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STOCK SELECTION BEHAVIOR OF INDIVIDUAL EQUITY INVESTORS IN PAKISTAN

This study examines the stock selection behavior of individual equity investors in Pakistan. The study provides very important information for investment advisors regarding stock selection behavior of small equity investors in Pakistan. The understanding of investors' behavior also enables equity market regulators to improve regulator environment that best suits stakeholders. It also provides pertinent information to corporations listed at stock markets of Pakistan to attract investors. The study identifies stock attributes including dividend, price trends and volatility, firm's status at a market, source of recommendation, corporate reputation, corporate social performance, firm's visibility in media having significant effect on stock selection behavior of individual equity investors in Pakistan.

Keywords: investor behavior, stock selection behavior, stock attributes, Pakistan.

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ПОВЕДІНКА ПРИВАТНИХ АКЦІОНЕРІВ ПРИ ВИБОРІ АКЦІЙ У ПАКИСТАНІ

У статті досліджено поведінку приватних акціонерів при виборі акцій у Пакистані, подано важливу для інвестиційних консультантів інформацію відносно поведінки дрібних приватних акціонерів. Розуміння поведінки інвесторів надає можливість органам регулювання фондового ринку покращити середовище регулювання, щоб воно більше підходило акціонерам. Також надано актуальну інформацію для корпорацій, акції яких котируються на ринку цінних паперів Пакистану, що можна використовувати для залучення інвесторів. Виділено характеристики акцій, у т. ч. дивіденди, цінові тренди і волатильність, статус фірми на ринку, джерело рекомендації, репутація, соціальна орієнтація організації, поява фірми в ЗМІ — все це має значний вплив на поведінку приватних акціонерів при виборі акцій в Пакистані.

Ключові слова: поведінка інвесторів; поведінка при виборі акцій; характеристики акцій; Пакистан.

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ПОВЕДЕНИЕ ЧАСТНЫХ АКЦИОНЕРОВ ПРИ ВЫБОРЕ АКЦИЙ В ПАКИСТАНЕ

В статье исследуется поведение частных акционеров при выборе акций в Пакистане, подается важная для инвестиционных консультантов информация относительно поведения мелких частных акционеров. Понимание поведения инвесторов дает возможность регулирующим фондовый рынок органам улучшить среду регулирования, дабы она больше подходила акционерам. Также предоставлена актуальная информация для корпораций, акций которых котируются на рынке ценных бумаг Пакистана, что можно использовать для привлечения инвесторов. Выделены характеристики акций, в т. ч. дивиденды, ценовые тренды и волатильность, статус фирмы на рынке, источник рекомендаций, репутация, социальная ориентация организации, появление фирмы в СМИ — всё это имеет значительное влияние на поведение частных акционеров при выборе акций в Пакистане.

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Ключевые слова: поведение инвесторов; поведение при выборе акций; характеристики акций; Пакистан.

Introduction. Behavioral finance is one of significant developments in finance recently. Behavioral finance uses social cognitive and emotional factors in understanding investor behavior. Behavioral finance has gained notable attention in recent years explaining the influence of investors' psychology on investment decision-making. Studies focusing on individual investor behavior first appeared in 1980s. Its main focus is on psychological aspects employed by investor to make investment decision. Theory which defines behavioral finance was presented by Kahneman and Tversky (1979). Kahneman and Tversky (1979) hold that an investor may not appear to be as rational for investment as supposed to be. These behaviorists were of the opinion that investors behave irrationally while making investment decisions. They based investor's decision-making process on overconfidence, overreaction, mental accounting, anchor and herd behavior (Banerjee, 1992). Shefrin (2000) defined behavioral finance as "a rapidly developing area that contrasts with the influence of psychology on the behavior of financial professionals". Behavioral finance goes on to relax and even in some cases to abandon the theories of traditional finance like rational behavior, efficient market hypothesis and random walk theory. It does not reject the theories offered by traditional finance, but deepens the concepts to comprehend and clarify the investors' behavioral characteristics. Behavioral finance outlines the shortcomings of traditional finance relevant to rational acting of investor. It integrates the psychological and social factors relating to investor in financial models and relates them with situational factors in order to find their relevance to capital market participants.

Plenty of research is documented on investor behavior in behavioral finance, however, majority of the research focus on psychological aspect of investor behavior. Very little research focuses on the stock selection behavior of individual equity investors. This study fills this gap by investigating the stock selection behavior of small equity investors in Pakistan.

