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A study on small investors' behavior in choosing stock case study: Kuala-Lumpur stock market

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This study follows a qualitative methodology to investigate small investors' behavior in choosing stock in Kuala-Lumpur stock market. Small investors usually capture the numerous factors to purchase a definite share within the security market. These factors dramatically influences investors' behavior and change their decisions to purchase a particular stock. According to this description, the main purpose of this study is to identify the key determinants of choosing stock by small investors. A purposive sampling technique is employed to recruit 12 small investors based on desired range of demographic characteristics (for example sex and age), experience levels in purchasing stock and value of purchasing per time in ringgit. The research evidence reveals 13 effective factors in choosing stock which can influence small investors' decisions for stock selection. These factors are in order of importance involving "financial statements of companies, accounting instruments, past stock price (return), firms' public information, profitability variables, consult with anybody, financial ratios, past trading volume of stocks, second-hand information resources, discounted cash-flow tools, government policies, calculation of risk and economic variable.

Key words: Small investors, investors' behavior, institutional investors, individual investors, stock market.

INTRODUCTION

Traditional finance theories have generally captured two vital assumptions to select different shares by financial decision makers. Firstly, investors make rational decisions through following basic financial rules base on their investment strategies and risk-return consideration; and then, they are unbiased in their predictions about future returns of the stock. However, the nature of investors' decisions is not the same and depends mainly on their personal attitudes to numerous characters of the shares. Studies in behavioral finance has rapidly extended during the recent years and provided evidence that investors' financial decisions depends deeply on internal and external behavioral factors (Shefrin, 2000; Shleifer, 2000). Identification of the influencing factors on investors' behavior can be effective for different policyholders, so that it would affect companies' future

policies and strategies from company's perspective, in addition, it can affect the required legislations and the additional procedures needed in order to satisfy investors' desires and also to give more supports to market efficiency from government perspective (Warneryd, 2001).

To date, numerous researches have been empirically done on investors' behavior and especially identification of influencing factors on investors' decisions within the stock markets. However, extending these studies was seriously followed under the condition that two groups of individual and professional investors are empirically separated within the security markets (Lui and Mole, 1998). These studies which have concentrated on two categories of stockholders actually extend investors' behavior theory upon professional institutions and financial firms to identify key determinants of choosing stock (Naser et al., 2003). Meanwhile, a substantial amount of attention has been given by researchers to investigate individual investors' behavior that are usually wealthy and professional individuals to invest in the stock

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market (Potter, 1971; Shefrin, 1999; Maditinos et al., 2007), but less attention has been given to small investors' behavior. They are usually defined as common individual with low wealth who attempt to invest small savings within stock market for preventing decrease of their value due to existence of money time value.

According to the research literature and the cited gap, most of the recent studies have extended investment behavior for two individual and institutional levels, but extending of a behavior pattern for small investors have been ignored until now. In responding to the cited gap, this study explores a key objective to investigate small investors' behavior in choosing stock, in addition, it provides an attempt to answer this research on how small investors evaluate stock within the Kuala-Lumpur stock market. The investigation also includes an exploration of the compositions of the proposed determinants and makes recommendations towards improving decision process of small investors.

THEORETICAL BACKGROUND

A review of investors' behavior

The numerous literatures of investors' behavior have been empirically extended on behavioral scientists in recent years (Weber, 1999; Shiller, 2000; Shefrin, 2000). They rely chiefly on two key assumptions of traditional finance theory under condition that investors firstly make rational decisions, and then, they are unbiased in their predictions about future returns of the stock (Sultana, 2010).

The literatures related to investors' behavior or behavioral finance defines the investors' market behavior as psychological principle of decision making to explain why people buy or sell stocks. Behavioral finance focuses indirectly upon how investors interpret and act on information to make investment decisions. In addition, behavioral finance places an emphasis upon investors' behavior leading to various market anomalies. It is defined as a rapidly growing area that deals with the influence of psychology on the behavior of financial practitioners (Shefrin, 1999). On the other hand, investors' behavior approach has been explained by economic theories that describe the investment decision of the individual as a macroeconomic aggregate and the microeconomic foundations of it in the framework of inter-temporal utility theory. Individuals attempt to maximize their utility based on classic wealth criteria to make a choice between consumption and investment through time (Merikas et al., 2004).

However, the cited theories deeply support from the recent studies on investors' behavior; therefore, this study provides an attempt to investigate again, the application of these theories in understanding the small investors' behavior.

