-0.3053	-0.1429	-0.2436	0.0678	-0.3492
SOUTHERN STEEL	-0.0833	0.0000	-0.1104	-0.2956	-0.2228	-0.1736
SUCCESS TRANSFORMER	-0.1652	0.0640	-0.0164	-0.0222	-0.2162	-0.1089
SUPERMAX	-0.1698	-0.0530	-0.1360	0.0000	-0.1157	-0.0052
TADMAX RESOURCES	0.0206	-0.0707	-0.0435	-0.1477	-0.2000	-0.0333
TECNIC GROUP	-0.1490	-0.0092	0.0000	-0.0884	-0.1173	-0.0751
TIEN WAH PRESS HOLDINGS	-0.0788	-0.0573	0.0155	-0.0751	-0.0318	-0.0170
TOMYPAK HOLDINGS	-0.0435	0.0455	0.0000	-0.0217	-0.2444	0.0588
TOP GLOVE	-0.0538	-0.0474	0.0100	-0.0148	-0.0550	-0.0476
TURIYA	0.0818	-0.0420	-0.0175	-0.1071	-0.2600	-0.0541
UCHI TECHS	-0.0950	-0.0250	-0.2410	-0.2703	-0.1157	-0.0157
UNITED U-LI	-0.1778	0.0000	0.0541	-0.0641	-0.1781	0.0167
WAH SEONG	-0.0791	-0.0810	-0.1191	-0.2644	-0.0322	-0.1320
WEIDA (M)	-0.1667	0.1000	-0.0182	0.0000	-0.1852	-0.0909
WHITE HORSE	-0.0469	-0.0328	-0.0339	-0.0702	-0.0094	-0.0095
WONG ENGINEERING	-0.0714	0.2692	-0.2727	-0.0833	0.1136	-0.0612
WTK HOLDINGS	-0.1025	-0.0776	-0.1535	-0.0643	-0.3250	-0.0741
YI-LAI	-0.1395	-0.0811	-0.1429	-0.0882	-0.0090	-0.0868
YLI HOLDINGS	-0.2483	-0.0826	-0.0800	-0.0652	-0.1977	-0.2029
Portfolio Return	-9.4262	-0.7098	-4.9374	-8.4015	-16.6967	-4.8574
Less: KLCI Return	-0.0198	-0.0538	-0.0743	-0.1522	0.0029	0.0122
Residual Return (RR)	**-9.4064**	**-0.6560**	**-4.8631**	**-8.2493**	**-16.6997**	**-4.8697**

Losing Portfolio

	1/7/08	1/8/08	1/9/08	1/10/08	1/11/08	1/12/08
ACME HOLDINGS	-0.0571	-0.0152	0.0154	-0.0404	-0.0579	0.0056
ADVANCED PACKTECH(M)	0.0448	-0.0857	0.0625	-0.0221	0.0000	-0.0226
AE MULTI HOLDINGS	0.1414	-0.1239	0.2374	0.0000	-0.5184	-0.0424
AJIYA	-0.0996	-0.1327	-0.0459	0.0481	-0.0918	-0.2556
ALUMINIUM COOF MAL	-0.0291	-0.0200	0.0510	-0.0534	-0.1282	0.0353
AMANAH HARTA TANAH PNB	-0.0349	0.0241	0.1118	-0.1005	0.0000	-0.1176
ANCOM	-0.1121	-0.0050	-0.0498	-0.1963	-0.1726	0.0079
A-RANK	-0.0952	0.0836	0.0286	-0.0750	-0.0991	0.0000
ASIA KNIGHT	0.0114	0.0112	0.0000	-0.0556	-0.0235	0.0000
ASTINO	-0.1672	0.0775	-0.0359	-0.1254	-0.1589	-0.0876
ASTRAL SUPREME	-0.0996	-0.1327	-0.0459	0.0481	-0.0918	-0.2556
ATURMAJU RESOURCES	0.0125	-0.0741	-0.0533	0.1268	-0.0250	-0.1923
BRIGHT PACKAGING IND	-0.2252	-0.1395	0.4189	-0.1810	0.1163	0.1563
BTM RESOURCES	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CAN-ONE	-0.0625	0.0267	0.0260	0.0127	-0.0375	0.0974

CCM DUOPHBIOTECH	-0.0121	-0.0117	-0.0399	-0.0748	-0.0541	0.0096
CENTRAL INDUSTRIAL	0.3043	-0.2000	0.0000	0.0417	-0.2000	0.0000
CENTURY BOND	-0.1038	-0.0105	0.1064	-0.0288	-0.2574	0.0800
CME GROUP	0.0494	0.0000	0.3529	-0.3043	-0.0625	-0.2000
COMPUTER FORMS (MAL)	-0.0600	-0.0426	-0.0222	-0.0455	-0.1429	-0.0556
CONCRETE ENGRPRDS	-0.1118	-0.0185	-0.0491	0.0714	-0.0519	-0.0781
CYL	0.0375	-0.0120	-0.0732	0.5789	-0.2833	-0.0698
CYMAO HOLDINGS	-0.1000	0.1282	-0.0606	-0.0806	-0.3158	0.1538
DENKO INDUSTRIAL	-0.1111	0.0313	0.0000	-0.0606	-0.2903	-0.1364
DOLOMITE	-0.1200	0.2273	-0.0370	0.0000	-0.1538	0.0000
DOMINANT ENTERPRISE	0.0300	-0.1300	0.0000	0.1000	0.0000	0.0000
EKSONS	-0.1304	-0.0750	0.0541	-0.0462	-0.3011	-0.1385
EONMETALL GROUP	-0.1591	-0.0338	-0.0490	-0.0147	-0.0299	-0.0692
EP MANUFACTURING	-0.0667	-0.0952	0.0263	-0.0385	-0.2000	0.0500
EVERGREEN FIBREBOARD	-0.0966	-0.0229	-0.0313	-0.2540	-0.3946	0.0893
FACB INDUSTRIES	-0.0909	0.0333	-0.0242	-0.0413	-0.1379	-0.0800
GOH BAN HUAT	-0.0141	-0.0583	-0.0228	-0.0556	-0.0824	0.0000
GOODWAY INTEGRATED INDS	0.1159	-0.0260	0.0000	-0.0667	-0.0714	-0.0769
GPA HOLDINGS	-0.0588	0.0625	0.0000	-0.0588	-0.0625	0.0667
HARVEST COURT	-0.3736	0.1927	0.3385	-0.4023	0.0865	0.0000
HCK CAPITAL GROUP	0.0536	0.1356	-0.2388	-0.0980	-0.1304	0.0500
HEVEABOARD	-0.1019	-0.0722	-0.0222	-0.1023	0.0759	-0.7412
HEXZA	-0.0417	-0.0283	0.0358	0.0216	-0.0275	0.0587
IDEAL UNITED BINTANG	0.0227	-0.0222	0.0000	-0.0455	-0.0476	0.0000
IMASPRO	-0.0199	-0.0203	-0.0552	-0.0584	-0.1163	-0.1754
INTEGRATED RUBBER	-0.0133	0.0000	-0.1977	0.2129	0.0000	0.0000
IRE-TEX	-0.0068	-0.0341	0.0671	0.0099	-0.0098	0.0232
IRM GROUP	-0.0290	-0.2537	0.1800	-0.0508	0.0714	0.0000
JASA KITA	0.0000	0.0476	0.0000	-0.0455	-0.0952	0.0000
JAYA TIASA HOLDINGS	-0.1135	-0.0645	-0.0187	-0.2417	-0.1019	-0.0736
JOHORE TIN	0.5596	-0.0297	-0.3195	0.5305	-0.4244	0.6022
KEIN HING INTL	0.0411	-0.0789	0.0714	0.0667	-0.2250	0.0000
KIA LIM	-0.1579	-0.0625	0.0000	0.1667	-0.2571	0.1538
KIAN JOO CAN FACTORY	-0.0656	-0.0439	0.1560	-0.0873	-0.1217	0.0495
KIM HIN INDUSTRY	0.0080	-0.0476	0.0000	-0.0833	-0.1273	0.0000
KKB ENGINEERING	-0.0421	-0.0793	-0.0338	-0.0541	-0.0118	-0.0733
KOBAY TECHNOLOGY	0.0081	-0.0645	0.0000	0.0862	0.0476	0.1364
KOMARKCORP	-0.1395	0.3027	-0.1992	-0.1088	-0.0756	0.0252

KUMPULAN H&L HIGH-TECH	-0.0129	-0.0574	-0.0540	0.0000	0.0996	-0.1558
KUMPULAN POWERNET	-0.3061	0.0147	0.0000	-0.0435	-0.1667	0.1455
LB ALUMINIUM	-0.1087	0.1463	-0.1277	0.0732	-0.2386	-0.0448
LEWEKO RESOURCES	-0.0953	-0.3571	0.0556	0.1053	-0.0714	-0.1026
LUSTER INDUSTRIES	-0.0600	-0.3191	0.1563	0.0000	-0.2703	0.1111
LYSAGHT GALVANIZED	-0.1132	-0.0213	-0.0217	-0.0556	-0.1176	0.3333
MALAYSIA PACKAGING IND	-0.1364	-0.1228	0.8400	0.0000	-0.0435	0.0000
MALAYSIA SMELTING	-0.0950	-0.1914	-0.1145	-0.1293	-0.3545	-0.1104
MASTER-PACK GROUP	-0.1154	0.0761	-0.0303	-0.1250	0.0476	-0.1591
MELEWAR INDUSTRIAL GROUP	-0.1923	0.0476	-0.0519	-0.1164	-0.1318	-0.0446
MENTIGA	-0.0412	-0.0061	-0.1049	-0.0345	-0.1429	0.0000
MERCURY INDUSTRIES	-0.1026	0.0286	0.1389	-0.0366	-0.0127	0.0256
METAL RECLAMATION	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
METROD HOLDINGS	-0.0655	0.0332	-0.0321	0.0554	0.0035	-0.0523
MIECO CHIPBOARD	-0.2294	-0.0476	0.0000	-0.1875	-0.1231	0.0175
MINETECH RESOURCES	-0.0459	-0.0433	0.0201	-0.0936	-0.0761	0.1118
MINHO (M)	0.0000	-0.0233	-0.0952	0.0000	-0.2237	-0.0508
MUDA	-0.1160	-0.0500	0.0526	-0.1250	-0.1571	0.0678
MULTICODE ELTNINDS	0.0000	-0.0500	-0.0263	-0.1892	-0.1500	0.0196
NAKAMICHI	-0.1250	0.2714	0.0843	-0.0674	0.0000	-0.3111
NWP HOLDINGS	-0.2083	-0.1579	-0.1250	0.0000	0.5000	-0.0476
NYLEX (MALAYSIA)	-0.0582	-0.0771	-0.0917	-0.0828	-0.1101	-0.1349
OCTAGON CONS	-0.1209	0.0000	-0.0563	0.0993	-0.0361	-0.2375
OKA	0.0000	-0.0263	0.0135	0.1200	-0.0476	-0.0500
ORNAPAPER BERHAD	-0.2564	-0.1034	-0.0577	0.0408	-0.0980	0.1522
PENSONIC HOLDINGS	-0.0845	-0.0923	0.0732	-0.0530	-0.0840	0.1223
PERSTIMAMAL(PERSTIMA)	-0.0391	0.0000	-0.0593	-0.0236	-0.1613	0.0096
PETRON MALREFN& MKTG	-0.0720	0.1638	-0.0370	-0.0654	-0.1029	-0.0367
PETRONAS GAS	0.0000	-0.0050	0.0101	-0.0100	-0.0051	-0.0102
POLY GLASS FIBRE (M)	0.0556	-0.0132	-0.0133	0.1081	-0.1707	0.1324
PRG HOLDINGS	0.0308	0.0115	0.0000	0.0000	-0.1205	0.0233
QUALITY CONCRETE HDG	0.2605	-0.2133	0.0000	0.0932	-0.1085	-0.0435

RALCO	0.0000	-0.0625	0.0000	-0.0667	-0.1643	0.1624
RAPID SYNERGY	-0.0194	-0.0792	-0.0215	0.0165	-0.0649	0.0058
RUBBEREX	-0.0992	0.1102	-0.1908	0.1604	-0.0244	0.0833
SAM ENGR& EQU(M)	-0.0182	-0.0123	-0.0313	-0.0323	-0.1333	-0.1462
SCIENTEX	-0.0160	0.0000	-0.0488	0.0085	-0.1525	0.0300
SEACERA GROUP	-0.0444	0.3488	-0.1595	0.1333	0.0181	0.0000
SKB SHUTTERS	0.0000	-0.2167	-0.0745	0.0000	-0.1494	0.0811
SMIS	0.0000	0.0395	-0.0380	0.0000	-0.1579	-0.0625
SOUTHERN ACIDS (M)	-0.0341	0.0176	-0.0173	-0.0588	-0.0250	-0.1090
STONE MASTER	-0.5000	-0.0429	0.0000	0.0000	0.6716	0.0000
SUBUR TIASA HOLDINGS	-0.0190	0.0000	-0.0968	-0.2321	-0.1907	0.0172
SUPER ENTERPRISE HDG	0.0259	0.0084	-0.0500	0.0526	-0.1333	0.0865
TA ANN HOLDINGS	-0.0874	-0.0587	-0.0548	-0.2231	-0.0765	-0.1568
TA WIN HOLDINGS	-0.0571	0.0606	-0.1357	-0.1322	-0.2762	0.5789
TASEK	-0.0466	-0.0845	-0.0776	-0.1368	-0.0975	0.2636
TECK GUAN PERDANA	0.0000	0.0400	0.1538	0.0000	-0.2000	0.6250
TEKALA	-0.0800	0.0000	0.0145	0.0286	-0.1597	-0.0083
THONG GUAN INDS	0.0167	0.0060	0.1560	-0.1195	-0.0350	-0.0575
THREE-A RES	-0.1117	-0.1429	0.2167	-0.0137	-0.0972	0.0000
TIMBERWELL	-0.2017	-0.0421	-0.0110	-0.0444	-0.0116	-0.0353
TONG HERR RESOURCES	-0.1954	0.0700	-0.0500	-0.0850	-0.2389	-0.0814
TOYO INK GROUP	-0.0397	0.0351	-0.0113	-0.0855	0.0626	-0.0707
UMS-NEIKEN GROUP	0.0964	-0.0769	-0.0476	0.2500	0.0600	-0.2642
VERSATILE CREATIVE	-0.1400	-0.0698	0.5000	-0.2333	0.0870	0.1600
VS INDUSTRY	-0.1555	-0.1089	-0.0111	-0.1124	-0.2089	-0.0720
WATTA HOLDINGS	-0.1163	0.0526	0.0000	-0.2500	-0.3333	0.0000
WOODLANDOR HOLDINGS	0.0000	0.1000	0.0227	0.0667	-0.0938	-0.0115
YUNG KONG GALVANISING INDS	-0.4018	0.3825	-0.1590	-0.0803	-0.1549	-0.0767
Portfolio Return	-6.5801	-1.8936	0.7372	-3.2086	-10.8246	-0.4688
Less: KLCI Return	-0.0198	-0.0538	-0.0743	-0.1522	0.0029	0.0122
Residual Return (RR)	**-6.5604**	**-1.8397**	**0.8116**	**-3.0564**	**-10.8275**	**-0.4811**