Background, Theoretical Framework and Hypotheses: Stock Attributes and Investor Stock Selection Behavior. Numerous studies in behavioral finance support the influence of various attributes on stock selection behavior or individual equity investor. For instance, Lee (1992); and Barber and Odean (2006) hold that dividend events induce retail investors attention-driven buying and that retail investors exhibit abnormal behavior following dividend announcement. Lee (1992) also found that small traders buy after earning surprises, weather good or bad and that they react later than large investors do. Shefrin (2000) inserted that investors enthusiastically and actively sought those stocks who offer higher dividend and growth, termed as value stock. Allen and Michealy (2003) asserted that dividend could affect the activity of stock at a market. Brave et al. (2005) reported that individual equity investors prefer dividend-paying stocks. Current research also hypothesis that individual equity investors are influences by higher dividend announcements and yields in their investment decision process.

Management competency is another attribute that individual equity investor may consider in making his/her investment decisions. Competent management hold-

ing good skills is indispensable for business growth at higher level of success. Competency and commitment of management can be ensured by a share ownership and other performance-based inducements. Managers of demonstrated talent having successful career record conveys clear message to investors to take advantage. Murphy and Soutar (2004) also investigated the effects of management competency as one of the strongest stock attributes that influences the investment behavior of individual equity investors. Literature supports that industry structure is a key factor for growth and effects firm performance and hence provides an incentive for investor to invest in that industry. Industry structure includes intensity of competition among rival firms. Intense competition in any industry can cause price lower than costs and industry-wide losses. Factors contributing to intensity of rivalry in an industry include diversity of competitors, firm concentration, entry and exit barriers and excess capacity (Scherer, 1980). Dreux (1992); and Wright et al. (2001) also hold that growing industries are evaluated as an attractive investment opportunity by equity investors. Knowledge about company products and services and personal experience of consuming corporate products is also another important attribute that individual equity investors incorporate in their investment decision-making. Similarly, satisfied and loyal investors also purchase more products of the same corporations. Murphy and Soutar (2004) found that investors preferred the stocks of those corporations for which they have personal experience or knowledge.

Individual investors usually buy stocks having upward price trends and sell stocks having downwards prices trends without having sufficient fundamental and technical analysis, this is called herding behavior in behavioral finance. Antonides and Van Der Sar (1990) also suggested that investor are less likely to buy stocks with prices moving downward and sell stock whose prices are moving upward. Lucey and Dowling (2005) investigated the relationship between equity prices and investor behavior and argued that equity prices have reciprocal effects on equity investor behavior. Market status refers to growth potentials of corporation as compared to its competitors in the same industry; these highly growing stocks are also known as blue chips and are preferred options for investment. Equity investors evaluate factors important for the success of business and discover the areas in which the firm occupies long term comparative lead on other firms in the same industry or sector. This competitive lead may be towering share at a market, intellectual property, strong brands or technological advantage. Theories of behavioral finance assume that individual equity investors are not always rational and do not incorporate industry, fundamental and technical analysis in investment decision. This has also been documented by many researches that individual investors mostly rely on recommendations of fellow traders or friends. Stockbrokers are generally preferred sources of recommendations on which individual equity investors base their investment decisions. This also separates investors from speculators; investor relies on their own technical or fundamental parameters, whereas speculators base their investment decisions on speculations and rumors at a market.

Another attribute that individual investors consider while investing in stocks of any corporation is the principal place of operation of that corporation. Individual investors tend to be more loyal to their economy and avoid investing in the companies not based in their homelands. Murphy and Soutar (2004) also found in their sur-

vey on Australian investors that individual investors prefer to invest in the companies based in Australia than in those located abroad. Many authors in different fashion have defined corporate reputation. Fombrun (1996) believed corporate reputation is a set of collectively held beliefs about a company's ability and willingness to satisfy interests of various stakeholders. Gotsi and Wilson (2001) presented a general definition and stated that corporate reputation is "a stakeholders overall evaluation of a company over time". Corporate reputation can be used to gain favor of various stakeholders including customer, employees, and investors. For instance, Ali (2011) found significant influence of corporate reputation on customer satisfaction and retention in the cellular industry of Pakistan.

Majority of literature is connecting CSR with improved financial performance of organization, for instance, Judge and Douglas (1998) argued that corporate environmental considerations improve business performance. Hull and Rothenberg (2008) also found strong association between CSR accomplishments and corporate financial performance. Other researches on CSR included the influence of CSR on customer behavior. Researchers found that CSR influence customer purchase behavior for instance, Luo and Bhattacharya (2006); Ali et al. (2011) also found strong association between corporate social responsibility, investor satisfaction and investor loyalty in the context of Pakistan. Investor relations management experts believe that good investor relations contribute to fair evaluation of firms by investors. Trueman (1996); and Bushee and Miller (2005) argued that good investor relations are beneficial for attracting investors and lower the costs of capital for corporations. Normally individual retail investors are considered less important for relationship management and more focus is given to large institutional investors. Bushee and Miller (2005) found in their survey that individual investors are difficult to target for investor relations management because they are hard to manage due to their large numbers and low quantity of stock holdings. Firm visibility and publicity or advertising is also another important factor that influence decision-making of individual equity investors. Companies frequently appear in media not only to attract customers, but also to communicate important messages to potential investors. The objective is to memorize the name of a corporation to potential investors and build strong image. Barber and Odean (2006) shown that small investors are more prone to buy attention-clutching stocks. Grullon et al. (2004) showed significantly positive relationship between annual advertising budget with breadth of share ownership and firm's liquidity, suggesting that investors seem to hold shares of those companies with whom they are more familiar.

