2.0   METHODOLOGY

2.1   Sources of Data

This study uses secondary data collected from the following sources :

(a)   Investor Digest, a monthly bulletin published by KLSE.

(b)   MetalStock, a software developed in the USA and integrated in Singapore that provides daily stock information of all major bourses in the world, including KLSE.

(c)   Annual Companies Handbooks.

(d)   Prospectuses of new share offer.

(e)   Stock databank of Zalik Securities.

The samples include all companies that made initial public offerings and sought listing of their shares on the KLSE Second Board during the period from December 1989 (The very first company listed on Second Board) to December 1993.

2.2 Sampling Technique

The following criteria are used to select the sample of new issues offered to public between December 1989 to December 1993 :

(a) New issues incorporated in Malaysia.

(b) New issues of ordinary shares, which excluded preferred shares, loan stock or debentures.

2.3 Market Adjusted Initial Return

The KLSE Composite Index is used as a proxy for the overall market performance of KLSE, since it consists of a basket of representative counters from various sectors in the main board.   Apart from its balanced mix of portfolio, the component counters also make up a substantial portion of total KLSE market capitalization.   Hence the movement of KLCI is normally considered as an indicator of KLSE market performance.

The initial return of the issue is taken as the percentage change in price from the offer price to the first official

listing price.   It is then adjusted for market changes for the period between the issue of prospectus and first official listing.

$$INITR = R_i - R_m$$

where,   INITR = Adjusted Initial Return

R_i = Initial Return of stock i

= (listing price - offer price) / offer price

R_m = Market Return

The stocks' adjusted initial returns are then ranked in ascending order and three equal size of portfolios are formed, INITR1, INITR2 and INITR3.   INITR1 consists of the first 33.33 percent of the sample counters with the smallest adjusted initial return and INITR3 is the last 33.33 percent with the largest adjusted initial return.   The performance of the three portfolios are then compared.

2.4 Degree of Establishment of the Companies

Net tangible per share (NTA/share), age of the firm and annual turnover of the firm are the parameters commonly used as proxies for the degree of establishment of the firms. However, information on the age and annual turnover are not consistently available for all the companies in the selected samples. Some newly listed company in the sample are holding company in nature, which were newly incorporated. The different subsidiaries of such holding companies may have started their operation at different times in the past thus creating some complication in considering the exact age of establishment.

NTA/shares of a listed company is a measurable parameter and clearly stated in the companies' reports. It is also easily understood amongst investors and considered as a commonly acceptable indicator of the degree of establishment of a company. As such, NTA/share of the first official financial report for all selected companies is chosen in this study.

A company with large NTA would imply its well establishment whilst a small NTA would reflect the reverse. A well established company is more stable and prudent financially

and is usually expected to perform better than a less established one.

In this segment of study, the stocks' NTA/share are ranked in ascending order and three equal size of portfolios are formed, i.e. NTA1, NTA2 and NTA3. NTA1 represents the first 33.33 percent of the sample counters with the smallest NTA/share while NTA3 is the last 33.33 percent of sample companies with the largest NTA/share. The performance of the three portfolios are then compared.

2.5   Market Value or Firm Size

By categorizing the IPOs according to their market value, an attempt would be made to study the size effect on the performance of the IPOs. The market value is determine as the closing price of the first day official listing on the KLSE Second Board multiplied by the total number of shares listed when first quoted.

The stocks' market values are then ranked in ascending order to form three equal size portfolios, MV1 to MV3. MV1 consists of the first 33.33% of the sample firms with the smallest size and MV3 is the last 33.33% with the largest

size in term of market value.   The after market performance
of the three portfolios are then compared.

2.6   Cumulative Average Adjusted Returns (CAR)

The weekly closing price of each sample stock for two years
period (104 weeks) after the first official listing is
used to calculate the weekly return of the samples.   The
weekly returns are then adjusted by using the KLSE Composite
Index as proxy.

The adjusted returns are exclusive of the initial return as
mentioned in 3.2.   As for the ease of data compilation, the
Friday closing price of each is taken as the weekly closing
price.   Hence for sample stocks that listed on the Monday to
Thursday of the week, the Friday closing price of the same
week will be taken as the first week closing.   In the case
of sample stocks listed on Friday, then the first week
closing price will be the following Friday's closing price.
Cash dividends are excluded from the returns computation to
simplify calculations.

The weekly market adjusted returns will be taken as the
weekly percentage raw return on a stock minus the weekly

percentage market return for the corresponding trading period, i.e. the gain or loss percentage of KLSE Composite Index.

$$ar_{it} = r_{it} - r_{mt}$$

where,

ar_{it} = market adjusted return for stock i in event week t.

r_{it} = return on stock i in week t.

r_{mt} = market return in week t calculated using KLCI.

The average market adjusted return on a portfolio of n stocks for week t is the equal weighted average of the market adjusted returns.

$$AR_t = \frac{1}{n} \sum_{i=1}^{n} ar_{it}$$

where,

AR_t = weighted average market adjusted return in week t.

n = number of stocks in the portfolio in week t

Therefore the cumulative market adjusted aftermarket performance from week r to week s is the summation of the average market-adjusted returns.

$$CAR_{r,s} \quad = \quad \sum_{t=r}^{s} \quad AR_t$$

where,

$CAR_{r,s}$ = Cumulative Average Market Adjusted Return from week r to week s.

2.7 Holding Period Returns

The one year, two years and three years buy and hold adjusted returns is calculated for each portfolios and compared.

The one year, two years and three years holding period returns of the stocks are measured from the closing market price on the first day of public trading to the market price on the 1, 2 and 3 year anniversaries of the stocks as the case may be. These returns are adjusted with the KLSE market return, which represented by the Kuala Lumpur Composite Index of the corresponding periods.

The adjusted holding period returns for each portfolio is the equally weighted average of the adjusted holding period returns of all stocks in each portfolio:

$$X = \frac{1}{n} \sum_{i=1}^{n} X_i$$

where,

X = average adjusted holding return of portfolio

X_i = Adjusted holding period return of stock i

n = Number of stocks in portfolio