A review of influencing factors on investors' behavior

A number of attempts have been made by researchers to identify the types of information that investors need to choose a definite share. These studies have empirically identified the influential factors in choosing different stocks by surveying the behavior of two levels of institutional and individual investors. In a study, several profitability variables such as dividends, rapid growth and quick profits beside other variables such as investment for saving purposes and long-term growth were empirically identified as effective factors on the attitudes of individual investors in making investment decisions (Potter, 1971). In another study, importance of accounting information for investment decisions was identified and it was concluded that the majority of the individual investors rely dramatically on stockbroker's consultation as main source of information about companies. Financial statements were also found to be another important source of information for a minority of individual investors (Baker and Haslem, 1973). Another research evidence explained the role of profitability variables of dividends and expected returns along with firms' financial stability to influence the process of individual investors' choice (Baker and Haslem, 1974). Consequently, other evidence proposed that investor treat rationally, taking into account the investment's risk/return tradeoff through analyzing the relationship between risk and return (Cohn et al., 1975; Baker et al., 1977). Moreover, in study of Wharton, an attempt to examine how demographic variables such as age, income, education level, etc., affect the investment choice and portfolio composition process was provided. Similarly, Blume and Friend (1978), using Wharton survey results, provided a comprehensive study on implications of behavioral finance and found that basic measures of risk undertaken by individual investors are price and earning volatility. Continuing, evidence revealed that corporate reports are dramatically considered by investors as the most important sources of information for investment decisions (Abdulla, 1992). Consequently, studies' area focus empirically on linkage between risk and return with investors' behavior. The evidence shows that risk aversion can affect decreasing of the investors' wealth; in addition, it decreases not only investors' wealth, but also three factors of age, income, and education, influence investors' wealth increase (Riley and Chow, 1992). The study of Nagy and Obenberger (1994) developed a questionnaire that included 34 questions including financial and non-financial items, that impact on shareholders' perception. Their findings suggested that classical wealth-maximization criteria are important to investors, even though investors employ diverse criteria when they choose the stocks. The recommendations of brokerage houses, individual stock brokers, family members and co-workers go largely unheeded. According to importance of the various

sources of corporate information, Abu-Nassar and Rutherford (1996) argued that the annual corporate reports are the most important source of information to make decision the different groups of investors. Also, Fisher and Statman (1997) believed that the investment decision is a complex process since an investor beside the risk and rate of return should consider several other financial and non financial items. Holms and Sugden (1999) and then Maditinos et al. (2005) found that traditional accounting measures are most efficient instrument in interpreting the expected returns of stocks in any modern stock market. Furthermore, the evidence of Lawrence and Kercksmar (1999) indicated that investors frequently use income statement for the purpose of investment decisions within stock markets. The research evidence of Shiller (2000) detected that stock market is managed by the market information which directly affects the behavior of the investors. Several demographics variable were empirically considered such as gender, age and risk tolerance level of individuals to analyze the investors' purchasing behavior. Krishnan and Booker (2002) analyzed the influencing factors on decisions of those investors who use analysts' recommendations to arrive at a short-term decision for holding or selling a definite stock. The results indicated that a strong form of the analyst summary recommendation report, that is, one with additional information supporting the analysts' position further, reduces the disposition error for gains and also reduces the disposition error for losses. In a study, Naser et al. (2003) found that individual investors classify the annual report as the second most important source of information and institutional investor's rank annual reports as the main source of information. Also, Malmendier and Shanthikumar (2003) provided an attempt to answer the question: are small investor's naive? They found that large investors generate abnormal volumes of buyer-initiated trades after a positive recommendation only if the analyst is unaffiliated. Small traders exert abnormal buy pressure after all positive recommendations, including those of affiliated analysts. The research evidence of Hodge (2003) detected that the investors' perceptions of earnings quality, auditor independence, and the usefulness of audited financial information can influence investors' behavior in choosing the stock, against lower perceptions of earnings quality are associated with greater reliance on a firm's audited financial statements and fundamental analysis of those statements when making investment decisions. Furthermore, the key role of prior information such as return continuations to determine an appropriate behavior patterns was identified as another influencing factor on investors' decisions (Kadiyala and Rau, 2004).

On the other hand, the evidence indicated that utilizing of financial skills by professional investors cause to have a higher performance than individual investors. In an interesting study, it was investigated the influencing

factors on individual stock investors' behavior in Greece through responding to two key questions; what decision variables provide stock purchase decisions for individual investors? And, are there homogeneous clusters or groups of variables that form identifiable decision determinants when making stock investment decisions? The variables were classified in six groups involving "profitability variables", "financial statements", "firms' public information", "past stock price (return)", "consultants", and "government policies", and the identified factors on investors' purchasing behavior were identified as "expected corporate earnings", "condition of financial statements", "firm status in industry", "reputation of the firm", "feelings for a firm's products and services", "protection or not of the investor", "expected dividends", "recent price movements in a firm's stock", "get rich quick", "perceived ethics of firm", "affordable share price", "current economic indicators", "opinions of the firm's majority stockholders", "fluctuations/developments in the indices of the major markets", "past performance of the firm's stock", "feeling on economy", "attractiveness of non-stock investments", "diversification needs", "brokerage house recommendation", "coverage in the press", "statements from politicians and governmental officials", "ease of obtaining borrowed funds", "environmental record", "family member opinions", "friend or coworker recommendations", and "political party affiliation" (Merikas et al., 2004). The evidence of Mirshekary and Saudagaran (2005) detected how investors apply the information items disclosed in the annual reports of financial statements for making investment decisions. In addition, Al-Tamimi (2006), using 343 individual investors, investigated two categories of profitability variables and past stock price (return) and identified the influencing factors on UAE investor's behavior. The influencing factors in order of importance were classified as corporate earnings, get rich quickly, stock marketability, past performance of the firm's stock, government holdings, and the creation of the organized financial markets. Maditinos et al. (2007) also explained that investment practices employed by ININ, which in most cases were based upon non-financial factors and second-hand information resources such as instinct/experience, newspapers/media and noise in the market, led them to experience significant capital losses. Maditinos et al. (2007) in his study stated that individual investors, while making investment decision, prefer to think more about the media, newspapers and noise in market, despite this, professional investor would rather concentrate more on technical and fundamental analysis and less on portfolio analysis. In addition, their evidence describe that all kind of investors according to accounting instruments, first look at the earnings (P/E) as their first priority and consider earnings per share (EPS) as their second priority, later pay attention to the net operating profit after taxes (NOPAT) as their third priority, and finally, regard return on equity (ROE) as their fourth

