



**UNIVERSITI PUTRA MALAYSIA**

**THE ACCURACY OF PROFIT FORECASTS OF THE  
MALAYSIAN KLSE SECOND BOARD  
INITIAL PUBLIC OFFERS**

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**GSM 1997 12**

**TESIS**

**THE ACCURACY OF PROFIT FORECASTS OF THE  
MALAYSIAN KLSE SECOND BOARD  
INITIAL PUBLIC OFFERS**

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**Master's Of**

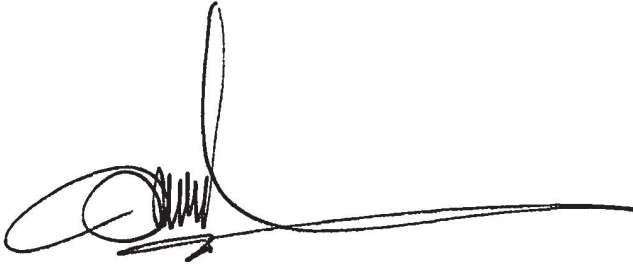
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**This paper is submitted as a partial fulfilment for the  
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**I, Cheng Sim Meng, Matrik No: 45090 hereby confirm that this project paper submitted as part fulfilment of the requirements for a Master's Degree in Business Administration is my original work.**



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**31<sup>st</sup> July 1997.**



**Special Dedications**

**To my wife  
LINDA**

**And to my children  
JOANNE, ANTHEA and NERISS**



## **ACKNOWLEDGEMENT**

**I WISH TO EXPRESS MY GREATEST GRATITUDE AND APPRECIATION TO MY ESTEEMED SUPERVISOR, ASSOCIATE PROFESSOR DR. SHAMSHER BIN MOHAMAD RAMADILLI FOR HIS CONSTANT QUALITY ADVISE, INVALUABLE ASSISTANCE AND GUIDANCE THROUGHOUT THE PERIOD WHEN I PREPARED THIS PROJECT PAPER.**

**SECONDLY, I WISH ALSO TO EXPRESS MY APPRECIATION TO MY WIFE AND MY CHILDREN FOR THEIR UNDERSTANDING, PATIENCE AND SUPPORT.**

**LAST BUT NOT LEAST, I WISH TO THANK THE STAFF OF THE LIBRARY OF THE KLSE FOR THE ASSISTANCE RENDERED TO ME.**



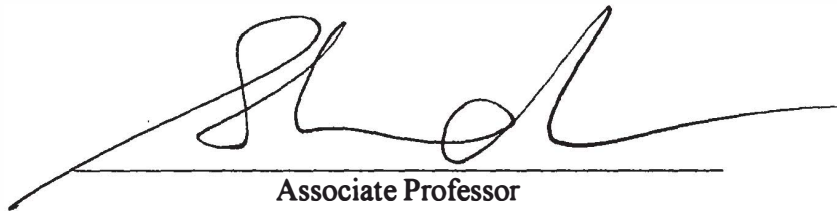
It is hereby certified that we have read this project paper entitled :-

**“THE ACCURACY OF PROFIT FORECASTS OF THE MALAYSIAN KLSE  
SECOND BOARD INITIAL PUBLIC OFFERS”**

submitted by CHENG SIM MENG as partial fulfillment for a Master’s Degree in Business Administration. In our opinion it is more than satisfactory in terms of scope, quality and presentation.

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## **ABSTRACT**

**This research project attempts to examine the accuracy of the profit forecasts reported in the prospectus of the initial public offers companies who have seek listing on the Kuala Lumpur Stock Exchange Second Board. Speculation that there is a tendency of management to either over forecast or under forecast will also be examined.**

**The study will also relate the forecast errors as a function of a few variables, namely, specific characteristics, Auditors and choice of the Merchant Banker used for the listing. It will envisage to obtain some explanation as to the accuracy of the profit forecast and also with it's determinant factors.**