REF.	Equation		Excel Formula
	$ARR_W =$	-7.4574	=AVERAGE ( )
	$ARR_L =$	-3.6589	=AVERAGE ( )
A	$ARR_W - ARR_L =$	-3.7984	
B	STDEV of $ARR_W =$	5.4687	=STDEV ( )
C	$n =$	6.0000	
D	STDEV of $ARR_L =$	4.3258	=STDEV ( )
E	$n =$	6.0000	
F	B/C+D/E =	1.6324	
G	$\sqrt{F} =$	1.2777	
A/G	T Stat =	-2.9730	

4.1.2.2 Period (i6) January – June 2009

Winning Portfolio

	1/1/09	1/2/09	1/3/09	1/4/09	1/5/09	1/6/09
ADVANCED PACKTECH (M)	-0.0462	-0.0484	0.0169	0.0333	0.0000	0.1290
ALUMINIUM COOF MAL	-0.0739	-0.0184	0.0437	-0.0419	0.1250	0.0389
AMALGAMATED INDLSTEEL	-0.0164	0.0167	-0.0164	0.0000	0.2333	0.1622
AMANAH HARTA TANAH PNB	0.0000	0.0133	0.0395	-0.0253	0.0065	0.0581
ANCOM	0.0449	-0.0654	-0.1000	-0.1333	0.3846	-0.0185
APB RESOURCES	-0.0556	0.0294	0.0286	-0.0139	0.2394	0.0227
A-RANK	-0.1100	0.0749	-0.0244	-0.0464	0.0749	0.0453
ASIA KNIGHT	0.0602	0.0000	-0.2500	-0.0606	-0.0645	0.2069
ASTRAL SUPREME	0.4113	-0.1471	0.0878	-0.0144	-0.2251	-0.1057
ATURMAJU RESOURCES	0.0635	-0.0597	0.1111	-0.1429	0.1667	-0.0286
BOUSTEAD HEAVY INDS	-0.0404	-0.0737	-0.0530	0.1200	0.1071	0.5097
BP PLASTICS HOLDING	0.0303	-0.0294	0.0758	-0.1268	0.2258	0.1579
BSL	-0.0385	0.2000	0.0000	0.0000	-0.1000	0.2222
BTM RESOURCES	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CAHYA MATA SARAWAK	0.0000	0.0079	0.0000	0.0366	0.1587	0.0435
CAN-ONE	-0.0414	0.0123	0.0000	0.0732	-0.0341	0.0471
CB INDLPRODUCT HOLDINGS	-0.1904	0.0170	0.0529	0.1481	0.1221	0.2649
CCM DUOPHBIOTECH	-0.0191	0.0097	0.0283	-0.0275	0.0379	0.0551
CENTRAL INDUSTRIAL	0.0000	0.0000	0.0000	-0.1250	-0.1429	0.3333
CENTURY BOND	0.0617	-0.0698	-0.0250	-0.1282	0.2059	0.1585

CHIN WELL HOLDINGS	-0.0811	0.2132	0.0061	-0.0361	0.2063	0.2435
CHOO BEE METAL INDS	-0.0430	0.0450	0.0090	-0.0596	0.1815	0.1304
CME GROUP	0.0833	-0.0769	0.0000	-0.0833	0.2727	0.0000
COASTAL CONTRACTS	-0.1588	0.0000	-0.0548	0.0747	0.4681	0.2174
CONCRETE ENGRPRDS	0.0042	-0.0127	-0.1026	-0.0714	0.0769	0.1905
CSC STEEL HOLDINGS	0.0000	0.0952	-0.0652	-0.1221	0.2053	0.1538
CYL	0.0250	0.0000	-0.1951	0.3030	0.0465	0.0000
CYMAO HOLDINGS	-0.1556	-0.0263	-0.0405	-0.0282	0.2464	0.1628
DENKO INDUSTRIAL	0.0000	0.0000	-0.0526	0.2778	0.0435	-0.0417
DOLOMITE	0.0455	-0.0217	-0.2222	0.0286	0.1667	0.0952
DOMINANT ENTERPRISE	0.0000	0.0000	0.0300	-0.2200	0.0100	-0.0350
DRB-HICOM	-0.0333	0.0414	-0.0464	-0.0278	0.4214	0.0000
EKSONS	0.0804	-0.0744	-0.0536	0.0094	0.2056	0.0620
EONMETALL GROUP	0.0331	-0.0720	-0.1379	0.1000	0.0000	0.0000
FACB INDUSTRIES	0.1087	-0.1569	-0.0698	-0.4125	0.5319	0.1944
FIMA	0.0379	-0.0715	0.0377	0.0111	0.0469	0.3030
GOLDEN PHAROS	-0.1538	0.0909	-0.0833	0.3636	0.3500	-0.2469
GOODWAY INTEGRATED INDS	0.0333	-0.0323	-0.0833	-0.2727	0.0500	0.1190
GPA HOLDINGS	-0.0625	0.0667	-0.0625	0.0667	0.3000	-0.0962
GSB GROUP	-0.1429	0.1667	0.0000	-0.1429	0.6667	0.1000
HO WAH GENTING	0.0244	-0.0952	-0.1053	-0.0882	0.3548	0.1667
HUME INDUSTRIES	0.1290	0.0000	-0.1429	0.1667	0.1000	0.1688
IDEAL UNITED BINTANG	0.0000	-0.0250	-0.1026	-0.1143	-0.0968	-0.0357
IMASPRO	0.0638	-0.1300	0.0000	0.0575	-0.0435	-0.0341
IRE-TEX	-0.2071	0.2122	-0.1347	0.0428	-0.0410	0.2685
IRM GROUP	-0.0500	-0.2982	0.1750	-0.1489	0.1000	0.2727
JADI IMAGING HDG	-0.0897	0.0000	-0.0563	-0.1194	0.5763	0.1613
JASA KITA	0.0526	0.0000	0.0500	0.0476	0.0909	0.0000
JAVA	0.1222	0.1485	-0.3276	-0.0256	0.6316	0.1129
JAYA TIASA HOLDINGS	-0.0556	-0.0909	-0.0296	0.0248	0.1359	0.0459
JOHORE TIN	-0.0615	0.0655	0.0000	0.0410	-0.1182	0.0670
KARYON INDUSTRIES	0.1250	0.3889	-0.3100	0.0580	0.0000	0.1370
KECK SENG (MALAYSIA)	0.0392	0.0176	-0.0544	0.0253	0.0839	0.1805
KEIN HING INTL	0.2903	-0.2500	0.0333	-0.0161	0.2459	-0.1579
KIA LIM	0.0000	-0.1333	-0.2308	0.0500	-0.0476	-0.0250
KIAN JOO CAN FACTORY	0.1038	-0.0085	0.0000	0.0259	0.0084	-0.0167

KIM HIN INDUSTRY	0.0000	0.0052	-0.0829	-0.0282	0.0174	0.0743
KINSTEEL	0.0494	-0.0353	-0.0610	0.0130	0.4744	0.5826
KNM GROUP	-0.2286	0.0741	-0.1611	0.0964	0.4370	0.7220
KOBAY TECHNOLOGY	-0.2000	0.1667	-0.0714	-0.1077	0.0345	-0.1333
KOMARKCORP	-0.1288	-0.0915	0.2326	-0.1384	0.0949	0.1467
KUMPULAN H&L HIGH-TECH	0.0773	-0.0717	-0.0615	0.0000	0.3042	-0.0593
LAFARGE MALAYSIA	0.2548	-0.1980	0.2911	-0.0196	0.1300	0.1173
LEADER STEEL HOLDINGS	0.0167	-0.0492	-0.0690	0.0370	0.4107	0.0633
LEWEKO RESOURCES	-0.0143	-0.0145	0.0147	0.1304	-0.0513	-0.0541
LION	0.0732	-0.0909	-0.1250	0.0000	1.2571	0.2278
LION DIVERSIFIED HDG	0.0448	-0.0429	-0.2388	-0.0196	0.8200	0.2857
LION INDUSTRIES	0.0976	-0.0370	-0.0769	0.0417	0.6000	0.2900
LUSTER INDUSTRIES	0.0667	-0.2188	-0.2000	0.0000	0.0000	-0.4000
MALAYSIA PACKAGING IND	0.0000	0.0000	0.1364	-0.1800	0.0000	-0.1220
MALAYSIA SMELTING	0.0345	-0.0500	-0.0947	-0.1628	0.2500	0.1037
MALAYSIA STEEL WKS(KL)	-0.0373	-0.0698	-0.0333	-0.0431	0.4505	0.1429
MELEWAR INDUSTRIAL GROUP	-0.0467	-0.0784	0.0000	-0.0851	0.3140	0.0885
METAL RECLAMATION	0.0000	0.0000	0.0000	0.0000	0.0000	0.0100
METROD HOLDINGS	-0.0037	-0.0221	0.0642	0.0177	-0.0244	0.1429
MINETECH RESOURCES	-0.1005	-0.0294	-0.0303	-0.0938	-0.1310	0.1111
MINHO (M)	0.1786	-0.1818	-0.2222	0.0714	0.3111	0.0339
MYCRON STEEL	0.0000	0.0000	0.0294	-0.0143	0.4348	-0.0909
NYLEX (MALAYSIA)	-0.0587	-0.2386	-0.1617	-0.0905	0.4607	-0.0341
OCTAGON CONS	0.2295	-0.2000	0.0000	-0.3333	-0.0750	0.0270
PA RESOURCES	0.7299	0.0654	-0.1287	-0.0114	0.0115	-0.0318
PETRON MALREFN& MKTG	0.0095	0.0236	-0.0553	0.0195	0.0861	0.0661
PETRONAS GAS	0.0051	0.0000	0.0000	-0.0102	-0.0309	0.0426
PIE INDUSTRIAL	0.1742	0.0715	-0.1437	0.1380	0.0894	-0.0096
PMB TECHNOLOGY	0.0921	0.1446	-0.0421	-0.1648	0.1579	0.3636
PNE PCB	0.0256	0.0000	0.0000	0.0000	0.5000	0.2667
POLY GLASS FIBRE (M)	0.0649	-0.1463	0.0000	-0.0143	0.0290	0.0423
PREMIUM NALFIN	0.1429	0.0000	0.0625	0.0000	0.0294	0.1143
PRICEWORTH INTERNATIONAL	-0.0227	0.0000	-0.2377	0.0136	-0.1037	0.1306

QUALITY CONCRETE HDG	-0.0091	0.0000	0.0000	0.1009	-0.0917	-0.0367
RAPID SYNERGY	0.0345	0.0278	0.0811	-0.0300	0.0309	-0.0050
RUBBEREX	-0.0385	0.0400	0.0000	0.0000	0.0231	0.1654
SAM ENGR& EQU(M)	0.2568	-0.1756	-0.2174	0.1111	0.0000	0.0500
SAPURA INDUSTRIAL	-0.0909	0.0667	0.0937	-0.1143	0.5968	0.0707
SARAWAK CONSINDS	0.1333	-0.3088	0.1064	0.0000	0.2692	0.0909
SCIENTEX	-0.0971	0.0430	-0.0619	-0.0330	0.1364	0.1300
SCOMI ENGINEERING	-0.0179	0.0273	0.2035	-0.2794	0.2653	0.6774
SEACERA GROUP	0.0000	0.0000	-0.1333	0.0000	0.2103	-0.0169
SHELL REFINING COFOM	-0.0581	0.0679	0.0462	0.0663	0.0207	0.1371
SINO HUA-AN INTL	0.0000	0.0000	-0.1111	0.0000	0.4500	0.8103
SKB SHUTTERS	0.0000	0.0000	-0.0750	0.2973	0.0000	0.0000
SMPC	2.8049	-0.7564	0.0000	-0.2632	0.4643	1.5854
SOUTHERN ACIDS (M)	-0.0072	0.0870	-0.1133	-0.0301	0.0543	0.0662
SOUTHERN STEEL	0.0643	0.0155	-0.1120	0.0258	0.2536	0.1115
SUBUR TIASA HOLDINGS	-0.0395	0.0000	0.0294	-0.1029	0.0892	0.0234
SUPER ENTERPRISE HDG	0.0000	0.0265	0.0000	0.0000	0.0000	-0.0345
TA ANN HOLDINGS	-0.0165	-0.2223	-0.1426	0.2289	0.1189	0.2000
TADMAX RESOURCES	0.3103	-0.0789	-0.1286	0.5738	-0.2396	-0.1781
TASEK	0.0000	0.0000	-0.0107	-0.1081	0.1819	-0.0360
TECK GUAN PERDANA	0.0000	0.0000	-0.1026	-0.4000	0.6667	-0.3571
TEKALA	0.0000	0.2833	-0.1818	0.0000	0.1429	-0.0278
THONG GUAN INDS	-0.0626	-0.0668	-0.0716	0.0771	0.1138	-0.0577
TIEN WAH PRESS HOLDINGS	0.0173	0.0408	0.1285	0.0000	0.0637	0.0399
TIMBERWELL	-0.0244	-0.0375	0.0909	-0.3690	-0.0283	0.0291
TONG HERR RESOURCES	0.2658	0.0250	-0.0537	-0.0722	0.0556	-0.0053
TOYO INK GROUP	0.1387	-0.2161	-0.0785	-0.2811	0.1879	0.2070
TURIYA	0.4286	0.0400	-0.2692	0.3553	0.0291	0.2925
UCHI TECHS	-0.0213	-0.0109	-0.1099	0.3827	0.1161	0.0560
UMS-NEIKEN GROUP	-0.2308	0.0000	0.0000	0.0000	0.2000	0.2222
VERSATILE CREATIVE	-0.1034	-0.3462	0.0000	-0.1471	-0.0345	0.1786
VS INDUSTRY	0.0431	0.0496	-0.0787	-0.1282	0.0686	0.1284
WAH SEONG	-0.0530	0.0052	0.1103	0.1801	0.2974	0.1001
WHITE HORSE	0.0096	0.0286	0.0093	-0.0092	0.1019	0.1261
WONG ENGINEERING	-0.1304	0.1000	-0.0909	0.0250	0.3171	0.0370