priority. Considering the market value-based, investors first think over economic variables such as value added (EVA), or market value added (MVA) as their first priority. Next, consider shareholder value analysis (SVA) as their second priority, later on, pay attention to the possibility of occurrence as their third priority because of its calculating hardship. Considering the discounted cash-flow tools, investors consider the dividend discount model (DDM) as the first preference, later on, net present value (NPV) is a second important factor, next, internal rate of return (IRR) would be thought of as the third, and they look at the cash flow return on investment (CFROI) as fourth significant factors. Continuing, FASB (2008) emphasized key role of corporate financial statement reports in choosing different stocks. To extend the FASB work, evidence of Al-Ajmi (2009) revealed that financial reporting should provide useful information for the potential investors, creditors and other users in making rational investment. Also, more evidence indicated that investors pay attention to several factors in choosing shares. These factors are involving historical profits, expectation of a higher price of the stock, increase in the distribution of cash dividends, newspaper and rumors from the market.

In addition, many other studies have identified several factors that have different levels of influencing investors' decisions to buy and sell stocks. These factors which are classified by profitability variables, government policies, past stock price (return), firms' public information, and consultative information are involving current and future profitability, dividends policy, government subsidies and support, stock price and future growth, members of the boards, line of business, and friends' recommendations (Abdelsalam, 1990; Al-Razeen and Karbhari, 2004, 2007; Al-Attar and Al-Khater, 2007). To make investment decisions in the firms' stock, investors expect the firms to disclose a set of information about their financial position, sources of financial, management forecasts, investment programs, and financial policies. Meantime, investors obtain other types of information from different sources (for example, stock exchange reports, newspapers, government agencies, etc.).

Generally, the literature evidence follows two areas of researches; some researches concentrate empirically on institutions' purchasing behavior along with their influential determinants on stock selection, while other studies have generally focused upon individual behaviors in choosing different shares beside identification of their influencing factors. The literature evidence identify numerous influential factors which are classified based on below vital categorizes involving demographic levels, financial statements of companies, accounting instruments, economic variables, discounted cash-flow tools, past stock price (return), consult with different resources, second-hand information resources, firms' public information, profitability variables, government policies, risk of stock, and past trading volume of stocks.

Therefore, the extracted factors and their main

categories are utilized as issues and topics discussed during the process of interview. On the other hand, the prior research evidence have actually ignored investigation of small investors' behaviors in choosing stock, hence, we provide an attempt to know whether small investors capture the prior factors identified to choose the different stocks as well as institutional and individual investors.

RESEARCH PURPOSE AND METHODOLOGY

This qualitative study of investigating small investors' behavior explores investors' decision interactions and their experiences, in addition to identifying influencing factors of small investors' behavior in choosing different stocks with in Kuala-Lumpur stock market. The research adopts a realist ontological position (Guba and Lincoln, 1994; Bryman, 2004) involving a deductive stage with small investors focusing on exploring the influencing factors of choosing shares within Kula-Lumpur stock market. Qualitative research in the form of semi-structured interviews was utilized. The main advantage associated with semi-structured interviews is related to flexibility, with interview format being a culmination of in-depth interviews and structured questionnaires. Semi-structured allow scope for discussion and provide the researcher with the opportunity to further probe and seek a more comprehensive or clearer explanation (Zikmund, 1999), while also enabling quantification of data, thus enabling greater flexibility than alternative methods such as in-depth interviews or focus groups (Carson et al., 2001). Hence, semi-structured in-depth interviews are chosen for the depth and intimacy of interviewing, involving one-to-one conversations in the respondent's own setting, thus maximizing the quality of the research result (Patton, 1990; Lincoln and Guba, 1985). The semi-structured interviews explore informants meanings, interpretations and views of small investors' behavior and delved into themes relating to the influencing factors of choosing different shares, that is, demographic levels, financial statements of companies, accounting instruments, economic variables, discounted cash-flow tools, past stock price (return), consult with different resources, second hand information resources, firms' public information, profitability variables, government policies, risk of stock, and past trading volume of stocks. During the semi-structured interviews, informants are asked to fill a fact sheet of information regarding their age, sex, education levels, income levels, years experienced, and value of purchasing per time of informants.