**Secondary data were collected from the KLSE library and the period under review is from it's inception till end of 1996. Accuracy is measured by forecast errors, absolute forecast errors and it's squares forecast errors. In addition, the forecast error obtained was used to test six hypothesis. These hypothesis would help to establish whether there were any relationship between the accuracy in profit forecast and the firm's specific characteristics. The mathematical model used here were the multiple regression, ANOVA and R-squared.**

**Results of this study showed that the level of forecast accuracy in an emerging market like Malaysia appeared to be very much better than that reported by studies in the developed markets. Many companies have showed compliance with the 10% deviation ruling by the Securities Commission. The tendency for management to either over forecast or under forecast is not present. This could be attributable to the management**

**obligation to meet its profits forecast for the three years, which they have indicated to the Securities Commission. The study concluded with establishing that there is no statistically significant differences between accuracy in forecast and the firm's specific characteristics.**



**THE ACCURACY  
OF  
PROFIT FORECASTS  
OF  
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ON  
THE MALAYSIAN  
KUALA LUMPUR STOCK EXCHANGE  
SECOND BOARD**



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# CHAPTER ONE

## 1.0 INTRODUCTION

### 1.1 Introduction to IPO's

As new equity financing is assuming increasing importance as a source of funds, more and more firms are taking the advantage to float their firm's shares. This reflected in the increasing number of Initial Public Offerings (IPO's). IPO's or new issues refer to the sale of ordinary shares to the public by previously closely held companies that do not have a public market. Companies use IPO's either to refinance and/or to obtain an efficient source of new funds. IPO's enable owners of these shares to diversify their portfolios and add liquidity to their investments. A majority of companies financed their business expansion through funds generated from IPO's. In the event of over-subscription, the shares are allocated through a draw.

In Malaysia, all new issues of shares are controlled by a government agency known as the Capital Issues Committee. The CIC function was to examine and to give approval to the request for listing. Previously, the CIC also ascertain the fair price for the IPO's. It no longer does.

### 1.2 Public Perceptions of IPO's

There have been a overwhelming support from the public in the IPO's. On the average, the over subscription for new shares between the period 1990 to 1996 have been a hundred (100) times or more of the offered tranche. This in effect means that

there is one (1) percent or less chance of being picked at the draw, and thus give rise to speculations. There appears to be a disparity between the offered price and the value that was perceived by investors. Could the IPO's be deliberately under priced to generate a demand?

### **1.3 The Kuala Lumpur Stock Exchange (KLSE) Second Board**

The KLSE launched its Second Board on November 11, 1988 and by December 31, 1989, two companies were listed. The companies listed on the Second Board are smaller in size and younger in age as compared to those on the Main Board. The main objectives of the Second Board is to make available to small and medium sized companies, which are profitable and having a good prospect for growth, alternate source of raising capital fund to finance their business expansion.

The stringent requirements for listing on the Main Board as specified by the Capital Issues Committee (CIC) tend to deny small and medium size companies the alternate source of raising capital. The listing on the Second Board is only allowed to local companies.

The listing requirements for the Second Board are basically the same with that of the Main Board, except that the entry requirements are lower and the continuing listing are less stringent. Details of the Second Board listing requirements are provided in Appendix 'B'

Part of the requirements of the listing regulations requires the prospective company to submit to the KLSE, its application together with its Memorandum and Articles of Association and other supporting documents (such as the prospectuses) for their consideration and approval. Subsequent upon approval being granted by CIC and KLSE, the company is then required to file and register its prospectuses with the Registrar of Companies (ROC). Only after these procedures are completed, the company is now able to advertise and offer its shares to the public for subscription. This provision is enacted in Section 6 of the Securities Industry Act (1983).

The offer for subscription is usually open for ten to fourteen days. After the close of the offer the issuing house will then tabulate the list of subscribers based on the range of the lot being subscribed and the numbers in each range. The issuing house then determines the basis for allocation by ballot (draw). Shares are then issued to the successful subscribers pursuant to the allotments. There is a grace period allowed before the shares are traded on the KLSE, usually three days after estimated date of receipt of the shares certificates. With the implementation of the Malaysian Central Depository System (CDS), a letter of confirmation is despatched in lieu of share certificates.