WOODLANDOR HOLDINGS	0.1163	-0.2500	0.0417	0.1467	-0.1047	0.1169
WTK HOLDINGS	-0.2750	0.0828	-0.0701	0.0411	0.2500	0.3474
YI-LAI	0.0376	-0.0267	0.0275	-0.0172	0.2816	0.0227
YLI HOLDINGS	0.0364	0.0088	-0.0174	-0.0619	0.4434	0.1765
YUNG KONG GALVANISING INDS	0.0830	-0.0767	-0.0144	0.0476	0.2063	-0.0116
Portfolio Return	5.1777	-2.9771	-5.1499	-1.4153	21.4944	13.8594
Less: KLCI Return	0.0088	0.0070	-0.0203	0.1355	0.0539	0.0298
Residual Return (RR)	**5.1689**	**-2.9842**	**-5.1296**	**-1.5507**	**21.4405**	**13.8296**

Losing Portfolio

	1/1/09	1/2/09	1/3/09	1/4/09	1/5/09	1/6/09
ADVANCED PACKTECH(M)	-0.0462	-0.0484	0.0169	0.0333	0.0000	0.1290
ALUMINIUM COOF MAL	-0.0739	-0.0184	0.0437	-0.0419	0.1250	0.0389
AMALGAMATED INDLSTEEL	-0.0164	0.0167	-0.0164	0.0000	0.2333	0.1622
AMANAH HARTA TANAH PNB	0.0000	0.0133	0.0395	-0.0253	0.0065	0.0581
ANCOM	0.0449	-0.0654	-0.1000	-0.1333	0.3846	-0.0185
APB RESOURCES	-0.0556	0.0294	0.0286	-0.0139	0.2394	0.0227
A-RANK	-0.1100	0.0749	-0.0244	-0.0464	0.0749	0.0453
ASIA KNIGHT	0.0602	0.0000	-0.2500	-0.0606	-0.0645	0.2069
ASTRAL SUPREME	0.4113	-0.1471	0.0878	-0.0144	-0.2251	-0.1057
ATURMAJU RESOURCES	0.0635	-0.0597	0.1111	-0.1429	0.1667	-0.0286
BOUSTEAD HEAVY INDS	-0.0404	-0.0737	-0.0530	0.1200	0.1071	0.5097
BP PLASTICS HOLDING	0.0303	-0.0294	0.0758	-0.1268	0.2258	0.1579
BSL	-0.0385	0.2000	0.0000	0.0000	-0.1000	0.2222
BTM RESOURCES	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CAHYA MATA SARAWAK	0.0000	0.0079	0.0000	0.0366	0.1587	0.0435
CAN-ONE	-0.0414	0.0123	0.0000	0.0732	-0.0341	0.0471
CB INDLPRODUCT HOLDINGS	-0.1904	0.0170	0.0529	0.1481	0.1221	0.2649
CCM DUOPHBIOTECH	-0.0191	0.0097	0.0283	-0.0275	0.0379	0.0551
CENTRAL INDUSTRIAL	0.0000	0.0000	0.0000	-0.1250	-0.1429	0.3333
CENTURY BOND	0.0617	-0.0698	-0.0250	-0.1282	0.2059	0.1585
CHIN WELL HOLDINGS	-0.0811	0.2132	0.0061	-0.0361	0.2063	0.2435
CHOO BEE METAL INDS	-0.0430	0.0450	0.0090	-0.0596	0.1815	0.1304
CME GROUP	0.0833	-0.0769	0.0000	-0.0833	0.2727	0.0000

COASTAL CONTRACTS	-0.1588	0.0000	-0.0548	0.0747	0.4681	0.2174
CONCRETE ENGRPRDS	0.0042	-0.0127	-0.1026	-0.0714	0.0769	0.1905
CSC STEEL HOLDINGS	0.0000	0.0952	-0.0652	-0.1221	0.2053	0.1538
CYL	0.0250	0.0000	-0.1951	0.3030	0.0465	0.0000
CYMAO HOLDINGS	-0.1556	-0.0263	-0.0405	-0.0282	0.2464	0.1628
DENKO INDUSTRIAL	0.0000	0.0000	-0.0526	0.2778	0.0435	-0.0417
DOLOMITE	0.0455	-0.0217	-0.2222	0.0286	0.1667	0.0952
DOMINANT ENTERPRISE	0.0000	0.0000	0.0300	-0.2200	0.0100	-0.0350
DRB-HICOM	-0.0333	0.0414	-0.0464	-0.0278	0.4214	0.0000
EKSONS	0.0804	-0.0744	-0.0536	0.0094	0.2056	0.0620
EONMETALL GROUP	0.0331	-0.0720	-0.1379	0.1000	0.0000	0.0000
FACB INDUSTRIES	0.1087	-0.1569	-0.0698	-0.4125	0.5319	0.1944
FIMA	0.0379	-0.0715	0.0377	0.0111	0.0469	0.3030
GOLDEN PHAROS	-0.1538	0.0909	-0.0833	0.3636	0.3500	-0.2469
GOODWAY INTEGRATED INDS	0.0333	-0.0323	-0.0833	-0.2727	0.0500	0.1190
GPA HOLDINGS	-0.0625	0.0667	-0.0625	0.0667	0.3000	-0.0962
GSB GROUP	-0.1429	0.1667	0.0000	-0.1429	0.6667	0.1000
HO WAH GENTING	0.0244	-0.0952	-0.1053	-0.0882	0.3548	0.1667
HUME INDUSTRIES	0.1290	0.0000	-0.1429	0.1667	0.1000	0.1688
IDEAL UNITED BINTANG	0.0000	-0.0250	-0.1026	-0.1143	-0.0968	-0.0357
IMASPRO	0.0638	-0.1300	0.0000	0.0575	-0.0435	-0.0341
IRE-TEX	-0.2071	0.2122	-0.1347	0.0428	-0.0410	0.2685
IRM GROUP	-0.0500	-0.2982	0.1750	-0.1489	0.1000	0.2727
JADI IMAGING HDG	-0.0897	0.0000	-0.0563	-0.1194	0.5763	0.1613
JASA KITA	0.0526	0.0000	0.0500	0.0476	0.0909	0.0000
JAVA	0.1222	0.1485	-0.3276	-0.0256	0.6316	0.1129
JAYA TIASA HOLDINGS	-0.0556	-0.0909	-0.0296	0.0248	0.1359	0.0459
JOHORE TIN	-0.0615	0.0655	0.0000	0.0410	-0.1182	0.0670
KARYON INDUSTRIES	0.1250	0.3889	-0.3100	0.0580	0.0000	0.1370
KECK SENG (MALAYSIA)	0.0392	0.0176	-0.0544	0.0253	0.0839	0.1805
KEIN HING INTL	0.2903	-0.2500	0.0333	-0.0161	0.2459	-0.1579
KIA LIM	0.0000	-0.1333	-0.2308	0.0500	-0.0476	-0.0250
KIAN JOO CAN FACTORY	0.1038	-0.0085	0.0000	0.0259	0.0084	-0.0167
KIM HIN INDUSTRY	0.0000	0.0052	-0.0829	-0.0282	0.0174	0.0743
KINSTEEL	0.0494	-0.0353	-0.0610	0.0130	0.4744	0.5826
KNM GROUP	-0.2286	0.0741	-0.1611	0.0964	0.4370	0.7220
KOBAY TECHNOLOGY	-0.2000	0.1667	-0.0714	-0.1077	0.0345	-0.1333

KOMARKCORP	-0.1288	-0.0915	0.2326	-0.1384	0.0949	0.1467
KUMPULAN H&L HIGH-TECH	0.0773	-0.0717	-0.0615	0.0000	0.3042	-0.0593
LAFARGE MALAYSIA	0.2548	-0.1980	0.2911	-0.0196	0.1300	0.1173
LEADER STEEL HOLDINGS	0.0167	-0.0492	-0.0690	0.0370	0.4107	0.0633
LEWEKO RESOURCES	-0.0143	-0.0145	0.0147	0.1304	-0.0513	-0.0541
LION	0.0732	-0.0909	-0.1250	0.0000	1.2571	0.2278
LION DIVERSIFIED HDG	0.0448	-0.0429	-0.2388	-0.0196	0.8200	0.2857
LION INDUSTRIES	0.0976	-0.0370	-0.0769	0.0417	0.6000	0.2900
LUSTER INDUSTRIES	0.0667	-0.2188	-0.2000	0.0000	0.0000	-0.4000
MALAYSIA PACKAGING IND	0.0000	0.0000	0.1364	-0.1800	0.0000	-0.1220
MALAYSIA SMELTING	0.0345	-0.0500	-0.0947	-0.1628	0.2500	0.1037
MALAYSIA STEEL WKS(KL)	-0.0373	-0.0698	-0.0333	-0.0431	0.4505	0.1429
MELEWAR INDUSTRIAL GROUP	-0.0467	-0.0784	0.0000	-0.0851	0.3140	0.0885
METAL RECLAMATION	0.0000	0.0000	0.0000	0.0000	0.0000	0.0100
METROD HOLDINGS	-0.0037	-0.0221	0.0642	0.0177	-0.0244	0.1429
MINETECH RESOURCES	-0.1005	-0.0294	-0.0303	-0.0938	-0.1310	0.1111
MINHO (M)	0.1786	-0.1818	-0.2222	0.0714	0.3111	0.0339
MYCRON STEEL	0.0000	0.0000	0.0294	-0.0143	0.4348	-0.0909
NYLEX (MALAYSIA)	-0.0587	-0.2386	-0.1617	-0.0905	0.4607	-0.0341
OCTAGON CONS	0.2295	-0.2000	0.0000	-0.3333	-0.0750	0.0270
PA RESOURCES	0.7299	0.0654	-0.1287	-0.0114	0.0115	-0.0318
PETRON MALREFN& MKTG	0.0095	0.0236	-0.0553	0.0195	0.0861	0.0661
PETRONAS GAS	0.0051	0.0000	0.0000	-0.0102	-0.0309	0.0426
PIE INDUSTRIAL	0.1742	0.0715	-0.1437	0.1380	0.0894	-0.0096
PMB TECHNOLOGY	0.0921	0.1446	-0.0421	-0.1648	0.1579	0.3636
PNE PCB	0.0256	0.0000	0.0000	0.0000	0.5000	0.2667
POLY GLASS FIBRE (M)	0.0649	-0.1463	0.0000	-0.0143	0.0290	0.0423
PREMIUM NALFIN	0.1429	0.0000	0.0625	0.0000	0.0294	0.1143
PRICEWORTH INTERNATIONAL	-0.0227	0.0000	-0.2377	0.0136	-0.1037	0.1306
QUALITY CONCRETE HDG	-0.0091	0.0000	0.0000	0.1009	-0.0917	-0.0367
RAPID SYNERGY	0.0345	0.0278	0.0811	-0.0300	0.0309	-0.0050
RUBBEREX	-0.0385	0.0400	0.0000	0.0000	0.0231	0.1654
SAM ENGR&	0.2568	-0.1756	-0.2174	0.1111	0.0000	0.0500

EQU(M)

SAPURA INDUSTRIAL	-0.0909	0.0667	0.0937	-0.1143	0.5968	0.0707
SARAWAK CONSINDS	0.1333	-0.3088	0.1064	0.0000	0.2692	0.0909
SCIENTEX	-0.0971	0.0430	-0.0619	-0.0330	0.1364	0.1300
SCOMI ENGINEERING	-0.0179	0.0273	0.2035	-0.2794	0.2653	0.6774
SEACERA GROUP	0.0000	0.0000	-0.1333	0.0000	0.2103	-0.0169
SHELL REFINING COFOM	-0.0581	0.0679	0.0462	0.0663	0.0207	0.1371
SINO HUA-AN INTL	0.0000	0.0000	-0.1111	0.0000	0.4500	0.8103
SKB SHUTTERS	0.0000	0.0000	-0.0750	0.2973	0.0000	0.0000
SMPC	2.8049	-0.7564	0.0000	-0.2632	0.4643	1.5854
SOUTHERN ACIDS (M)	-0.0072	0.0870	-0.1133	-0.0301	0.0543	0.0662
SOUTHERN STEEL	0.0643	0.0155	-0.1120	0.0258	0.2536	0.1115
SUBUR TIASA HOLDINGS	-0.0395	0.0000	0.0294	-0.1029	0.0892	0.0234
SUPER ENTERPRISE HDG	0.0000	0.0265	0.0000	0.0000	0.0000	-0.0345
TA ANN HOLDINGS	-0.0165	-0.2223	-0.1426	0.2289	0.1189	0.2000
TADMAX RESOURCES	0.3103	-0.0789	-0.1286	0.5738	-0.2396	-0.1781
TASEK	0.0000	0.0000	-0.0107	-0.1081	0.1819	-0.0360
TECK GUAN PERDANA	0.0000	0.0000	-0.1026	-0.4000	0.6667	-0.3571
TEKALA	0.0000	0.2833	-0.1818	0.0000	0.1429	-0.0278
THONG GUAN INDS	-0.0626	-0.0668	-0.0716	0.0771	0.1138	-0.0577
TIEN WAH PRESS HOLDINGS	0.0173	0.0408	0.1285	0.0000	0.0637	0.0399
TIMBERWELL	-0.0244	-0.0375	0.0909	-0.3690	-0.0283	0.0291
TONG HERR RESOURCES	0.2658	0.0250	-0.0537	-0.0722	0.0556	-0.0053
TOYO INK GROUP	0.1387	-0.2161	-0.0785	-0.2811	0.1879	0.2070
TURIYA	0.4286	0.0400	-0.2692	0.3553	0.0291	0.2925
UCHI TECHS	-0.0213	-0.0109	-0.1099	0.3827	0.1161	0.0560
UMS-NEIKEN GROUP	-0.2308	0.0000	0.0000	0.0000	0.2000	0.2222
VERSATILE CREATIVE	-0.1034	-0.3462	0.0000	-0.1471	-0.0345	0.1786
VS INDUSTRY	0.0431	0.0496	-0.0787	-0.1282	0.0686	0.1284
WAH SEONG	-0.0530	0.0052	0.1103	0.1801	0.2974	0.1001
WHITE HORSE	0.0096	0.0286	0.0093	-0.0092	0.1019	0.1261
WONG ENGINEERING	-0.1304	0.1000	-0.0909	0.0250	0.3171	0.0370
WOODLANDOR HOLDINGS	0.1163	-0.2500	0.0417	0.1467	-0.1047	0.1169
WTK HOLDINGS	-0.2750	0.0828	-0.0701	0.0411	0.2500	0.3474
YI-LAI	0.0376	-0.0267	0.0275	-0.0172	0.2816	0.0227
YLI HOLDINGS	0.0364	0.0088	-0.0174	-0.0619	0.4434	0.1765