A purposive sampling technique is employed to recruit 12 small investors representing the desired range of demographic characteristics (sex, age, income, and education), number of years experienced, and value of purchasing per time. This sampling method is particularly useful as only informants who are relevant to the research are sampled and ensued until "theoretical saturation" is achieved (Bryman, 2004), hence, enabling a rich comparison of different number of years experienced and value of purchasing per time across the sample. The sample population is slightly skewed to include a higher representation of 12 small investors among institution, individual and small investors within Kula-Lumpur stock market. As shown in Table 1, the age profile of informants include all age ranges from under 30 to over 50 which detect the purchasing process can occur in all age ranges. Furthermore there is no a significant relationship between informants' age and number of years experienced in buying the stock, means that older is not necessarily associated with high experience in buying stock. As a result the sample is comprised of a greater proportion of under 30 (42%) and 30 to 40 (42%) age profiles, with the remaining age profiles 40 to 50 (8%) and over 50 (8 %) of the sample population. Income levels varied from "very low" (under 1000 ringgit per month)

Table 1. Interviewee profile.

Respondent (name)	Sex	Age	Income	Education	No. of year of experience	Value of purchasing per time (Ringgit)
Meysam	Male	30-40	3000-8000	Master	Over 5	Under 200
Ali	Male	under 30	1000-3000	Master	3	200-700
Masood	Male	30-40	3000-8000	Master	Over 5	Under 200
Khinol	Male	under 30	1000-3000	Bachelor	4	200-700
Andy	Male	under 30	3000-8000	Master	2	200-700
Shery	Male	Over 50	3000-8000	Bachelor	4	200-700
Sophian	Female	40-50	1000-3000	Bachelor	1	Under 200
Gorab	Female	30-40	3000-8000	PHD	1	200-700
Hassan	Male	under 30	1000-3000	Master	2	Under 200
Rasidah	Female	under 30	1000-3000	Master	2	Under 200
Najm	Male	30-40	1000-3000	Bachelor	4	Under 200
Reza	Male	30-40	3000-8000	Master	Over 5	200-700

to "low" (1000 to 3000 ringgit per month) to "middle" (3000 to 8000 ringgit per month) to "high" (over 8000 ringgit per month), generally include income level of informants, so that evidence reveal that all informants are located in two levels of "low" (50%) and "middle" (50%). The number of years experienced by informants to buy stock includes a range of one year (17%), two years (25%), three years (8%), four years (25%) and over 5 years (25%). Furthermore, share value purchased by informants for per time is ranged as under 200 ringgit (50%) and 200 to 700 ringgit (50%), it shows easily and well that informants are small investors whose have usually low wealthy from one side and also spend low money to purchase stock per time.

The in-depth interviews are analyzed using content analysis in the form of template analysis (King, 1994). To perform the template analysis approach, text is analyzed through utilizing an analysis guide or codebook consisting of a number of categories or themes related to the research question (King, 1994). In accordance with this study, the researchers initially derived the codebook from the literature and the content of the research questions, as the interview guide is semi-structured with each section relating to specific research themes. The researchers initially segmented the data using "lower-order" codes and as common groupings emerged, data exhibiting collective properties, elements or concepts are clustered together to form "higher-order" codes (King, 1994).

The authors are also mindful of the reliability and validity issues commonly associated with drawing conclusions and generating implications from small samples (Bock and Sargeant, 2002). The notion of reliability is therefore approached as "replicability" of the data, and internal validity, which is particularly essential to qualitative research; hence, it is viewed as the accuracy of the data collected and the degree of correspondence to reality (Tsoukas, 1989; Cresswell, 1994). Moreover, the "trustworthiness" of the qualitative findings (Lincoln and Guba, 1985) is facilitated through a total review of appropriate literature, solid justification of the qualitative research methodologies employed and careful structuring of data analysis to ensure full and descriptive evaluation and assessment (Carson et al., 2001).

However, corresponding to the identified categories and factors by literature and also the research methodology, more than 30 sub-questions were asked based on essential question of this research, which explain how small investors evaluate stock, during the interview process:

1. What categories do you consider, to select and purchase a definite share? These categories that include the previous 13 items by literature, involves "financial statements of companies", "accounting instruments", "economic variables", "discounted cash-flow tools", "past stock price (return)", "consult with different resources", "second-hand information resources", "firms' public information", "profitability variables", "government policies", "risk of stock", and "past trading volume of stocks".

2. If you select those categories what factors have key role in choosing stock from your point of view?

3. How do you rank each of those selected categorizes and their effective factors in order of importance?

DISCUSSION OF FINDINGS

Financial statements

All of our respondents use the financial statements of companies in their evaluation. The "profit and loss statement", "corporate financial statement reports" and "balance sheet" are being used more than others, where 67, 42 and 42% respectively of respondents are using them. So, we may conclude that most of them ensure that these 3 statements will let them know a good image of financial background of the company which they are investing in. As one of them clearly mentioned, "profit and loss statement and balance sheet of the company provide possibility for knowing loss and profit of a company from one side and also understanding amount of assets and liabilities from other side. So, identifying of firms' position and their stock will be easily realized by surveying two above statements".

Accounting instruments

All of our respondents use the accounting statements of companies in their evaluation. Informants count four tools of accounting instruments which are able to help them in

promoting their knowledge to purchase stock. The employed accounting instruments by respondents were in order of importance “earnings per share (EPS)”, “return on equity (ROE)” and “net operating profit after taxes (NOPAT)”, however, P/E was less used accounting statement that respondents mentioned.