**Table 1 - Cumulative Total number of companies listed for the period 1989 to 1996**

<b>YEAR</b>	<b>Cumulative Total Numbers of Companies</b>
<b>1989</b>	<b>2</b>
<b>1990</b>	<b>14</b>
<b>1991</b>	<b>32</b>
<b>1992</b>	<b>52</b>
<b>1993</b>	<b>84</b>
<b>1994</b>	<b>131</b>
<b>1995</b>	<b>158</b>
<b>1996</b>	<b>188</b>

#### **1.4 Profits Forecast**

Forecast literally means Throwing Forward (Fore meaning Front and Cast meaning Throw) – Throw the Past into the Future. In another words it means essentially an act to estimate or predict the outcome of a future knowable event base on past data.

There are many variables to consider and no matter how careful or diligent the Management may be, many assumptions made may not turn out the way it was Predicted and this will lead to inaccurate profit forecast. An optimist can give rise to over forecast in profits. Where else, a conservative can be the reverse i.e tend to under forecast in profits.

Nonetheless, profit forecast still remains an essential information to investors, creditors and other users of these financial information. Empirical example have shown that forecasts contains information which is considered relevant to those in decision making, such as, establishing market prices and used as yardstick in evaluating performance. Buzby (1974), Chenhall and Juchau (1977), McNally, Lee



and Hasseldine (1982),

on the future prospects of the firm is ranked highly by external users, particularly among the investors and financiers.

Investors who are primarily interested in the future prospects of the company cannot use the annual financial reports to meet their needs. Annual financial reports use historical cost accounting structure and are deemed as a review of past events. Thus, there is an increasing demand for companies to disclose more information on the future prospects of the firm, either in the qualitative or quantitative form. But, these disclosures have to be reliable and valid in order to be of use to the external users.

### **1.5 Disclosure of Forecast Information in Prospectuses**

In the Malaysian context, profit forecast disclosure is currently mandatory when a company seeks to issue new securities. In addition, the firm is to ensure that the profit forecast must not deviate from the actual profits by more than ten (10) percent. If this forecast information is to be of value to investors for decision making, then the highest standard of accuracy and fair presentation must at all times be maintained for these forecasts to be relevant and reliable. Bernstein (1967) proposed that a 10% to 15% or less in forecast differences as the acceptable range. The large turnover of shares in the KLSE were derived from the Second Board. This could be overplayed by speculative investors (The New Straits Times dated 21 September 1996).

Therefore, a genuine investor relies on the financial disclosures, example, Profit Forecast are used to evaluate the actual value (intrinsic value) of the Companies

instead of judging from their share prices.

## **1.6 Statement of Problem for Research**

To study and examine the predictive accuracy of Profit Forecasts made by Malaysian IPO's in their Prospectuses on Companies listed on the KLSE Second Board for the period 1989 to 1996,

- the accuracy of the forecasts and the firm's specific characteristics.
- To examine the correlation between forecast errors and stock price premium upon listing.
- To compare the average of profit forecast errors of the companies with the 10% deviation ruling by KLSE.
- To examine the tendency of management to over forecast or under forecast profits.

To examine the impact of several firm's characteristics viz. size of company, forecast intervals, size of Auditors, level of leverage, existence of past profit records and age of the company's operations, on forecast accuracy.

These results will be compared with findings of similar studies in other countries.

Indirectly, the study also assess the degree of professionalism of auditing firms responsible for certifying such forecasts.

A large number of studies investigating the accuracy of profit forecasts made by company management and by investment analysts have been carried out in developing markets.