YUNG KONG GALVANISING INDS	0.0830	-0.0767	-0.0144	0.0476	0.2063	-0.0116
Portfolio Return	5.1777	-2.9771	-5.1499	-1.4153	21.4944	13.8594
Less: KLCI Return	0.0088	0.0070	-0.0203	0.1355	0.0539	0.0298
Residual Return (RR)	**5.1689**	**-2.9842**	**-5.1296**	**-1.5507**	**21.4405**	**13.8296**

REF.	Equation		Excel Formula
	ARRw =	2.6884	=AVERAGE ( )
	ARRL =	5.1291	=AVERAGE ( )
A	ARRw-ARRL =	-2.4407	
B	STDEV of ARRw =	5.3333	=STDEV ( )
C	n =	6	
D	STDEV of ARRL =	10.5589	=STDEV ( )
E	n =	6	
F	B/C+D/E =	2.6487	
4.G	$\sqrt{F}$ =	1.6275	
A/G	T Stat =	-1.4997	

Appendix 4.1.2.3 Period (i7) July – December 2009

Winning Portfolio

	1/7/09	1/8/09	1/9/09	1/10/09	1/11/09	1/12/09
ACME HOLDINGS	-0.0838	0.1046	-0.0533	0.1125	-0.0056	0.2768
ADVANCED PACKTECH(M)	-0.0857	0.2188	-0.0385	0.0667	0.0250	0.0915
ADVENTA	0.0455	0.2793	0.0371	-0.0251	0.1568	0.1702
AE MULTI HOLDINGS	0.2021	-0.1239	1.3838	-0.4025	1.1418	0.0132
AJIYA	-0.0549	-0.0223	-0.1050	-0.0663	0.0710	-0.1837
APM AUTOMOTIVE HDG	-0.0444	0.0756	0.0703	0.1263	0.0493	0.0214
A-RANK	-0.2433	-0.0308	0.2136	-0.0262	-0.0385	-0.0120
ASIA KNIGHT	-0.0571	0.0303	0.0294	-0.0286	-0.0882	-0.0161
ASTRAL SUPREME	-0.0549	-0.0223	-0.1050	-0.0663	0.0710	-0.1837
BOX-PAK (MALAYSIA)	0.1067	0.0663	-0.0621	0.0361	0.0465	0.2000
BP PLASTICS HOLDING	-0.0682	0.0732	0.1591	0.1176	0.0351	-0.0424
BRIGHT PACKAGING IND	-0.0278	0.0000	0.1810	0.0484	0.0923	0.1338
BTM RESOURCES	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CAHYA MATA SARAWAK	0.0417	0.0000	0.0060	-0.0199	0.1298	-0.1616
CENTRAL INDUSTRIAL	0.0000	0.0250	0.2195	0.0000	0.2000	-0.3167
CENTURY BOND	0.0737	0.1961	0.0328	0.0873	0.0438	-0.1818

CHOO BEE METAL INDS	0.0340	0.0198	0.0134	-0.0768	0.0416	0.0000
COASTAL CONTRACTS	0.0056	0.1310	0.0468	-0.0500	-0.1004	0.1295
CSC STEEL HOLDINGS	-0.0667	0.1327	-0.0631	0.0288	0.1776	0.0000
DAIBOCHI PLASTIC & PACK INDUSTRY	-0.0811	0.9035	-0.0076	0.2033	0.2285	0.0147
D'NONCE TECHNOLOGY	0.1250	0.5833	0.0702	-0.1803	0.1800	0.1186
DOLOMITE	-0.1957	0.0541	0.0256	-0.1500	0.1471	-0.0513
EKSONS	0.0000	0.1095	0.0855	0.0182	-0.0238	-0.0488
EVERGREEN FIBREBOARD	0.1221	0.2313	-0.0884	0.1030	0.4286	0.0308
FACB INDUSTRIES	-0.0465	0.1098	0.0220	-0.0215	0.0110	0.0870
FIMA	0.0309	0.0922	0.0244	-0.0139	-0.0131	0.0480
GOLDEN PHAROS	0.1148	0.0000	-0.0735	-0.0317	-0.0492	-0.0172
GOODWAY INTEGRATED INDS	0.0638	0.0600	-0.0566	0.1600	-0.0172	0.0175
GUH HOLDINGS	0.0500	0.3810	0.0690	-0.0597	-0.0617	0.0603
HUME INDUSTRIES	-0.1444	-0.0390	0.0811	0.2250	-0.1429	0.1905
INTEGRATED RUBBER	0.1797	0.5143	0.0700	0.0095	0.3603	-0.1766
IRE-TEX	0.0092	-0.1033	-0.0475	0.0142	0.0246	0.0925
JAVA	-0.0797	0.0709	-0.0221	-0.0827	0.0328	-0.0317
JAYA TIASA HOLDINGS	0.1646	0.0727	-0.0238	-0.0129	0.0208	0.0332
KECK SENG (MALAYSIA)	-0.0164	0.0333	0.0214	0.0000	0.0529	-0.0277
KIA LIM	0.3590	-0.1698	-0.1136	0.1282	0.0682	-0.1064
KKB ENGINEERING	0.0432	0.0584	0.2847	0.0263	0.1727	0.0426
KOMARKCORP	0.0756	0.1838	-0.1187	0.2694	0.0327	-0.2174
KOSSAN RUBBER	0.0625	-0.0107	0.0832	0.0848	0.1840	-0.0482
KUMPULAN H&L HIGH-TECH	0.0274	-0.0667	-0.0714	0.2308	0.2500	-0.3000
KYM HOLDINGS	0.4583	0.1214	-0.2102	0.1290	-0.1429	0.1667
LION INDUSTRIES	-0.0388	0.2823	-0.0629	0.0134	-0.0662	-0.1064
LYSAGHT GALVANIZED	0.0000	0.1650	-0.0083	0.1765	0.0000	0.0571
MALAYSIA PACKAGING IND	0.2500	-0.0889	-0.1951	0.1212	-0.0676	-0.0725
MELEWAR INDUSTRIAL GROUP	-0.0244	0.0750	-0.0698	0.0000	-0.0417	0.0870
METROD HOLDINGS	-0.0625	0.0667	0.0625	-0.0147	0.0209	-0.0292
MINHO (M)	0.1475	0.0286	0.0000	0.0556	-0.0263	-0.1757
MULTICODE ELTNINDS	0.4091	-0.0968	0.0714	0.0333	0.2903	-0.1125
NAKAMICHI	0.2000	-0.1458	0.2439	-0.0458	-0.1301	0.2598
PERSTIMAMAL(PER STIMA)	0.0568	0.1157	-0.0370	0.0000	0.0269	0.1348
PNE PCB	-0.2500	0.5965	-0.3626	-0.3966	0.2571	0.0000
PREMIUM NALFIN	0.2051	0.0213	0.0208	-0.0204	0.1042	-0.0566

PRESS METAL	0.1868	0.1204	-0.0165	0.0756	-0.0156	-0.0476
PRICEWORTH INTERNATIONAL	0.1452	0.0778	-0.0588	0.1250	0.2323	-0.0984
PUBLIC PACKAGES HDG	-0.1944	0.3793	0.0750	0.0465	0.1556	-0.0385
RALCO	-0.0217	0.0667	0.1875	0.0526	-0.0556	0.1059
RUBBEREX	0.0581	0.0488	-0.0291	0.0599	0.0960	-0.0052
SAPURA INDUSTRIAL	-0.0566	0.1900	-0.1345	0.0097	0.0577	-0.1455
SKB SHUTTERS	0.0000	0.0000	0.0000	-0.0625	0.0000	0.0000
SKP RESOURCES BERHAD	0.0000	0.1304	-0.0385	0.0800	0.1481	0.0323
SUPER ENTERPRISE HDG	0.0357	0.0345	-0.0333	0.0000	-0.0690	-0.0185
SUPERMAX	0.0309	0.4970	0.0040	-0.0080	0.4257	0.0873
TA ANN HOLDINGS	0.0454	0.1690	-0.0475	-0.0738	0.1008	-0.0129
TADMAX RESOURCES	0.0667	0.0313	-0.0909	-0.1167	0.0377	-0.1455
TASEK	0.0532	-0.1110	0.0851	0.0000	0.0210	0.0333
TECK GUAN PERDANA	0.1111	0.2400	-0.1935	0.1000	-0.2727	-0.1000
TECNIC GROUP	0.0262	0.2471	0.2327	0.0434	0.0306	-0.0498
THREE-A RES	0.1594	0.1500	0.2391	0.4298	1.1227	-0.2832
TIEN WAH PRESS HOLDINGS	-0.0061	0.1809	0.0870	-0.0451	-0.0265	-0.0103
TOMYPAK HOLDINGS	-0.0794	0.9138	0.2252	0.0809	0.1224	0.0545
TONG HERR RESOURCES	0.0317	0.0718	-0.1100	-0.0323	-0.0056	-0.0782
TOP GLOVE	0.1356	0.0746	-0.0417	0.0275	0.1707	0.0964
TOYO INK GROUP	-0.1196	0.0509	0.0646	0.0759	0.0772	0.0262
UNITED U-LI	-0.0130	0.0395	0.2911	0.0196	0.1731	0.0000
WEIDA (M)	0.1596	0.1376	0.0726	0.0376	0.1014	-0.1053
WHITE HORSE	-0.0672	0.0400	0.0077	-0.0076	0.0231	0.0526
YI-LAI	-0.0430	0.0372	0.0507	-0.0483	0.0000	0.0149
YUNG KONG GALVANISING INDS	0.0411	0.0507	0.0107	0.0743	0.0099	0.0000
Portfolio Return	2.6231	9.2308	2.4712	1.7777	6.8210	-0.8339
Less: KLCI Return	0.0927	-0.0005	0.0237	0.0342	0.0128	0.0109
Residual Return (RR)	2.5304	9.2313	2.4475	1.7435	6.8083	-0.8448

Losing Portfolio

	1/7/09	1/8/09	1/9/09	1/10/09	1/11/09	1/12/09
ABLEGROUP	0.1000	0.0157	0.5463	-0.2655	0.0815	-0.1859
ABRIC	0.2414	-0.1667	0.8333	-0.1091	-0.0816	-0.0667
ALUMINIUM COOF MAL	0.0160	0.0316	0.0714	0.0095	0.0566	-0.0357
AMALGAMATED INDLSTEEL	0.0233	0.0341	-0.0110	0.0444	0.0106	0.0105
AMANAH HARTA TANAH PNB	0.0488	0.0233	-0.0284	0.0526	0.0000	0.0000
ANCOM	0.1226	0.0588	0.0000	0.0238	-0.0698	0.0500

ANN JOO RESOURCES	-0.0104	0.2513	-0.0460	0.0570	0.0788	0.0885
APB RESOURCES	-0.0222	0.0682	0.0532	0.0606	0.0571	0.0270
ASTINO	0.0707	0.2594	0.0187	-0.0331	-0.0114	0.0192
ATURMAJU RESOURCES	-0.1029	0.0246	0.0400	-0.0308	0.0079	-0.0551
BIG INDUSTRIES	0.0930	0.2979	-0.0164	-0.0333	0.0431	-0.0331
BOON KOON GROUP BHD	0.4054	0.2308	-0.0313	-0.0323	-0.0500	-0.1930
BOUSTEAD HEAVY INDS	-0.1282	0.1520	0.0830	-0.0079	-0.0337	-0.0492
BSL	-0.0909	0.0167	-0.0164	-0.0167	-0.0508	-0.0357
CAN-ONE	0.0112	0.0500	0.0000	0.0000	0.0000	0.0053
CB INDLPRODUCT HOLDINGS	0.0633	0.0382	-0.0603	0.0454	-0.0494	-0.0299
CCM DUOPHBIOTECH	-0.0739	0.0374	0.1178	0.0448	-0.0314	-0.0561
CHIN WELL HOLDINGS	-0.0333	0.0000	-0.0603	0.0275	-0.0446	-0.1215
CME GROUP	0.0714	0.0000	-0.0667	0.0000	0.0000	-0.1429
CN ASIA	-0.1818	0.1111	0.1000	0.4182	0.6026	-0.1840
COMINTEL	0.3617	0.0781	-0.1449	0.0678	0.0000	-0.0476
COMPUTER FORMS (MAL)	0.5385	0.1800	0.0169	-0.4167	0.4286	0.4000
CONCRETE ENGRPRDS	0.2400	0.0000	0.0000	-0.0774	0.0490	-0.0333
CYL	0.1111	0.4300	-0.2308	-0.0364	-0.0189	0.0000
CYMAO HOLDINGS	0.0400	-0.0577	0.1939	-0.0855	0.0187	0.1468
DENKO INDUSTRIAL	0.0435	0.2083	-0.1379	0.0800	0.0741	-0.1034
DOMINANT ENTERPRISE	0.0900	-0.0450	0.1400	-0.0100	-0.0150	0.0450
DRB-HICOM	0.0352	0.0971	-0.0088	0.0179	-0.0614	-0.0561
EG INDUSTRIES	0.3617	0.2031	0.0000	0.0390	-0.0375	0.0779
EONMETALL GROUP	0.1455	-0.0952	-0.0702	-0.0755	0.0000	-0.0816
EP MANUFACTURING	0.4390	0.0847	-0.0625	0.6833	0.0396	-0.0762
GE-SHEN	0.0000	-0.3276	0.0256	0.0000	-0.0250	0.6923
GOH BAN HUAT	0.2994	0.0696	0.0793	-0.0405	0.0285	0.0134
GPA HOLDINGS	-0.0426	0.0444	-0.0426	0.0444	0.0000	-0.0426
GSB GROUP	-0.0909	0.1000	-0.0909	0.0000	0.0000	-0.1000
HARVEST COURT	-0.2301	0.4943	0.2692	-0.1576	0.9640	-0.0696
HCK CAPITAL GROUP	1.4167	-0.0172	0.0000	-0.0175	0.0714	0.1667
HEVEABOARD	0.1667	0.0000	0.1633	0.2281	0.6429	0.1565
HEXZA	0.0361	0.5349	-0.1439	0.0088	0.1228	-0.1406
HIAP TECK VENTURE	-0.0424	0.0885	0.0407	0.3040	0.0150	0.0517
HIL INDUSTRIES	0.4426	0.3409	0.1949	0.1631	-0.0061	0.0429
HO WAH GENTING	0.0000	0.0000	-0.0204	-0.0417	-0.1304	-0.0250
IDEAL UNITED BINTANG	-0.0741	0.0000	0.0200	-0.0196	0.0000	0.0000
IMASPRO	-0.0059	0.0059	-0.0353	0.0732	0.0227	-0.0333