Economic variables

Using the economic variables in evaluations of choosing the stock was a less used variable in the study, as one of them mentioned that “those variables cannot be reliable variables”. However, only 17% of respondents are using, “market value added” as the economic variable. One of respondents referred to this variable since “a high MVA indicates the company has created substantial wealth for the shareholders”.

The discounted cash-flow tools

According to the findings, half of the interviewees apply the discounted cash-flow means to evaluate their stock values. As it was explained in literature review, the IRR and NPV are most common tools to compare and select investment opportunities. In fact, the IRR and NPV are the sides of the coin. The IRR evaluation generates a percentage figure which is equal to the interest rate at which the project capital would have to be invested to generate the same series of annual cash flows that the project will generate.

The NPV gives the value of the project as a dollar amount today. Each year's cash flow is discounted to the present, at a predetermined discount rate, which reflects the project risk and the investors' minimum investment criteria. The NPV is the sum of these discounted annual cash flows.

Our research result also highlight NPV and IRR as the most famous tools amongst investors, since 5 out of 6 people, who use discounted cash-flow means, apply NPV and IRR as their evaluation methods. Also, one person mentions DDM and CFROI to asset companies' stocks.

The past stock price (return)

This research shows that all investors are unanimous on using historical stock price due to the fact that most investor's predictions regarding future stock price would be determined just by past stock prices. Historical stock price would allow the investors to realize the stocks conditions of companies in detail as well as based on those information; they could find the intuitive and real price of the stock.

Based on this study, the major small individual investors, 6 out of 12, consider the stock prices of two

years ago for making decision whether to do the trade or not, as well as 16.6% of interviewees mentions that they usually just look at the last year of the company information. 2 out of 12 trace the stock prices of three years ago. Finally, the 16.6% consider the stock prices of more than 5 years ago to evaluate the performance of firm's stocks.

Consult with anybody

Based on the results obtained through this survey, more than 92% of investors consult with the other person to give their recommendation for making better investment decision and only less that 8% rely on their personal experiences and knowledge. From those people who would like to consult with anyone, consulting with a friend is selected as the most consulting method. Second priority of investors for making decision would be opinions of the firm's majority stockholders and the third is brokerage houses. Finally, family member opinions and coworker recommendations is placed on the last preferences respectively.

Khirol in the interview stated that “I prefer to consult with three groups (opinions of the firm's majority stockholders, friends, and family member opinions) because I am a risk-averse individual. In other words, I have more confidence in them, although brokerage houses are a professional unit for this mean.” Despite Khirol, Rasidah indicated to the expert coworker recommendations as first preference for consulting.

The second-hand information resources

The study explains that 75% of investors use the second hand market information. On the other hand, second hand information influences 75% of traders in financial markets. Based on our findings newspapers are the most common second-hand information sources among the other recourses. Rasidah Mohd Rashid (one of the interviewee) tells that “I often follow the investment news by economic newspapers”. In addition Khirol explains that “I prefer to read financial section of newspapers instead of using the information related to media and noises in market”.

The second source of second-hand information, which is gained from this research, is noise (rumors) in the market. One of our interviewee says that “the market has always been under the influence of noise and rumors. So, I try to be aware of it as much as I can”. So, many investors believe that, rumor has an important factor on the market price and they believe that by the rumor, sell the fact is an old trading rule, however, interpreted incorrectly – the rules dictates that you do not have to sell the fact and not buy the fact. One clear point indirectly suggested in this rule is that the rumor should be bullish:

If it is bullish, then you stand a better chance to win – to earn more than reasonable levels.

Finally, on the basis of this survey, the media is thought of as the last sources of getting second hand information.

The firms' public information

In accord with this study, we found that 10 out of 12 interviewees use firms' public information in their evaluations to choose the stock. From the investors' perspective, the reputation of the firm has highest impact on their making decision. Next, they mention the protection or not of the investor and firm status in industry as the significant factors and influence. Later on, feelings for firm's products and services, and members of the board have been determined as important factors. According to the many research that has been done in investor's behavior, firms' public information has low effect on investor's making decision, totally. regarding this fact Khirol in the interview adds that "I select many stocks according to reputation of the firm, but I believe that it is not a logical way to choose stock".

Profitability variables

The results of this study showed that majority of the respondents use profitability variables to evaluate the stock performance, (2 out of 12 respondents did not use them). Profitability variables are mostly ratios and are defined as indicators of a firm's success at making profits. Kangari (1988), in his model about prediction of business failure in the construction industry, showed that the majority of profitability variables have significant relationship with the company failure rate. Between the ones who said yes to this question, almost all of them focus on dividends, because they want to know the payments made by a company to its shareholders to estimate their gains. Also, 33% of the people who use profitability variables, consider current, future portability and quick profits through trading and historical profits as second tools to assess the stock performance. Finally, 1 out of 6 who is being interviewed, think of expected corporate earnings as the second important method to evaluate the performance of firms' stock. Najm Bin Mohamad, one of the interviewee, states that "I often consider dividend in short run trade".