# CHAPTER TWO

## 2.0 LITERATURE REVIEW

### 2.1 Accuracy of Forecast in General

Accuracy of profit forecasts made by management and by investment analyst have been subject of considerable research interest, particularly in the developing markets of United States and Europe and to some extent in the emerging market like Malaysia.. Some of these studies focused on comparing the accuracy of analysts' forecasts, managers' forecast and the prediction from various statistical models e.g. studies of Basi, Carey and Twark (1976), Hegerman and Ruland (1979), and Schreuder and Klaassen (1984). In addition, some studies by Patell (1976) and Pennman (1983) have examined the impact of forecast errors on stock prices. On the contrary, not many studies were done on accuracy of profit forecast made during take-over bids except those of Dev (1972) and Westwick (1972). Studies were carried out on the issues of securities by newly listed companies by Dev & Web (1972), Ferris (1976), and Ferris and Hayes (1977). Daily (1971) did a study on the forecast accuracy and the determinants of 18 firms in the United States. He used two measures to test the accuracy of revenue and net income forecasts i.e. accuracy and precision. According to Daily, accuracy is an analysis differences arising in a particular year whereas precision is the measure of the degree of reliance that can be placed on a particular forecast and requires the trends in differences over time.



Daily's studies indicated that only 10% of the observations of revenue forecasts had deviations not exceeding 10% from actual revenue but on the other hand, of the observations on net income forecasts had differences exceeding 15%.

results, operations results with the degree of accuracy and precision necessary to satisfy the requirements of the investors.

findings i.e.

because some firms in the study are capable of forecasting net income consistently within 10% to 15% of the actual amount.

Perhaps,

disclosed in the prospectuses for the issue of capital was carried out by Ferris (1976).

A sample of 283 forecasts covering the period from 1970 to 1973 was obtained.

uses the relative forecast error model, to examine the accuracy of profit forecast. The relative forecast error is the ratio of differences between actual earnings and forecast earnings,

base on the zone of acceptance of the forecast which were being provided by companies which took part in his earlier study in 1975.

The median zone of acceptance for the majority of the companies was 5% above the forecast and 0% below.

acceptance and the mean forecast error was 16%.

examined were found to be under estimated.

estimation prevailed. He attributed the low level of accuracy to the failure of the companies to utilise accounting adjustments to reduce forecast deviations and the tight zone of acceptance. However, when the zone of acceptance was revised to 20% above the forecast to 0% below, more than 60% of forecasts would fall within this range. This revised zone of acceptance was deemed too relaxed and does not reflect the generally accepted level of accuracy of 10%.

Another closely related study was done by Dev and Web (1972) which is on the accuracy of profit forecasts given in prospectuses issued in the UK. Consistent with Ferris (1976)'s findings, under forecasts of profit was significant.

McDonald (1973) examined the reliability of net income forecasts included in 201 annual financial statements from over a period of five years. The tool of measurement used to test the accuracy was also relative forecast error and his study was very optimistic. Of the 201 predictions, 35.3% are within 5% of actual earnings and 48.8% are within 10% of actual earnings. After removing outliers, the mean of the relative forecasts errors is 16.3% and contrary to the findings of Ferris (1976) and Dev and Web (1972), over predictions significantly outnumbered under predictions. However, due to a lack of knowledge on investors' materiality functions, he was unable to conclude on the absolute reliability of the forecasts. There are also two limitations in his study. First, the method of obtaining samples in the study was not random, thus, the results cannot be generalised to the population of all firms in US.

Secondly, the possibility of bias exists because making the predictions public was voluntary on the part of the sampled firms. It is possible that only those firms with an above-average ability to predict earnings made their predictions public, thus biasing the results on the determinants of forecast accuracy (will be discussed later).

Platt (1979) also carried out a study on the accuracy of profit forecasts. He compared the profits forecast in annual reports issued during the year 1974 to 1975 and also in interim report issued during similar period with the actual results subsequently published. Platt found that 28.5% of the total samples showed variances of the forecasts and actual results up to 5%, 43 of the total samples showed variances over 5% up to 20%. However, similar to McDonald's case, Platt's study also did not specify the acceptable level of accuracy and thus, fail to provide much help in this area of study.

Firth and Smith (1992) studied on the accuracy of profit forecasts contained in prospectuses of companies newly listed on the New Zealand Stock Exchange. A sample of 89 forecasts covering the period from 1983 to 1986 was obtained. Firth and Smith used three different methods of measures for accuracy viz. Forecast error, absolute forecast error and squared forecast error. The results of their study revealed that the mean forecast error is very large and negative; the actual profits were 92% less than forecast. This performance was considered far worst than those reported in UK and US. However the mean forecast error drops to -5% after removing the outliers. In addition they also observed a higher number of under forecast among their sample firms.