IRM GROUP	-0.3036	0.6154	0.0000	-0.1746	0.1538	-0.1000
JADI IMAGING HDG	-0.1019	0.2990	0.0317	0.0846	0.0567	-0.1007
JASA KITA	0.1250	0.1111	-0.0333	0.0000	0.0690	-0.0645
JMR CONGLOMERATION	0.7391	-0.0500	0.4211	-0.3519	0.1429	0.1500
JOHORE TIN	-0.0628	0.0223	0.0097	-0.0096	0.1092	0.1904
KARYON INDUSTRIES	-0.1205	0.0959	-0.0375	0.0000	0.1299	0.0690
KEIN HING INTL	-0.0469	0.0984	0.1493	-0.0130	-0.0263	-0.0135
KIAN JOO CAN FACTORY	-0.0085	0.0171	0.0000	-0.0168	0.0256	0.0333
KIM HIN INDUSTRY	0.0106	-0.0053	0.0688	0.1089	-0.0625	0.1333
KINSTEEL	-0.0549	0.1628	-0.0950	0.0331	0.0053	-0.0585
KNM GROUP	-0.1716	0.0669	-0.1312	-0.0133	0.0400	-0.0899
KOBAY TECHNOLOGY	0.1346	0.0339	0.0820	-0.0303	-0.0313	0.0161
KUMPULAN POWERNET	-0.1014	0.2258	0.5132	-0.2348	0.0341	0.3407
LAFARGE MALAYSIA	0.1881	0.0117	0.0049	0.0082	-0.0146	0.0396
LB ALUMINIUM	0.0588	0.0972	0.0886	0.1744	0.0495	-0.0943
LCTH	0.5833	-0.1711	-0.0159	0.0645	-0.0152	0.0154
LEADER STEEL HOLDINGS	-0.0476	0.1000	0.0227	-0.0222	0.0455	0.0326
LEWEKO RESOURCES	-0.0714	0.0154	0.0303	0.0000	-0.0882	0.0323
LION	-0.0928	0.1023	-0.1753	-0.0375	0.0130	-0.1923
LION DIVERSIFIED HDG	-0.0769	0.1111	-0.1083	-0.0561	-0.0693	-0.1383
LUSTER INDUSTRIES	0.2500	-0.4000	0.0000	0.0000	0.0000	0.0000
MALAYSIA SMELTING	0.0034	0.0702	0.0500	-0.0595	-0.0190	0.0129
MALAYSIA STEEL WKS(KL)	0.0000	0.0761	-0.0505	0.0000	0.1064	-0.0481
MASTER-PACK GROUP	0.2000	-0.0278	0.2857	-0.2111	0.1831	-0.1310
MENTIGA	0.5000	0.1667	0.0714	-0.2000	0.0833	-0.0154
MERCURY INDUSTRIES	0.0000	0.0500	0.2500	0.1619	0.0164	0.0484
METAL RECLAMATION	0.0000	0.0000	0.0000	0.0000	-0.0099	0.0000
MIECO CHIPBOARD	0.0926	0.0678	0.3968	-0.0909	0.0500	0.0357
MINETECH RESOURCES	0.1786	0.0848	-0.2179	0.0357	-0.0621	0.0000
ML GLOBAL	0.3889	-0.0400	0.4167	0.0882	0.1081	-0.0732
MUDA	-0.0488	0.2735	-0.0134	-0.0136	0.0966	0.0063
MYCRON STEEL	0.1111	0.0300	-0.0194	0.0099	0.0196	0.0000
NWP HOLDINGS	0.7857	0.0000	-0.4000	0.2667	0.0000	-0.2105
NYLEX (MALAYSIA)	0.1150	0.1581	0.0273	0.0070	0.0597	-0.0996
OCTAGON CONS	0.0658	0.0123	0.0488	-0.1163	-0.1316	-0.1818
OKA	0.1905	0.3200	-0.0152	0.0769	-0.0571	-0.0909

ORNAPAPER BERHAD	0.8889	-0.0735	0.1429	-0.1111	0.0937	-0.0857
PA RESOURCES	-0.0188	-0.1053	0.1631	0.0805	0.0638	0.0000
PENSONIC HOLDINGS	0.3364	0.0979	0.0478	-0.1429	0.1383	0.0685
PETRON MALREFN& MKTG	-0.0868	0.0000	0.0724	0.0338	0.0653	-0.0345
PETRONAS GAS	0.0000	-0.0061	0.0010	-0.0051	0.0093	0.0112
PIE INDUSTRIAL	-0.0146	0.0000	0.0395	-0.0214	0.0315	-0.0187
PMB TECHNOLOGY	-0.2500	0.1222	-0.0396	-0.0412	0.0323	-0.1250
POLY GLASS FIBRE (M)	0.0270	-0.0263	0.0000	0.0000	0.0000	0.0000
PRESTAR RESOURCES	0.0930	0.0745	0.0297	-0.0962	-0.0106	0.2473
PRG HOLDINGS	0.1452	0.0778	-0.0588	0.1250	0.2323	-0.0984
QUALITY CONCRETE HDG	0.0000	-0.0381	0.0792	-0.0550	-0.0291	0.0000
RAPID SYNERGY	0.0201	-0.0985	0.0820	-0.1010	0.0056	-0.0056
SAM ENGR& EQU(M)	0.0000	-0.0524	0.0050	-0.1000	0.1389	0.0000
SARAWAK CONSINDS	-0.2361	0.4182	-0.1795	-0.0625	0.0167	0.2459
SCIENTEX	0.0531	0.0252	0.0492	-0.0156	0.0714	-0.0222
SCOMI ENGINEERING	0.0192	0.2547	-0.0301	0.2093	-0.0897	-0.0915
SEACERA GROUP	-0.0302	0.0667	0.0167	0.1967	-0.1267	0.0275
SHELL REFINING COFOM	-0.0536	-0.0094	0.0095	0.0057	0.0038	-0.0093
SINO HUA-AN INTL	-0.0095	0.0000	-0.0288	-0.0099	-0.0600	0.0426
SMIS	0.0333	0.6452	-0.3529	0.3788	0.2637	-0.2174
SMPC	-0.2642	0.0769	0.3452	0.0265	-0.0862	-0.1132
SOUTHERN ACIDS (M)	-0.1172	0.0234	0.0000	0.0000	0.0000	0.0000
SOUTHERN STEEL	0.0000	0.0643	-0.1157	0.0625	0.1291	-0.0207
STONE MASTER	0.6066	0.0000	0.0000	-0.3163	0.0896	0.5342
SUBUR TIASA HOLDINGS	0.1314	0.0707	-0.0377	-0.0098	-0.0099	0.0050
SUCCESS TRANSFORMER	-0.0058	0.0694	0.1028	0.0196	0.2310	-0.1173
TA WIN HOLDINGS	0.0667	0.0833	0.0192	-0.1132	-0.0426	0.3333
TEKALA	0.0000	0.0500	-0.0068	0.1096	-0.0864	-0.0270
THONG GUAN INDS	0.0140	-0.0207	0.0687	0.0774	-0.0474	0.0000
TIMBERWELL	-0.1321	-0.1304	-0.0250	-0.0513	0.0270	-0.0395
TURIYA	-0.3066	0.0105	0.0208	-0.0510	0.0753	0.0200
UCHI TECHS	-0.1667	0.2273	-0.0889	0.0407	0.0781	0.0435
UMS-NEIKEN GROUP	-0.1818	0.1944	0.0233	-0.0682	0.0000	-0.1707
VERSATILE CREATIVE	-0.0303	-0.0938	-0.0345	0.0357	0.2069	0.0286
VS INDUSTRY	-0.0244	0.1167	-0.0821	-0.0407	0.0424	-0.0407
WAH SEONG	-0.0270	0.1156	0.0345	0.1095	0.0217	0.0126
WATTA HOLDINGS	0.0000	0.0000	0.0000	6.0000	0.4286	-0.2300
WONG ENGINEERING	0.0357	0.1034	0.0156	0.0615	-0.0145	-0.1029

WOODLANDOR HOLDINGS	-0.2326	-0.0303	0.1250	0.0278	0.0000	-0.0811
WTK HOLDINGS	-0.1172	0.1770	-0.1353	-0.0087	0.0439	-0.0252
YLI HOLDINGS	-0.0222	0.0511	-0.0432	0.1017	-0.1282	-0.0588
Portfolio Return	8.4601	9.2846	3.5727	6.7365	5.5179	-0.6663
Less: KLCI Return	0.0927	-0.0005	0.0237	0.0342	0.0128	0.0109
Residual Return (RR)	**8.3674**	**9.2852**	**3.5490**	**6.7023**	**5.5051**	**-0.6772**

	Equation		Excel Formula
	ARRw =	3.6527	=AVERAGE ( )
	ARRL =	5.4553	=AVERAGE ( )
A	ARRw-ARRL =	-1.8026	
B	STDEV of ARRw =	3.6787	=STDEV ( )
C	n =	6	
D	STDEV of ARRL =	3.6317	=STDEV ( )
E	n =	6	
F	B/C+D/E =	1.2184	
G	$\sqrt{F}$ =	1.1038	
A/G	T Stat =	-1.6331	

Appendix 4.1.2.4 Period (i12) January – June 2012

Winning Portfolio

	1/1/12	1/2/12	1/3/12	1/4/12	1/5/12	1/6/12
ABLEGROUP	-0.0132	0.0667	0.0625	-0.1471	-0.0690	-0.0741
ADVENTA	-0.0635	0.0308	-0.0509	-0.0131	-0.0767	-0.0290
AE MULTI HOLDINGS	0.1439	-0.0464	-0.0347	-0.0180	-0.1209	-0.1750
AJIYA	0.3245	-0.1200	-0.0568	0.2349	0.5707	-0.4534
AMANAH HARTA TANAH PNB	-0.0094	0.0571	-0.0631	0.0096	0.0095	0.0000
ANCOM	-0.0400	0.0556	0.0000	-0.0526	-0.0139	0.0000
A-RANK	-0.0433	-0.0244	0.1679	-0.0612	-0.0651	-0.0592
ASIA KNIGHT	0.1176	-0.1579	0.1250	0.0694	0.5844	-0.2623
ASTINO	0.0665	-0.0923	0.0137	0.0000	-0.0081	0.0082
ASTRAL SUPREME	0.3245	-0.1200	-0.0568	0.2349	0.5707	-0.4534
ATURMAJU RESOURCES	0.0000	0.0000	-0.0333	0.0345	-0.0167	0.0000
BIG INDUSTRIES	-0.1167	0.0377	0.0182	-0.0179	-0.0545	-0.0385
BOX-PAK (MALAYSIA)	0.6884	0.0730	-0.0800	-0.0696	-0.0234	-0.0287
BRIGHT PACKAGING IND	0.0275	0.2807	0.1211	-0.1210	-0.0508	-0.0357
CAHYA MATA SARAWAK	0.0058	-0.0057	0.1934	-0.0447	0.0342	0.0073
CAN-ONE	0.0404	0.8932	-0.0923	0.0452	0.1892	-0.0364
CB INDLPRODUCT	0.0548	0.1080	0.0084	0.0242	0.1225	-0.1269