Government policies

When the investors are not well informed and when there is a systematic mispricing, regulation can protect unaware investors and improve risk sharing. On the other hand, government policy and regulations can help investors make better decisions and will increase the market prices efficiency. Politics and government influence the stock market, for example it responds to

inflation which is depends on monetary policies, (Bittlingmayer, 1993). In spite of this fact, based on the results obtained through this survey, majority of our respondents prefer not to use government policies to evaluate and choose the stocks (9 out of 12). Amongst those who rely on government policies, all interviewee mentioned that they just use government agencies to evaluate their stocks. In other words, nobody chooses government subsidies and support. Finally, Ali Pirayesh in his interview adds that "to diversify the risk by selecting the stocks, are more supported by government and are of governmental links".

Financial ratios

This research shows that, more than 83% of investors use the financial ratios in their evaluations to choose the stock. From those people who would like to take advantage of the financial ratios, consulting balance sheet is selected as most applied method (6 out of 10). Profit and loss statement that is also referred as income statement presents a company's revenue and expenses in a specific period of time. With this statement, investors can predict whether the company will stay in this business in the future or not. According to this study, second priority of investors is profit and loss statement by 6 out of 10 and the 4 out of 10 person selected cash flow statement as the third priority. Finally, auditor's report is one of the essential tools on reporting financial information to users, especially in business. Many third-party users prefer the financial information which is certified by an independent external auditor, so, many auditees rely on auditor reports to certify their information to attract investors, give loans and improve public appearance. Despite this fact, based on this research, only one person rely on audit report as the method of financial ratios.

Calculation of risk

There are some methods to help the investors calculate the risk but investors are not aware of those models. Theory says that there is a positive relationship between risk and return of the stocks and depends on the levels of being risk averse or risk taker the investors chose their stocks. Also Schaefer (1978), found that the extent of an investor's ability to tolerate the uncertainties of return is referred as risk tolerance level of an investor. 38% of the respondents mentioned that they calculate the risk of their investment before investing in stocks for example they go for consultation and they follow the exchange rate movements if the company in multinational. Khirol in this interview stated that he will not use this method because he is not familiar with the risk calculation methods. Malkiel (1996) believed that an individual's risk tolerance is related to his/her household situation, lifecycle stage and subjective factors. Mitra (1995) also

Table 2. Importance ratings of the proposed influencing factors to choose the stocks.

Effective factors in choosing stock	Number of informants (n) = 12	Average of scores given by responders
Financial statements of companies	11	10.08
Accounting instruments	11	9.91
Past stock price (return)	10	8.58
Firms' public information	11	6.66
Profitability variables	10	6.33
Consult with anybody	9	5.58
Financial ratios	7	5.25
Past trading volume of stocks	10	4.83
Second-hand information resources	9	4.75
Discounted cash-flow tools	8	4
Government policies	7	3.66
Calculation of risk	7	3.66
Economic variables	7	3

mentioned some factors related to individuals risk tolerance, such as years until retirement, knowledge level and income. Similar to this finding, 5 out of 12 respondents which said they use risk calculation have the moderate salary, most of them have master degree (4 out of 5).

Past trading volume of stock

According to the literature, trading volume is a critical and fundamental element to stock decisions. Volume means the number of shares traded in a market during a given period of time. It measures the activity of sellers and buyers. Volume is an indicator to measure the value of a market move. If the markets price move up or down the strength of that move depends on the volume for that period.

The higher the volume during that price move the more significant the move. Kent et al. (2001), in his study mentioned that investors are influenced very much by historical performance of the stock price.

The interview findings were consistent with Daniel et al. (2002) who suggested that investors may build theories about how the market works based on irrelevant historical information. Similar to these findings, Tvernsky and Karneman (1974) suggested the idea of anchoring where investors set a primary value for future prices. Consistent with the mentioned findings and despite the finding of Sultana (2010) about Indian investors which said Indian investors make decision based on their own initiative, 75% (9 out of 12) respondents said they use past trading volume of the stocks, where 6 of them used less than 2 years historical data.

Andi said "high past trading volume of stocks provides more confidence for me to choose the stock", according to him, having the data up to 2 years will be enough to see the trends of the stock.

Ranking of influencing factors small investors' purchasing behavior

In responding to the last research question for ranking each of those categories identified, 13 influencing categories investors' behavior involving "financial statements of companies", "accounting instruments", "economic variables", "discounted cash-flow tools", "past stock price (return)", "consult with different resources", "second-hand information resources", "firms' public information", "profitability variables", "government policies", "risk of stock" and "past trading volume of stocks" are ranked by small investors during the interviews. It is important to note that content analysis is applied to quantify the importance of influencing categories small investors in choosing the stocks by counting the average of scores given by responders in the interview. Table 2 presents a rank-ordered list of the importance ratings of each of those proposed influencing categories by small investors to choose stock within Kuala-Lumpur stock market.

The evidence shows that 13 categories are effective in choosing stock in order to influence small investors' decisions for stock selection. These categories are in order of importance involving "financial statements of companies, accounting instruments, past stock price (return), firms' public information, profitability variables, consult with anybody, financial ratios, past trading volume of stocks, second-hand information resources, discounted cash-flow tools, government policies, calculation of risk, and economic variable.