Research Hypotheses. On the basis of the above theoretical discussion, the following research hypotheses are developed:

H1: Dividend has significant relationship with investor's stock selection behavior.

H2: Firm's management competence stock attribute has significant relationship with investor's stock selection behavior.

H3: Firm's growth perception in an industry has significant relationship with investor's stock selection behavior.

H4: Knowledge of corporation's products stock attribute has significant relationship with investor's stock selection behavior.

H5: Price trends and volatility influence significantly on investor's stock selection behavior.

H6: Firm's status at a market influences significantly investor's stock selection behavior.

H7: Investor's stock selection behavior is influenced significantly by recommendations from others.

H8: Investor's stock selection behavior is influenced by significantly firm's principal place of operations of a corporation.

H9: Corporate reputation has significant impact on investor stock selection behaviour.

H10: Individual equity investor's stock selection behaviour is positively affected by social performance of corporations.

H11: Individual equity investor's stock selection behaviour is positively influenced by investor relations management of a corporation.

H12: Individual equity investor's stock selection behaviour is positively affected by visibility or publicity of a corporation in media.

Research Methods. The study empirically tested the stock selection behavior of individual equity investors. The primary data was collected through personally administered survey of 470 individual equity investors trading at all 3 stock exchanges of Pakistan, namely; Karachi stock exchange, Lahore stock exchange and Islamabad stock exchange. The dependent variable individual equity investor decision-making is measured by the instrument adopted from Muhammad and Ismail (2009). The instrument to measure stock attributes including dividend, yield, management team competence, industry sector, knowledge about company, price trends and volatility, market status, sources of recommendations, principal place of operations, are adopted from Murphy and Soutar (2004) who used conjoint analysis approach to determine the question items. The instrument to measure corporate reputation is adopted from Helm (2007) who used the instrument development methodology proposed by Diamantopoulos and Winklhofer (2001) for content specification of the construct. The construct of the CSP is adopted from Smith et al. (2010). The instrument contains 5 items incorporating labor practices, environmental, social and stakeholders' aspects. The instrument to measure firm visibility and publicity and investor relations management has been adopted from Bushee and Miller (2005), the instrument contained 10 items. All items are measured on the 5-point Likert scale.

Results and Discussion. The reliability analysis of the data is performed through latest version of SPSS and values of Cronbach alpha. Nunally and Bernstein (1978) hold that the value of Cronbach alpha should be greater than 0.5 to reflect the acceptable reliability of data in social sciences. The Cronbach alpha of all the variables including dividend and yields, management team competence, firm industry/sector, knowledge about company, price trends and volatility, firm's market status, source of recommendations, firm's principal place of operations, corporate reputation, corporate social performance, investor relations management, firm visibility in media and individual investor behavior are 0.84, 0.77, 0.76, 0.83, 0.88, 0.74, 0.75, 0.82, 0.89, 0.85, 0.64, 0.89 and 0.74 respectively. Therefore, all the scales used in this study are found reliable and can be used for analysis purposes.

The results of structural equation model presented in Table 1 show the decisions of hypotheses testing. Hypothesis 1 in this study is related to influence of dividend and yield stock attribute on individual equity investor's decision-making process. The SEM path between dividend and yields and investor decision-making process shows positive and significant relationship with P value (.044) which is less than 0.05 with positive values of estimate, and standard error, we therefore accept H1. The result shows that stocks offering higher dividend and yields influence individual equity investor's decision-making. The second path represents the relationship between firm's management team competence and individual equity investor's behavior. The SEM results for this path shows insignificant influence of firm's management team competence on individual equity investor's trading behavior P value (0.194), we therefore, reject H2. This implies that individual equity investors do not consider firm's management team competence stock attribute in their decision-making. The third path in SEM analysis is related to firm's industry or sector from which it belongs and its influence on equity investor's behavior as depicted in H3. SEM results show positive and significant influence of firm's industry or sector on individual equity investor's decision-making behavior P value (0.039), leaving H3 accepted. This result implies that industry or sector having higher growth potentials are seen positively by equity investors and individual equity investors of Pakistan also consider firm's industry or sector before making an investment decision.