HOLDINGS						
CENTURY BOND	0.0065	0.2821	-0.0800	-0.1304	-0.0500	0.0263
CN ASIA	-0.0071	0.0360	0.0000	-0.0278	0.0000	0.0000
COASTAL CONTRACTS	0.0212	0.1917	0.0043	-0.1385	-0.0151	-0.1122
COMPUTER FORMS (MAL)	0.2037	0.1000	-0.0350	0.0000	0.0000	0.0290
CONCRETE ENGRPRDS	-0.1361	0.0303	0.0000	0.0529	-0.0670	-0.1677
DAIBOCHI PLASTIC & PACK INDUSTRY	0.0034	0.0716	0.0211	-0.0242	-0.0069	0.0106
DENKO INDUSTRIAL	-0.0278	-0.1714	-0.0345	-0.0357	0.0185	-0.0545
D'NONCE TECHNOLOGY	0.0339	0.0984	0.1343	0.0526	-0.1125	0.0563
DOMINANT ENTERPRISE	-0.0100	0.0750	0.0550	0.0300	0.0600	-0.0350
DRB-HICOM	0.0200	0.3873	-0.0777	0.0000	-0.0230	-0.0431
FACB INDUSTRIES	0.1190	0.0000	-0.0213	-0.0326	-0.0787	0.0000
GOH BAN HUAT	0.0769	0.0000	0.0667	0.0179	0.0175	0.0345
GOODWAY INTEGRATED INDS	-0.0667	0.1310	-0.1368	-0.0244	0.0125	-0.0617
GPA HOLDINGS	0.0667	-0.0625	0.0667	0.0000	-0.0625	-0.0533
HCK CAPITAL GROUP	0.0937	0.2000	0.1905	-0.1200	0.2273	-0.0741
HEXZA	-0.1385	0.1071	0.0000	-0.0161	-0.0246	0.0084
IMASPRO	0.0122	0.0000	0.0241	0.0353	0.0341	-0.0714
INTEGRATED RUBBER	-0.1111	0.0625	-0.0588	-0.0938	-0.0345	-0.0714
JASA KITA	0.0714	0.0000	0.0667	-0.0938	0.0345	-0.0333
JMR CONGLOMERATION	0.0306	-0.0099	-0.0100	-0.0202	0.0309	-0.0100
JOHORE TIN	-0.0259	0.0945	0.1606	0.2663	0.1763	-0.1140
KARYON INDUSTRIES	-0.0933	0.0882	0.0541	-0.0769	-0.0556	-0.0588
KECK SENG (MALAYSIA)	0.0561	0.0481	0.0121	-0.0215	-0.0293	-0.0503
KEIN HING INTL	0.0000	0.0909	0.0104	-0.0309	-0.0426	-0.1111
KIA LIM	-0.1957	0.2973	0.3750	-0.0606	0.0000	0.1129
KIAN JOO CAN FACTORY	0.0938	0.0667	-0.0491	-0.0563	-0.0199	-0.0102
KKB ENGINEERING	0.0059	-0.0118	0.0179	-0.0234	0.0000	-0.1198
KOMARKCORP	-0.1219	0.0163	-0.0321	0.0166	-0.0694	0.0351
KOSSAN RUBBER	0.0220	0.0769	-0.0343	-0.0266	-0.0122	-0.0338
KUMPULAN H&L HIGH-TECH	0.0127	0.3250	-0.1887	-0.1163	0.2500	-0.0579
LAFARGE MALAYSIA	0.0448	-0.0457	0.0973	-0.0205	0.0014	-0.0181
LEWEKO RESOURCES	-0.0294	0.0000	-0.0303	0.0625	-0.0882	-0.1290
LYSAGHT GALVANIZED	-0.0059	0.0355	0.1543	0.0149	-0.0244	0.0250
MALAYSIA	0.3200	-0.1818	0.2963	-0.1143	0.0645	-0.0303

PACKAGING IND MENTIGA	0.0286	0.2500	-0.1667	-0.1067	0.1493	0.0260
MIECO CHIPBOARD	-0.0860	0.0941	-0.0215	-0.0549	-0.0233	-0.0833
MINHO (M)	0.1250	-0.0667	-0.0119	-0.0120	-0.0488	-0.0256
ML GLOBAL	-0.0588	-0.1875	-0.1538	-0.0909	-0.6000	0.0000
MULTICODE ELTNINDS	0.0685	0.4615	0.0088	0.0000	-0.0522	0.0642
NWP HOLDINGS	-0.0385	0.0000	0.0400	0.1538	-0.0667	-0.1429
OKA	-0.0693	0.2340	-0.0776	-0.0654	-0.0200	0.0204
ORNAPAPER BERHAD	0.0667	0.0000	-0.0208	-0.0638	0.0000	0.0455
PA RESOURCES	-0.1576	-0.1223	0.0000	0.0328	-0.1349	-0.0826
PENSONIC HOLDINGS	-0.0648	0.0277	-0.0081	-0.0299	0.0196	-0.0495
PETRONAS GAS	0.1411	0.0316	0.0778	-0.0036	-0.0036	0.0334
PIE INDUSTRIAL	0.0316	0.0355	0.0839	0.1181	0.0020	-0.1500
POLY GLASS FIBRE (M)	0.0484	0.0462	0.0588	-0.0139	0.0282	-0.0137
PRESS METAL	-0.0168	0.0739	0.0423	0.0508	0.0193	-0.1469
QUALITY CONCRETE HDG	-0.0149	-0.0076	0.1221	-0.1565	0.0000	-0.0081
RALCO	0.1000	0.0909	-0.1583	-0.0297	-0.0306	-0.0316
RAPID SYNERGY	-0.0198	0.0909	0.0694	0.0606	0.0816	0.0000
RUBBEREX	0.0222	0.0145	-0.0571	-0.0303	-0.0313	0.0806
SARAWAK CONSINDS	-0.0822	0.0000	0.0448	-0.0429	-0.1194	-0.0169
SCIENTEX	0.0123	0.0243	0.0119	-0.0273	-0.0643	-0.0086
SCOMI ENGINEERING	-0.0508	0.1071	-0.1210	0.0367	-0.0619	-0.0566
SEACERA GROUP	0.0000	0.0578	-0.0546	-0.0844	0.0000	0.0194
SMIS	0.0100	0.0495	-0.0566	-0.0800	-0.0652	-0.1047
SOUTHERN ACIDS (M)	-0.0091	0.0968	-0.0126	0.0170	0.0126	-0.0909
SUBUR TIASA HOLDINGS	0.0909	0.0125	0.0206	0.0484	0.0192	-0.1396
SUCCESS TRANSFORMER	-0.0492	0.0287	0.0335	0.0054	0.0108	0.0000
SUPER ENTERPRISE HDG	0.1698	-0.1183	-0.0061	0.0061	-0.0610	-0.0130
SUPERMAX	0.0493	0.1175	-0.0701	-0.0452	-0.0053	0.0265
TASEK	-0.0250	0.0256	0.0850	0.0081	-0.0091	-0.0254
TECK GUAN PERDANA	-0.0933	0.0000	0.0000	0.1029	-0.0267	-0.0822
THONG GUAN INDS	0.0000	0.1475	0.0458	0.0074	-0.0222	-0.0066
THREE-A RES	-0.0744	0.1786	-0.0606	-0.0806	0.0614	-0.0496
TOMYPAK HOLDINGS	0.0051	0.0151	-0.0099	-0.0400	-0.0312	-0.0054
TOP GLOVE	0.0616	0.0120	-0.0455	-0.0683	0.0422	0.0000
UMS-NEIKEN GROUP	-0.0769	0.1042	0.1887	0.0159	-0.0313	0.2581
UNITED U-LI	-0.0633	0.0541	-0.0513	-0.0405	0.0211	0.0000
WEIDA (M)	0.0215	0.0105	0.0313	-0.0101	-0.0204	0.0260
YUNG KONG GALVANISING	-0.0894	0.0000	-0.0345	0.0000	-0.0137	-0.0111

INDS

Portfolio Return	1.7654	5.4556	1.0268	-1.1613	0.6178	-3.6847
Less: KLCI Return	-0.0062	0.0318	0.0170	-0.0161	0.0064	0.0117
Residual Return (RR)	**1.7716**	**5.4238**	**1.0098**	**-1.1452**	**0.6114**	**-3.6964**

Losing Portfolio

	1/1/12	1/2/12	1/3/12	1/4/12	1/5/12	1/6/12
ABRIC	0.0000	-0.0794	0.0000	0.0345	0.0000	-0.0833
ACME HOLDINGS	-0.1077	0.0345	0.0000	-0.0333	-0.0862	0.0566
ADVANCED PACKTECH(M)	0.1017	-0.0923	0.2034	-0.0070	-0.0071	0.0429
ALUMINIUM COOF MAL	-0.0174	0.0059	-0.0235	0.0361	-0.0233	-0.0476
AMALGAMATED INDLSTEEL	-0.1579	0.0313	0.0303	-0.0735	0.0317	0.0308
ANN JOO RESOURCES	-0.0802	0.1047	0.0737	0.0147	-0.0628	-0.1186
APB RESOURCES	0.0667	-0.0417	0.0326	0.0263	-0.0974	0.0966
APM AUTOMOTIVE HDG	0.0114	0.0112	0.0200	0.0000	0.0240	0.0426
BOON KOON GROUP BHD	-0.0317	-0.0164	-0.0167	-0.1017	-0.0755	-0.1837
BOUSTEAD HEAVY INDS	0.2943	0.1224	-0.0468	-0.0736	-0.1647	0.0070
BP PLASTICS HOLDING	0.0000	0.1583	-0.0216	-0.0588	-0.0469	0.0164
BSL	-0.1803	0.3800	0.1014	-0.0789	0.0286	-0.1667
BTM RESOURCES	-0.1010	0.0000	-0.1517	0.0397	-0.0382	0.0397
CCM DUOPHBIOTECH	-0.0822	0.0501	0.0941	0.0343	-0.0169	0.0297
CENTRAL INDUSTRIAL	0.0714	0.0000	-0.0222	0.0227	0.0222	0.0109
CHIN WELL HOLDINGS	0.0141	-0.0139	-0.0141	-0.0286	-0.0074	-0.0519
CHOO BEE METAL INDS	0.0355	0.0616	0.0194	-0.0380	-0.0263	-0.0405
CME GROUP	0.0000	0.0588	0.0000	-0.0556	0.0000	-0.1765
COMINTEL	0.2903	-0.1500	-0.1765	0.2500	-0.0571	0.0000
CSC STEEL HOLDINGS	-0.0221	0.0977	-0.0548	0.0145	-0.0071	-0.0504
CYL	-0.0312	0.0215	0.0421	0.0404	-0.0194	0.0099
CYMAO HOLDINGS	0.0000	-0.0652	0.0465	0.0000	-0.0444	-0.1047
DOLOMITE	0.0800	0.0370	-0.0357	0.0000	-0.0370	-0.0192
EG INDUSTRIES	0.0937	-0.0571	-0.0758	-0.0328	-0.0169	-0.0172
EKSONS	0.0000	0.0594	0.0374	-0.0360	0.0467	-0.0357
EONMETALL GROUP	-0.0313	0.2258	-0.0526	0.0000	-0.0556	0.0000
EP MANUFACTURING	0.0000	0.1871	-0.0435	-0.0966	0.0063	-0.0500
EVERGREEN FIBREBOARD	0.0278	0.1351	-0.0381	-0.0545	-0.0576	0.0000
FIMA	0.0000	0.1123	-0.0372	-0.0145	-0.0113	0.0248
GE-SHEN	0.0476	0.1818	0.0000	-0.1346	0.1556	-0.0385

GOLDEN PHAROS	-0.0263	0.0405	-0.0779	0.0141	0.0000	0.0000
GSB GROUP	-0.1579	0.2500	-0.0500	0.0000	-0.0526	-0.1111
GUH HOLDINGS	0.0000	0.2000	-0.0552	-0.0298	0.0000	-0.0307
HARVEST COURT	0.2448	-0.0801	0.0486	-0.3932	-0.1911	-0.1516
HEVEABOARD	-0.0357	0.0648	0.0087	-0.0345	-0.0179	-0.0182
HIAP TECK VENTURE	-0.1702	0.0847	0.0078	-0.0543	-0.0246	-0.0588
HIL INDUSTRIES	-0.1008	-0.0187	0.0762	-0.2301	-0.0345	-0.0238
HO WAH GENTING	0.0000	0.1739	-0.0247	0.0000	-0.0127	0.0128
HUME INDUSTRIES	0.0602	-0.0114	-0.0115	-0.0349	-0.0723	-0.1169
IDEAL UNITED BINTANG	0.1111	0.0000	0.2500	0.0000	0.0000	-0.0400
IRE-TEX	-0.0200	0.0000	-0.0087	0.0029	0.0968	0.1925
IRM GROUP	0.4286	-0.2400	-0.0526	0.1111	-0.1000	-0.1667
JADI IMAGING HDG	-0.0593	0.0315	-0.0840	-0.0667	-0.0268	0.0000
JAVA	-0.0584	-0.1448	-0.0161	0.0246	-0.0560	-0.0254
JAYA TIASA HOLDINGS	0.0764	0.0540	0.0330	0.1375	0.1645	-0.1260
KIM HIN INDUSTRY	0.0080	0.0317	0.0000	-0.0385	0.0400	-0.0231
KINSTEEL	-0.0385	0.1000	-0.0818	-0.0297	-0.0816	-0.0667
KNM GROUP	0.0148	0.1317	-0.1607	-0.0902	-0.0242	-0.1314
KOBAY TECHNOLOGY	-0.0380	-0.0263	0.0135	0.0933	0.0488	-0.0233
KUMPULAN POWERNET	-0.1406	1.0000	-0.2727	-0.1750	0.1515	-0.2105
KYM HOLDINGS	0.0000	-0.0769	0.0069	-0.0966	-0.0153	-0.0698
LB ALUMINIUM	0.0000	0.0263	-0.0128	-0.0260	0.0267	-0.0260
LCTH	0.0000	0.0294	0.1429	0.0250	0.0488	-0.0930
LEADER STEEL HOLDINGS	-0.0526	0.0833	0.0256	-0.1250	-0.0571	-0.0303
LION	-0.0526	0.0278	-0.2000	-0.3716	-0.0968	-0.2738
LION DIVERSIFIED HDG	-0.0282	0.1159	-0.1039	0.0000	-0.0870	-0.0159
LION INDUSTRIES	-0.0075	0.1128	-0.0338	-0.0280	0.0072	-0.1857
LUSTER INDUSTRIES	0.0000	0.0000	0.0000	0.0000	0.0000	14.0000
MALAYSIA SMELTING	-0.0316	0.1328	-0.0796	-0.0144	0.0341	-0.1344
MALAYSIA STEEL WKS(KL)	0.0642	-0.0086	-0.0261	-0.0625	-0.0476	-0.0200
MASTER-PACK GROUP	0.0132	0.1818	0.3516	-0.0488	-0.0769	-0.0370
MELEWAR INDUSTRIAL GROUP	-0.0300	0.0722	-0.2308	-0.0375	-0.0260	-0.1067
MERCURY INDUSTRIES	-0.0235	0.0361	0.0988	0.1217	0.0000	0.3396
METAL RECLAMATION	0.0000	0.0000	0.4000	0.0000	0.1905	0.0000
METROD HOLDINGS	0.0615	0.0145	-0.0238	-0.0244	-0.1000	0.0556
MINETECH RESOURCES	-0.0286	-0.0368	0.1450	0.0000	-0.0933	0.0662
MUDA	0.0606	0.1771	-0.0437	-0.0508	-0.0321	-0.0497