Conclusions

This study investigates small investors' behavior to purchase stock in the Kuala-Lumpur stock market. 13 main categories which include effective vital factors on

Table 3. Sub-variables identified by small investors in order of importance.

Number	Variables identified by literature	Sub-variables identified by informants in order of importance
1	Financial statements of companies	Profit and loss statement Balance sheet Corporate financial statement reports Cash flow statement Audit report
2	Accounting instruments	Earnings per share (EPS) Return on equity (ROE) Net operating profit after taxes (NOPAT) P/E
3	Past stock price (return)	Stock price of two years Stock price of three years Stock price of more than five years
4	Firms' public information	Reputation of the firm Protection or not of the investor Firm status in industry Feelings for firm's products and services Members of the board
5	Profitability Variables	Dividends Current and future portability Quick profits Historical profits Expected corporate earnings
6	Consult with anybody	Consulting with the friend Opinions of the firm's majority stockholders Brokerage houses Family member opinions Coworker recommendations
7	Financial ratios	-
8	Past trading volume of stocks	-
9	Second-hand information resources	Newspapers Noise (rumors) in market Media
10	Discounted cash-flow tools	Net present value (NPV) Internal rate of return (IRR) Dividend discount model (DDM) Cash flow return on investment (CFROI)
11	Government policies	Government agencies
12	Calculation of risk	-
13	Economic variables	Market value added (MVA)

stock selection are empirically identified based on the literature evidence. They involve "financial statements of companies, accounting instruments, economic variables, discounted cash-flow tools, past stock price (return), consult with anybody, second-hand information resources, firms' public information, profitability variables,

government policies, financial ratios, calculation of the risk of stock, and past trading volume of stocks. According to those categories identified by the research literature, informants identify subcategories (factors) for each of those categories which are introduced in the following table. Table 3 presents sub-variables identified

by informants in order of importance (for example the variable of Financial Statements of Companies as the most important factor get noticed by small investors through five sub-variables of Profit and Loss statement, Balance Sheet, Corporate Financial Statement Reports, Cash Flow Statement and Audit Report Respectively, and the Economic Variables as less important factor is described by one sub-variable which is Market Value Added).

In other words, those factors introduced by small investors during the interview process, actually provide needed information to make decision on the small investors from one side, and directly influence small investors purchasing behavior from the other side. Furthermore, the evidence explained by literature shows that the institution and individual investors consider three variables of "calculating the risk of stock, government policies and economic variables" as influencing variables on stock selection, but these three variables has been reducibly applied by small investors.

LIMITATIONS OF THE RESEARCH AND FUTURE RESEARCH ISSUES

Insights gained from the literature develop a list of influencing variables in choosing the stock, which are empirically explored using a qualitative research in the form of semi-structured interviews. The main limitation of the research relates to the small sample sizes, with further research in terms of in-depth qualitative/and or quantitative studies required with larger sample sizes to deal with any issues in terms of making inferences or generalizations regarding the population as a whole.

In relation to the proposed influencing variables on stock selection, additional qualitative small investor research across a larger sample will facilitate the confirmation/disconfirmation of the importance of the proposed influencing variables on stock selection to identify a behavior pattern for this group of inventors; thus, addressing current gaps within the literature and contributing greatly to management practice by facilitating further generalizations from the research. Moreover, this study is conducted within Kuala-Lumpur stock market and reveals evidence relating to influencing variables on stock selection perceived as essential to the small investors. Further comparative analysis research is necessary to assert the generalisability of the proposed influencing variables on stock selection across Malaysia financial markets.