Next SEM path elaborates the influence of investor's knowledge about company products or services on investment decision-making as presented in H4. The result presented in Table 4.14 depicts insignificant P value (0.192) which means that investor's knowledge about company's products or services has no influence on decision-making, we therefore reject H4. H5 proposes the influence of price trends and volatility stock attribute on individual equity investor's behavior. The SEM results show positive and significant influence of price trends and volatility stock attribute on investor behavior (P value 0.015) leaving H5 accepted. This finding is quite logical, as equity investors are considered risky as compared to investors of other financial assets, for instance, bonds, and other financial instruments. Hypothesis 6 proposes the influence of firm's market status stock attribute on individual equity investor's behavior. The SEM results show positive and significant ($P = .019$) relationship between firm's market status and equity investor's behavior, leaving H6 accepted. This finding shows that firms enjoying good status at a stock market are given more preferences by equity investors. The next hypothesis proposes the linkage between source of recommendations and equity investor decision-making as presented in H7. SEM analysis shows positive and highly significant association between source of recommendation and investor decision-making ($P = 0.00$), we therefore accept H7. This shows that source of recommendation is the most significantly influencing factor on individual equity investors in Pakistan. Hypothesis 8 proposes influence of principal place of operations stock attribute on equity investor's behavior SEM results show insignificant influence of principal place of operation stock attribute on investor behavior ($P = 0.278$), we therefore reject H8. This implies that individual equity investors in Pakistan do not consider place of operations of company and are willing to invest in any corporations having their principal operations in any country. The next hypothesis in this study links the path between corporate reputation and equity

investor behavior. The SEM result for this path depicts positive and significant ($P = .001$) influence of corporate reputation on individual equity investor's decision-making, we accept H9 therefore. The analysis shows that corporate reputation is the stock attribute having the second highest influence on investor's behavior after recommendation.

H 10 is related to influence of corporate social performance on individual equity investor's decision-making. The SEM results show significantly positive influence of corporate social performance on individual equity investor's behavior ($P = .010$) leaving H10 accepted. This finding is very pertinent in this study, it implies that individual equity investors' consider social performance of corporations in their decision-making. The next hypothesis proposes the influence of investor relations management on investor's behavior. The SEM results show insignificant ($P = 0.218$) influence of investor relations management on individual equity investor's decision-making, resulting in rejection of H11. The final path in our model is related to the influence of firm's visibility in media stock attribute on individual equity investor's decision-making in Pakistan. The SEM results provide positively significant influence of firm's visibility in media on individual equity investor decision-making, we therefore accept H12 as well.

Table 1. Regression Weights

Paths	Hypotheses	Estimate	S.E	P	Decision
I.D. Making <-- Dividend and Yields	H1	.064	.038	.044	Supported
I.D. Making <-- Management Team Competence	H2	.053	.041	.194	Not Supported
I.D. Making <-- Firm's Industry/Sector	H3	.096	.047	.039	Supported
I.D. Making <-- Knowledge about Company	H4	.051	.039	.192	Not Supported
I.D. Making <-- Price Trends and Volatility	H5	.089	.037	.015	Supported
I.D. Making <-- Firm's Market Status	H6	.119	.049	.019	Supported
I.D. Making <-- Source of Recommendations	H7	.306	.043	.000	Supported
I.D. Making <-- Principal Place of Operation	H8	.037	.034	.278	Not Supported
I.D. Making <-- Corporate Reputation	H9	.126	.038	.001	Supported
I.D. Making <-- Corporate Social Performance	H10	.090	.035	.010	Supported
I.D. Making <-- Investor Relations Management	H11	.063	.051	.218	Not Supported
I.D. Making <-- Firm Visibility in Media	H12	.072	.035	.039	Supported

Conclusion. The objective of this study is to investigate the stock selection behavior of individual equity investors and the influence of various stock attributes on investor behavior. The study identifies stock attributes including dividend, price trends and volatility, firm's status at a market, source of recommendation, corporate reputation, corporate social performance, firm's visibility in media having sig-

nificant on stock selection behavior of individual equity investors in Pakistan. However, some stock attributes including: management team competence, knowledge about company products and services, firm's principal place of operation, and investor relations management do not have significant influence on stock selection behavior of individual equity investors for the case of Pakistan. The study provides important information for investment professionals, stock market regulators and companies listed at stock exchanges of Pakistan. The findings of this study can be used to attract investors and increase their participation at the equity market of Pakistan.

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Стаття надійшла до редакції 13.06.2012.