MYCRON STEEL	-0.0385	0.0533	-0.0633	0.0000	-0.0270	-0.0556
NAKAMICHI	-0.0200	0.0884	-0.1500	-0.0294	0.1515	-0.1316
NYLEX (MALAYSIA)	0.0714	0.0250	-0.0488	-0.0171	0.0087	-0.0862
OCTAGON CONS	-0.0333	-0.0345	-0.1071	-0.1200	-0.0455	-0.1905
PERSTIMAMAL(PER STIMA)	0.0108	-0.0053	-0.0323	-0.0028	-0.0251	-0.0286
PETRON MALREFN& MKTG	0.0351	0.0282	-0.0110	-0.0111	0.0084	-0.0446
PMB TECHNOLOGY	-0.0408	0.1064	0.0096	0.2095	-0.0630	0.0084
PNE PCB	-0.1034	0.1731	0.0820	0.0909	-0.1389	0.2903
PREMIUM NALFIN	0.1000	0.4545	0.0125	-0.0988	-0.0274	0.0704
PRESTAR RESOURCES	-0.0933	0.1029	-0.0133	-0.0270	-0.1111	-0.0625
PRG HOLDINGS	-0.0767	0.0277	-0.0389	0.0405	-0.0389	0.0810
PRICEWORTH INTERNATIONAL	-0.0767	0.0277	-0.0389	0.0405	-0.0389	0.0810
PUBLIC PACKAGES HDG	-0.0500	0.1316	-0.0233	-0.0238	-0.0366	-0.0380
SAM ENGR& EQU(M)	0.0000	0.0000	0.0000	0.0000	0.4879	-0.0097
SAPURA INDUSTRIAL	-0.0608	0.0719	-0.0537	0.0709	0.0000	0.0662
SHELL REFINING COFOM	-0.0234	0.0566	0.0309	0.0200	0.0078	-0.0370
SINO HUA-AN INTL	-0.0392	0.0408	-0.0392	-0.0816	-0.0667	-0.1190
SKB SHUTTERS	-0.0400	-0.1042	0.1628	0.0000	0.0200	-0.0784
SKP RESOURCES BERHAD	-0.0179	0.5273	0.0952	0.0652	0.0204	0.0400
SMPC	0.0738	-0.0916	0.0504	0.1040	5.3696	-0.1547
SOUTHERN STEEL	-0.0407	0.0790	-0.0732	-0.0048	-0.0265	0.0050
STONE MASTER	-0.5761	0.1966	-0.1214	-0.0244	0.0250	0.1138
TA ANN HOLDINGS	0.0424	0.0573	0.0351	0.0542	0.0464	-0.1933
TA WIN HOLDINGS	-0.1167	0.1698	-0.0484	-0.0508	0.0000	-0.1429
TADMAX RESOURCES	0.0461	-0.0126	-0.0318	-0.0987	-0.0146	-0.2074
TECNIC GROUP	0.1964	0.0896	-0.0050	0.0397	-0.0055	-0.0177
TEKALA	-0.0099	-0.0200	-0.0510	-0.0645	-0.0805	-0.1125
TIEN WAH PRESS HOLDINGS	0.0407	0.0782	0.0933	-0.0142	0.0000	0.0144
TIMBERWELL	0.0000	0.2118	-0.1748	0.0000	0.1059	-0.0957
TONG HERR RESOURCES	-0.0297	0.0765	0.1043	0.0258	-0.0042	0.0252
TOYO INK GROUP	0.1195	0.0184	-0.1345	0.1838	-0.0840	-0.0324
TURIYA	0.0000	0.0000	-0.0667	-0.0476	-0.1500	-0.1029
UCHI TECHS	-0.0684	0.0917	0.0000	0.0168	0.0000	0.0248
VERSATILE CREATIVE	0.5179	0.2471	-0.3679	-0.0597	-0.0476	-0.0333
VS INDUSTRY	0.1214	0.0127	-0.0063	-0.0127	0.0192	-0.0126
WAH SEONG	0.0248	0.0000	-0.0242	0.0197	-0.0144	-0.0886
WATTA HOLDINGS	0.1905	0.0000	-0.2400	0.3158	0.4400	-0.0972
WHITE HORSE	0.0183	0.0000	0.0240	-0.0292	0.0241	-0.0059
WONG ENGINEERING	-0.0682	0.0244	0.0952	0.0870	-0.0200	-0.0816

WOODLANDOR HOLDINGS	-0.2088	0.1111	0.1500	-0.2174	-0.0833	-0.0606
WTK HOLDINGS	-0.0388	0.1613	-0.0278	0.0786	-0.0464	-0.1667
YI-LAI	-0.0171	0.0596	0.0691	-0.0427	0.0103	-0.0374
YLI HOLDINGS	-0.0500	0.3158	-0.0200	-0.1224	-0.0233	-0.0714
Portfolio Return	0.0053	7.7385	-1.1499	-1.6746	4.3647	9.7479
Less: KLCI Return	-0.0062	0.0318	0.0170	-0.0161	0.0064	0.0117
Residual Return (RR)	**0.0115**	**7.7068**	**-1.1669**	**-1.6585**	**4.3582**	**9.7362**

	Equation		Excel Formula
	ARRw =	0.6625	=AVERAGE ( )
	ARRL =	3.1645	=AVERAGE ( )
A	ARRw-ARRL =	-2.5020	
B	STDEV of ARRw =	3.0427	=STDEV ( )
C	n =	6	
D	STDEV of ARRL =	4.8417	=STDEV ( )
E	n =	6	
F	B/C+D/E =	1.3141	
G	$\sqrt{F}$ =	1.1463	
A/G	T Stat =	-2.1827	

Appendix 4.1.2.5 Period (i16) January – June 2014

Winning Portfolio

	1/1/14	1/2/14	1/3/14	1/4/14	1/5/14	1/6/14
ABLEGROUP	-0.0714	0.0000	0.0000	0.0385	-0.0370	0.0385
ABRIC	0.0175	-0.0345	0.0357	0.0172	0.0678	0.3333
AJIYA	0.0270	0.0789	0.0488	-0.1860	-0.0571	-0.0909
ALUMINIUM COOF MAL	-0.0993	0.0236	-0.0154	0.0156	0.0769	-0.0143
ANN JOO RESOURCES	-0.0625	0.0095	0.0283	0.0367	0.0619	-0.0667
A-RANK	-0.0842	0.0460	0.0330	0.0426	0.2347	-0.0661
ASTINO	0.0167	0.0656	0.0615	0.0000	-0.0290	0.0448
ASTRAL SUPREME	0.0270	0.0789	0.0488	-0.1860	-0.0571	-0.0909
BP PLASTICS HOLDING	0.0078	0.0000	0.0692	-0.0432	0.0902	0.0069
BTM RESOURCES	0.1389	-0.0183	0.0621	-0.0994	0.3117	-0.1683
CAHYA MATA SARAWAK	0.1281	0.0799	0.0364	0.3160	-0.0572	0.0431
CB INDLPRODUCT HOLDINGS	0.0058	0.0379	0.1110	0.1973	0.0606	-0.0532
CCM DUOPHBIOTECH	-0.0073	-0.0078	0.0743	0.0942	-0.0031	-0.0634
CENTRAL INDUSTRIAL	0.2500	0.0071	0.0780	-0.0132	0.0667	-0.0625
CHIN WELL	0.0000	0.0571	0.0068	-0.0268	0.0414	-0.0728

HOLDINGS COMPUTER FORMS (MAL)	0.0000	0.0000	0.0222	0.0326	-0.0263	0.0378
CYL	-0.0286	-0.0098	0.0099	0.1176	0.0351	-0.0085
D'NONCE TECHNOLOGY	-0.0164	0.0333	-0.0968	0.1429	0.0313	0.0000
DOLOMITE	-0.0735	0.0476	-0.0455	0.0317	0.0154	0.0303
DOMINANT ENTERPRISE	0.0450	0.0900	0.1900	0.0000	-0.0700	0.0300
EKSONS	0.1190	-0.0851	0.0078	0.0385	-0.0074	-0.0149
EP MANUFACTURING	0.0070	-0.0350	0.0362	-0.0140	0.0851	-0.0850
EVERGREEN FIBREBOARD	-0.0108	0.0000	0.0543	0.1340	-0.0455	-0.0190
GE-SHEN	0.3750	-0.0909	0.1667	0.0857	0.0789	0.0366
GSB GROUP	-0.0556	0.0588	0.0000	0.2222	0.0455	-0.2174
HEVEABOARD	0.4945	-0.2206	0.1132	0.2288	-0.0897	0.0455
HIL INDUSTRIES	0.0500	0.2024	0.0792	0.1376	0.0000	-0.0403
HUME INDUSTRIES	-0.0645	0.1810	0.1387	0.0321	0.0186	0.0061
IMASPRO	0.1429	-0.1000	0.0648	0.0435	0.0667	-0.0625
INTEGRATED RUBBER	0.0122	-0.1325	0.0278	-0.0270	-0.0694	0.0000
JADI IMAGING HDG	-0.1279	0.0000	0.2000	0.2111	-0.0734	0.0000
JASA KITA	-0.0333	0.1034	0.2188	-0.0513	-0.0541	0.0000
JMR CONGLOMERATION	0.1911	0.0802	-0.0099	-0.0100	-0.0101	-0.0255
KEIN HING INTL	-0.0139	-0.0141	0.0286	0.0278	0.0270	0.0395
KIM HIN INDUSTRY	0.0080	-0.0238	-0.0244	0.0167	0.0246	0.0000
KINSTEEL	-0.0882	-0.0323	0.3333	-0.1750	0.0909	-0.1111
KOBAY TECHNOLOGY	0.0600	-0.1509	0.1185	0.0199	0.1039	0.1000
KOSSAN RUBBER	0.1739	-0.0208	0.0236	-0.0208	-0.0330	-0.0244
KUMPULAN POWERNET	-0.2000	0.4583	-0.1429	-0.1000	0.0185	0.0000
LAFARGE MALAYSIA	-0.1255	-0.0082	0.0224	0.0150	0.0306	0.0451
LCTH	-0.0909	0.0000	0.0250	0.0000	0.2683	-0.0385
LION	-0.1111	-0.1250	0.1429	0.0000	0.0000	-0.1250
MELEWAR INDUSTRIAL GROUP	-0.1250	0.1429	-0.1667	-0.1000	0.2500	-0.0222
METAL RECLAMATION	-0.0147	0.0000	0.0075	0.0000	-0.1407	-0.0431
MIECO CHIPBOARD	-0.0294	-0.0303	0.0313	0.0909	-0.0556	0.0147
MINETECH RESOURCES	0.0625	0.0235	0.0000	-0.2184	0.0294	-0.1357
ML GLOBAL	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NWP HOLDINGS	-0.0333	0.0000	0.0000	0.0000	-0.1724	-0.0833
OKA	0.1630	-0.0280	0.2308	0.2422	0.0252	0.0675
PENSONIC HOLDINGS	-0.1284	-0.0421	-0.0330	0.0227	0.0444	-0.0745
PMB TECHNOLOGY	0.0000	0.0299	0.0435	0.0208	0.2993	-0.1099
PNE PCB	0.0119	0.2235	0.4904	0.0323	-0.0250	-0.0769

	1/1/14	1/2/14	1/3/14	1/4/14	1/5/14	1/6/14
PRESS METAL	-0.0043	0.0086	-0.0385	0.0267	0.5022	0.0029
PUBLIC PACKAGES HDG	0.0154	0.0000	0.0152	0.0224	0.0073	-0.0217
RALCO	0.0000	0.5333	-0.1304	0.0000	-0.0750	0.1081
RAPID SYNERGY	0.0080	-0.0053	0.1825	0.0089	0.0133	0.0263
SARAWAK CONSINDS	-0.0412	0.1183	-0.1346	0.1444	-0.0583	0.0206
SCIENTEX	0.0161	-0.1213	0.1100	0.0198	0.0247	-0.0121
SEACERA GROUP	0.1356	-0.0417	0.0217	0.0369	0.0109	0.0555
SKB SHUTTERS	-0.0109	0.2088	0.0000	-0.2182	0.2209	-0.0381
SKP RESOURCES BERHAD	-0.0159	0.0000	-0.0161	0.0328	0.0952	0.1884
STONE MASTER	0.0625	0.0535	-0.0152	-0.0438	-0.5337	0.0173
SUCCESS TRANSFORMER	0.1475	-0.0571	0.0152	0.0373	0.0935	-0.0263
TA WIN HOLDINGS	0.0492	0.4219	-0.0110	0.1778	0.0000	-0.1226
TASEK	-0.0080	-0.0591	0.0929	-0.0131	0.0570	-0.0764
TECNIC GROUP	0.0245	-0.0072	0.0306	0.0328	-0.0317	0.0195
TEKALA	-0.0571	0.1212	-0.1216	0.1077	-0.0139	-0.1127
THONG GUAN INDS	0.1856	0.0426	-0.0543	0.0191	0.0091	0.0703
TONG HERR RESOURCES	-0.0169	-0.0287	-0.0237	0.0727	0.1017	0.0718
TOYO INK GROUP	-0.0800	0.0000	0.0145	-0.0143	-0.0580	-0.0077
TURIYA	0.0000	-0.1220	0.1389	-0.0244	-0.0250	0.0256
UMS-NEIKEN GROUP	-0.0642	-0.2457	0.0909	-0.0417	0.0652	-0.0748
UNITED U-LI	0.0784	-0.0727	-0.0098	0.0000	0.0297	0.0096
VERSATILE CREATIVE	-0.1212	-0.0460	0.0120	0.0119	0.1412	0.0206
VS INDUSTRY	0.0370	0.0286	0.0139	0.0205	0.0872	-0.0062
WOODLANDOR HOLDINGS	-0.1300	0.0920	-0.0526	-0.0333	0.2644	-0.0909
Portfolio Return	1.0491	1.7716	3.1170	1.8165	2.4155	-1.1004
Less: KLCI Return	-0.0337	0.0175	0.0074	0.0121	0.0010	0.0050
Residual Return (RR)	**1.0829**	**1.7540**	**3.1096**	**1.8045**	**2.4145**	**-1.1054**