REFERENCES

- Abdelsalam M (1990). The use of corporate financial reports by investors in Saudi Arabia. *J. Adv. Int. Acc.*, 3: 25-39.
- Abdulla JYA (1992). Disclosure needs of major users of corporate reports in Bahrain. *J. Econ. Adm. Sci.*, 8: 135-167.
- Abu-Nassar M, Rutherford BA (1996). External users of financial reports and Finance in Transition, University of Greenwich, London.
- Baker HK, Hargrove MB, Haslem JA (1977). An Empirical Analysis of the Risk Return Preferences of Individual Investors. *J. Financ. Quant. Anal.*, 12(3): 377-389.
- Baker HK, Haslem JA (1974). Toward the Development of Client-Specified Valuation Models. *J. Financ.*, 29(4): 1255-1263.
- Baker KBH, Haslem JA (1973). Information needs of individual investors. *J. Accountancy*, pp. 64-69.
- Blume ME, Friend I (1978). *The Changing Role of the Individual Investor*. John Wiley & Sons, New York, New York.
- Bock T, Sargeant J (2002). Small sample market research. *Int. J. Market Res.*, 44(2): 235-247.
- Bryman A (2004). *Social Research Methods*, Oxford University Press, Oxford.
- by foreign exchange dealers: Hong Kong evidence", *J. Int. Money Financ.*, 17(3): 535-545.
- Carson D, Gilmore A, Perry C, Gronhaug K (2001). *Qualitative Marketing Research*, Sage Publications, London.
- Cohn RA, Lewellen WG, Lease RC, Schlarbaum GG (1975). Individual Investor Risk Aversion and Investment Portfolio Composition. *J. Financ.*, 30(2): 605-620.
- Cresswell JW (1994). *Research Design: Qualitative and Quantitative Approaches*, Sage, Thousand Oaks, CA.
- Daniel K, Hirshliefer D, Teoh SH (2002). Investor Psychology in Capital Markets: Evidence and Policy Implication. *J. Monetary Econ.*, 49: 139-209.
- Financial Accounting Standard Board. (2008). *Statement of Financial Accounting Concepts No. 2: Qualitative Characteristics of Accounting Information*, available at: www.fasb.org/pdf/aop_CON1.pdf.
- Fisher KL, Statman M (1997). The mean-variance optimization puzzle: security portfolios and food portfolios. *Financ. Anal. J.*, 53(4): 41-50.
- Guba EG, Lincoln YS (1994). Competing paradigms in qualitative research, in Denzin, NK, Lincoln YS (Eds), *Handbook of Qualitative Research*, Sage, Thousand Oaks, CA, pp. 105-117.
- Hodge FD (2003). Investors' perceptions of earnings quality, auditor independence, and the usefulness of audited financial information. *J. Acc. Horizons.*, 17: 37-48.
- Holmes G, Sugden A (1999). *Interpreting Company Reports and Accounts*, 7th ed., Financial Times/Prentice-Hall, London.
- in less developed countries: the case of Jordan. *J. Br. Acc. Rev.*, 28: 73-87.
- Kadiyala P, Rau R (2004). Investor reaction to corporate event announcement: Underreaction or overreaction?. *J. Bus.*, 77: 357-386.
- Kent D, Hirshliefer, Teoh SH (2001). Investor psychology in capital markets: evidence and policy implications. *J. Monetary Econ.*, 49(1): 139-209.
- King N (1994). The qualitative research interview, in Cassell, C. and Symon, G. (Eds), *In Qualitative Methods in Organizational Research*, SAGE Publications, London, pp. 14-36.
- Krishnan R, Booker DM (2002). Investors' use of Analysts' recommendations. *Behavioral Research in Accounting*. 14: 129-158.
- Lawrence R, Kercksmar J (1999). Accounting information utilization and judgment quality in a stock investment task. *Am. Bus. Rev.*, 7-16.
- Lincoln YS, Guba EG (1985). *Naturalistic Inquiry*, Sage, Beverly Hills, CA.
- Lui YH, Mole D (1998). The use of fundamental and technical analyses
- Maditinos D, Sjevic´ Z, Theriou N (2005). Performance measures: traditional accounting measures versus modern value-based measures. The case of earnings and EVAwin the Athens Stock

- Exchange (ASE), paper presented at 3rd Conference on Accounting
- Maditinos D, Sevic Z, Theriou N (2007). Investors' behavior in the Athens stock exchange. *Stud. Econ. Finan.*, 24(1): 32-50.
- Malkiel BG (1996). *A random walk down Wall Street*. New York: W. W. Norton & Co.
- Merikas AA, Merikas AG, Vozikis GS, Prasad D (2004). Economic Factors and Individual Investor Behavior: The Case of the Greek Stock Exchange, *J. Appl. Bus. Res.*, 20(4).
- Mirshekary S, Saudagaran SM (2005). Perceptions and characteristics of financial statement users in developing countries: evidence from Iran. *J. Int. Acc. Audit. Tax.*, 14: 33-54.
- Mittra S (1995). *Practicing financial planning: A complete guide for professionals*. Michigan: Mittra & Associates.
- Nagy RA, Obenberger RW (1994). Factors influencing individual investor behavior. *Finan. Anal. J.*, 50(4): 63-69.
- Naser K, Nuseibeh R (2003). User's perception of corporate reporting: evidence from Saudi Arabia. *J. Br. Acc. Rev.*, 35(2): 129-153.
- Patton MQ (1990). *Qualitative Evaluation of Research Methods*, 2nd ed., Sage, Newbury Park, CA.
- Potter RE (1971). An empirical study of motivations of common stock investors. *Southern J. Bus.*, 6(1): 41-44.
- Riley WB, Chow KV (1992). Asset Allocation and Individual Risk Aversion. *Finan. Anal. J.*, 48(6): 32-37.
- Shanthikumar D, Malmendier (2003). Are small investors naive?, Stanford University, Working Paper.
- Shefrin, H (2000). *Beyond Greed and Fear* Harvard Business School Press, Boston.
- Shiller RJ (2000). *Irrational Exuberance* Princeton University Press, Princeton.
- Shleifer A (2000). *Inefficient Markets: An Introduction to Behavioral Finance*, Oxford University Press, Oxford.
- Sultana ST (2010). An Empirical Study of Indian Individual Investors' Behavior. *Global J. Financ. Manage.*, 2(1): 19-33.
- Tsoukas H (1989). The validity of ideographic research explanations. *J. Acad. Manage. Rev.*, 2(4): 551-561.
- Tversky A, Kahneman D (1974). Judgment under uncertainty; Heuristics and biases. *J. Sci.*, 185: 1124-1131.
- Warneryd KE (2001). *Stock-market Psychology: How People Value and Trade Stocks*, Edward Elgar, Cheltenham.
- Zikmund W (1999). *Essentials of marketing research*, The Dryden Press, Orlando, FL.