The researches by Daily, Ferris, Dev and Web, McDonald and Platt and finally Firth & Smith focused on the accuracy of management forecasts. Another group of study focused on the accuracy of analysts' profit forecast and its comparison with the accuracy of management forecasts. Although this group of study is not directly related to this research, its result can provide further information on the accuracy of analysts and especially management forecasts.

Bhaskar and Morris (1984) examined the accuracy of analysts' profit forecasts on 171 UK companies and results showed that one-third of relative prediction errors fell within a  $\pm 5\%$  range, a half with  $\pm 10\%$ , and three fifths with  $\pm 15\%$ , while the mean absolute relative error was around 10% to 15%. Besides, the relative prediction errors were negatively skewed, indicating a tendency on the part of professional analysts to underestimate future profits and this is consistent with other UK studies by Dev and Web (1972) and Ferris (1976).

Basi, Carey and Twark (1976), on the other hand, compared the accuracy of management and security analysts' forecasts of earnings. In their study, measures of forecasts accuracy adopted were the mean absolute percentage error, mean squared percentage error and another alternative measures which, unlike the first two measures, is not so sensitive to extreme values is to form a cumulative probability distribution of absolute errors. The third measure indicates that A will be a better forecaster than B if the cumulative error probability function of A is never below that

of B at any point and is above that of B for at least one point. They found that both groups had more than 70% of their forecasts within 10% of actual figures and the overall distribution was positively skewed showing a tendency to overestimate earnings, and this is consistent with McDonald's (1973) findings of US data.

Jaggi (1980) conducted a study on the comparison of management and security analysts' forecasts using 156 management earnings forecasts published in the Wall Street Journal from 1971 to 1974. He found that the mean prediction errors for management forecasts and analysts forecasts were 26.7% and 28.3% respectively which, in turn, indicated that, on average, the forecasts were not in the acceptable forecasts error range of 10%.

Westwick (1972) examined the accuracy of profit forecasts published in the annual reports of the UK Panel on Take-overs and Mergers. Total samples taken by Westwick was 210 and his study revealed that out of the 210 forecasts, 170 forecasts (81.0%) achieved the acceptable range of forecasts error i.e. within plus or minus 10% of actual profits. Besides, consistent with other UK researchers' findings, there is a tendency for forecasts to be conservative i.e. more forecasts were exceeded by results (53%) than vice versa (24%). However, an additional findings from his study was that although the under predictions were significant, there is a greater likelihood of results falling far short of forecasts than vice versa i.e. 7% of results were more than 28% below forecast but only 2% were more than 28% above forecasts.

However, Schrerder and Klaassen (1984) make their comment on the shortcomings



of interpretation of results from previous studies namely by Daily (1971), Westwick (1972), McDonald (1973), Basi, Carrey and Twark (1976) and Jaggi (1980).

According to them, the forecasts may not be independent if they are both published.

Analysts may be influenced by corporate forecasts (as in the case of comparison between accuracy of management and security analysts' forecasts) and management forecasts may be influenced by the expectations which the financial community has made public. In addition, there may be strong pressure on corporations to manipulate the actual earnings in order to meet previously published forecast.

Finally, sample of companies publishing forecasts which is examined in previous studies may not be a representative of the population because the selected companies disclose their profit forecasts on voluntary basis. Imhof (1978) and Jaggi and Grier (1980) have shown that firms which disclose forecasts differ from those who do not particularly with regard to the variability in their historical earnings. Forecast-disclosing firms tend to have more stable earnings. Therefore, according to Schreuder and Klaassen, it is highly questionable whether one can generalize the results of studies based on published forecasts to the rest of the firms due to the existence of self-selection bias.

Therefore, Schreuder and Klaassen design their research which differs from previous results in that it examined the accuracy of revenue and profit forecasts and most importantly, it is based on confidential or internal data instead of published data, thus, eliminating the drawbacks of using published data. Included in their study are 53 forecasts of a representative sample of companies listed on the Amsterdam Stock