Losing Portfolio

	1/1/14	1/2/14	1/3/14	1/4/14	1/5/14	1/6/14
ACME HOLDINGS	0.2500	0.0783	0.2500	0.0258	-0.0566	-0.0533
ADVANCED PACKTECH(M)	-0.0051	0.0206	0.0101	-0.0250	0.0513	0.0146
ADVENTA	0.0185	-0.0693	0.1217	-0.0455	0.0179	-0.0275
AE MULTI HOLDINGS	0.0000	-0.0207	0.1217	-0.0660	-0.0455	0.0212
AMALGAMATED INDLSTEEL	-0.0625	0.0333	-0.0645	0.0345	0.0167	0.0000
AMANAH HARTA TANAH PNB	-0.0088	0.0000	-0.0265	0.0364	0.0088	0.0087
ANCOM	-0.0548	0.1014	0.0921	0.5542	-0.1628	0.0093
APB RESOURCES	0.0101	-0.0100	0.1717	-0.0172	-0.0263	0.0450
APM AUTOMOTIVE HDG	-0.0136	0.0294	0.0487	-0.0080	-0.0226	0.0116
ASIA KNIGHT	-0.0574	0.0000	-0.0174	0.0000	0.0088	-0.0175

ATURMAJU RESOURCES	0.0492	-0.0469	-0.0082	0.0248	0.0323	-0.0547
BIG INDUSTRIES	-0.0556	0.0147	0.3043	1.1111	-0.2105	-0.0867
BOON KOON GROUP BHD	-0.0345	0.0000	0.0000	0.0357	-0.0345	0.0000
BOUSTEAD HEAVY INDS	0.0037	-0.1058	-0.0122	0.0413	0.0079	-0.0197
BOX-PAK (MALAYSIA)	-0.0625	0.0444	-0.0383	0.0531	0.0504	-0.0320
BRIGHT PACKAGING IND	-0.1247	-0.2260	0.0973	0.0887	0.0148	-0.0584
BSL	0.1429	-0.1607	0.1064	0.0000	0.0192	0.0566
CAN-ONE	-0.0603	0.0092	-0.0303	-0.0125	-0.0285	-0.1531
CENTURY BOND	-0.0606	0.0258	-0.0126	-0.0255	0.0065	-0.0649
CHOO BEE METAL INDS	-0.0063	-0.0446	0.0667	0.0937	0.1657	-0.0882
CME GROUP	0.0000	0.0833	0.0000	0.0000	0.0000	0.0769
CN ASIA	-0.0533	-0.0282	0.0217	0.0638	0.6000	-0.0167
COASTAL CONTRACTS	0.0394	0.1254	0.0881	0.2262	-0.0272	-0.0240
COMINTEL	-0.0541	-0.0286	-0.0882	0.1935	0.2162	0.1556
CONCRETE ENGRPRDS	-0.0055	-0.0824	0.0180	-0.0118	0.0476	-0.0852
CSC STEEL HOLDINGS	-0.0388	0.0323	0.0313	0.0152	0.0000	-0.0672
CYMAO HOLDINGS	-0.0667	0.0000	0.2571	0.1932	0.0095	-0.1415
DAIBOCHI PLASTIC & PACK INDUSTRY	0.0147	-0.0410	0.0427	0.0843	0.0000	-0.0222
DENKO INDUSTRIAL	-0.0333	-0.0172	0.0175	-0.0345	0.0000	-0.0357
DRB-HICOM	0.0406	-0.0426	-0.0815	-0.0161	0.0246	-0.0240
EG INDUSTRIES	0.0448	0.1714	-0.0122	0.0617	0.1279	0.4021
EONMETALL GROUP	-0.0339	0.0175	0.0000	0.0690	0.0000	0.0323
FACB INDUSTRIES	0.0000	0.0079	-0.0315	0.0325	0.1260	-0.0350
FIMA	-0.0386	0.0208	0.1834	0.0921	0.0462	-0.0536
GOH BAN HUAT	-0.0164	0.0250	0.1789	0.2138	0.1364	-0.1000
GOLDEN PHAROS	-0.1739	-0.0175	0.0000	0.1429	0.0313	0.9697
GOODWAY INTEGRATED INDS	0.0658	-0.0864	0.0000	0.2432	-0.0652	0.2093
GPA HOLDINGS	-0.0625	0.0000	0.1333	0.2235	0.1827	-0.0407
GUH HOLDINGS	-0.0495	0.0625	0.0882	0.1171	0.1613	-0.0417
HARVEST COURT	0.0000	-0.0455	0.1667	0.0408	-0.0196	0.1600
HCK CAPITAL GROUP	0.0506	0.0695	0.2650	0.0356	0.3588	0.0337
HEXZA	-0.0224	-0.0153	0.0698	0.0362	0.0699	-0.0261
HIAP TECK VENTURE	-0.0204	0.0208	-0.0204	0.0208	0.0748	-0.0759
HO WAH GENTING	-0.0476	-0.0250	0.0000	-0.0256	0.0263	-0.0769
IDEAL UNITED BINTANG	0.0351	0.0508	-0.0484	0.0169	0.3000	0.2179
IRE-TEX	0.0295	-0.1265	0.0193	0.0530	0.0252	0.1667
IRM GROUP	-0.1176	0.0667	0.3125	0.1905	0.0400	-0.1538
JAVA	0.0435	-0.0625	-0.0222	-0.0455	0.1429	-0.0208

JAYA TIASA HOLDINGS	-0.0973	0.1225	0.1092	0.0827	-0.0109	-0.0294
JOHORE TIN	-0.0402	-0.0299	0.0062	0.0368	-0.0237	-0.0061
KARYON INDUSTRIES	-0.0548	0.0290	0.0141	0.1944	0.0349	-0.1573
KECK SENG (MALAYSIA)	-0.0814	-0.1047	0.0341	0.0989	0.0043	-0.0142
KIA LIM	0.0000	0.1111	0.0500	0.2381	-0.0096	0.0680
KIAN JOO CAN FACTORY	-0.0250	0.0096	0.0032	0.0380	0.0396	-0.0440
KKB ENGINEERING	-0.0074	-0.0824	0.0122	-0.0161	0.0287	-0.1036
KNM GROUP	0.0457	0.3678	0.0319	0.2199	0.0708	-0.0835
KOMARKCORP	-0.0169	0.0172	-0.0094	0.0663	0.0071	-0.0300
KUMPULAN H&L HIGH-TECH	0.0385	0.0741	-0.1379	0.0000	0.0000	0.0200
KYM HOLDINGS	0.0000	-0.0200	-0.0102	-0.0722	-0.0444	-0.0756
LB ALUMINIUM	0.1048	-0.0172	0.0263	0.0256	0.1167	0.0149
LEADER STEEL HOLDINGS	0.0169	-0.0167	0.0169	-0.0667	0.1786	-0.1061
LEWEKO RESOURCES	-0.0571	-0.0303	0.0000	0.1250	0.1667	0.0000
LION DIVERSIFIED HDG	-0.1707	0.0000	-0.0294	-0.0606	0.0968	-0.0882
LION INDUSTRIES	-0.0265	-0.0476	-0.0429	-0.1045	0.0917	-0.1221
LUSTER INDUSTRIES	-0.0556	0.0588	0.2778	-0.1304	0.0500	0.0000
LYSAGHT GALVANIZED	0.0167	0.0164	0.0065	0.1218	-0.0714	0.4031
MALAYSIA PACKAGING IND	-0.0549	0.3605	-0.2137	0.0109	0.0430	0.0103
MALAYSIA SMELTING	-0.0250	-0.0073	0.1181	0.1188	0.0413	-0.0510
MALAYSIA STEEL WKS(KL)	-0.0286	0.0098	0.0485	-0.0463	-0.0485	0.0102
MASTER-PACK GROUP	-0.0455	0.1810	-0.0565	0.3162	0.0065	0.0645
MENTIGA	0.0366	-0.0588	0.0000	0.2125	0.0000	0.0309
MERCURY INDUSTRIES	0.0325	-0.0157	0.0800	0.0444	-0.0213	0.1449
METROD HOLDINGS	0.0055	0.0000	0.0492	-0.0104	0.0263	0.0205
MINHO (M)	0.0071	0.0000	0.0634	0.3775	0.0096	0.0190
MUDA	0.0110	0.2350	0.3363	0.1192	0.1243	-0.0368
MULTICODE ELTNINDS	-0.0419	0.0063	0.0124	-0.0675	-0.0132	-0.0133
MYCRON STEEL	-0.0769	-0.0833	0.0303	0.0882	0.1351	-0.0952
NAKAMICHI	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NYLEX (MALAYSIA)	-0.0377	0.0392	0.0566	0.1964	0.0000	-0.0373
OCTAGON CONS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
ORNAPAPER BERHAD	0.0811	0.0500	0.2738	0.0841	0.0000	0.0172
PA RESOURCES	0.0000	-0.0690	0.0741	-0.0690	0.0000	-0.0370
PERSTIMAMAL(PER	0.0129	0.0025	0.0532	0.1058	0.0109	0.0258

STIMA)						
PETRON						
MALREFN& MKTG	-0.0099	-0.0067	0.0000	-0.0268	0.0897	-0.0032
PETRONAS GAS	0.0025	-0.0371	-0.0043	0.0395	-0.0289	0.0136
PIE INDUSTRIAL	0.0342	0.0560	0.1033	0.0679	-0.0532	0.0110
POLY GLASS FIBRE						
(M)	0.0000	0.0000	0.0000	0.4189	-0.1619	-0.0909
PREMIUM NALFIN	-0.0135	-0.0685	0.0000	0.0294	-0.0143	0.0000
PRESTAR						
RESOURCES	-0.0707	-0.0109	0.0549	0.1250	0.1667	-0.0873
PRG HOLDINGS	-0.0165	-0.0788	0.0112	-0.0111	0.0238	-0.0178
PRICEWORTH						
INTERNATIONAL	-0.0165	-0.0788	0.0112	-0.0111	0.0238	-0.0178
QUALITY						
CONCRETE HDG	-0.1429	-0.0333	0.0345	-0.0333	0.1379	-0.1212
RUBBEREX	0.0065	-0.0584	-0.0966	-0.0076	-0.0154	-0.0078
SAM ENGR&						
EQU(M)	0.0155	0.0305	0.0778	0.1340	0.0242	0.0148
SAPURA						
INDUSTRIAL	-0.0775	-0.0305	0.0236	0.2154	-0.0190	0.0645
SCOMI						
ENGINEERING	-0.0952	0.0526	0.0500	0.0238	-0.0698	-0.0500
SHELL REFINING						
COFOM	-0.0914	0.0220	-0.0323	-0.0350	-0.0132	0.0017
SINO HUA-AN INTL	0.0000	0.0000	0.0370	0.0357	0.0345	-0.0333
SMIS	0.0937	-0.0286	-0.0147	0.0224	0.0365	0.1761
SMPC	0.0000	-0.0775	0.0560	-0.0320	-0.0708	-0.0528
SOUTHERN ACIDS						
(M)	0.0143	0.3099	0.0161	0.0317	0.2974	-0.0514
SOUTHERN STEEL	-0.0968	-0.0073	0.0507	0.0273	0.0667	-0.0938
SUBUR TIASA						
HOLDINGS	0.0410	-0.0296	0.0000	0.1624	-0.0131	-0.0177
SUPER ENTERPRISE						
HDG	0.0536	-0.0254	0.0087	0.0172	0.0085	0.0672
SUPERMAX	0.0492	0.0542	-0.0274	-0.0986	-0.0430	-0.0286
TA ANN HOLDINGS	0.0296	-0.0096	0.0169	-0.0071	0.0072	0.0262
TADMAX						
RESOURCES	0.0725	0.4595	-0.1019	0.0309	-0.0300	-0.0515
TECK GUAN						
PERDANA	0.1250	-0.1111	-0.1000	0.0694	0.2078	0.2151
THREE-A RES	-0.0718	0.0833	0.0000	-0.0275	-0.0056	0.0114
TIEN WAH PRESS						
HOLDINGS	0.0806	-0.0821	0.0488	-0.0233	-0.0040	-0.0398
TIMBERWELL	0.0000	0.0833	0.0769	0.2143	0.0588	0.0000
TOMYPAK						
HOLDINGS	0.0000	-0.0071	-0.0143	0.0000	-0.0072	-0.0073
TOP GLOVE	-0.0293	-0.0249	0.0455	-0.1376	-0.0303	0.0000
UCHI TECHS	-0.0214	-0.0073	-0.0147	0.0373	0.0432	-0.0138
WAH SEONG	-0.0121	0.1699	-0.0367	0.0289	0.0365	0.0051
WATTA HOLDINGS	-0.1111	0.1250	0.0000	0.0417	0.1467	-0.1512
WEIDA (M)	0.0241	-0.0471	-0.0370	0.0321	0.0186	-0.0183
WHITE HORSE	-0.0106	-0.0107	0.0541	0.0462	0.0931	0.0404
WONG						
ENGINEERING	0.0583	0.0092	0.0000	-0.0182	0.3056	0.0567

WTK HOLDINGS	0.0565	-0.0534	0.0242	0.1339	-0.0764	0.0301
YI-LAI	-0.0248	0.0510	0.0394	0.1079	0.0439	0.0588
YLI HOLDINGS	-0.0943	0.0278	0.1014	0.3129	0.0748	-0.0870
YUNG KONG GALVANISING INDS	0.0135	-0.0667	0.0143	0.0141	0.0139	-0.0137
Portfolio Return	-1.3733	1.4592	4.5309	8.3610	4.7920	0.3488
Less: KLCI Return	-0.0337	0.0175	0.0074	0.0121	0.0010	0.0050
Residual Return (RR)	**-1.3396**	**1.4416**	**4.5235**	**8.3490**	**4.7910**	**0.3439**

	Equation		Excel Formula
	ARRw =	1.5100	=AVERAGE ( )
	ARRL =	3.0182	=AVERAGE ( )
A	ARRw-ARRL =	-1.5082	
B	STDEV of ARRw =	1.4523	=STDEV ( )
C	n =	6	
D	STDEV of ARRL =	3.5342	=STDEV ( )
E	n =	6	
F	B/C+D/E =	0.8311	
G	F^0.5 =	0.9116	
A/G	T Stat =	-1.6544	