

Measuring Validity of the Determinants of Investment Decision Making

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Abstract. The growing importance of behavioral finance and investment decision is the motivation to carry out the present study. The purpose of the present study is to validate the items to measure Heuristics, Risk Aversion, Financial Tools and firm level corporate governance as antecedents of investment decision making. The study collected response from 94 equity fund managers of insurance companies, commercial banks, and equity investment companies. Initially the scale items were forty one (41). The instrument of thirty seven (37) items is finalized after applying confirmatory factor analysis using AMOS version 16. Further study may be carried out to use the validated items of variables using descriptive analysis and investigate the interrelationships of the variables.

Keywords: Investment Decision Making, Use of Financial Tools, Firm-Level Corporate Governance, Heuristics, Risk Aversion.

1. Introduction

The stock markets are becoming more peopled; their emotions, attitude, behavior, perception, and style of investing have impact on the prices of stocks. There are numbers of financial investment decision makers in the stock markets. The presences of various financial practitioners including financial planner, a group, an individual, an organization and the market provide a large population for research in the emerging discipline of behavioral finance (Ricciardi and Simon, 2000). Institutional investors are the entities, holding large amount of funds, which they invest in stock market such as investment banks, brokerage firms, mutual funds, insurance companies, endowment funds, and pension funds (Huyghebaert and Hulle, 2004). Behavioral finance is an area within finance which focuses on the behavior of investors' and their decision making. Furthermore, it proposes psychological based theories to clarify stock market anomalies. The key concept of behavioral finance is that finance practitioners do not always make rational financial decisions (Sewell, 2010). The significance of behavioral finance is further confirmed in the World Wealth Report of 2010 by Capgemini and Merrill Lynch Global Wealth Management. The report concludes increasing prominence of emotional factors in decision making process of investors.

Share price movement cannot be judged with the use of traditional finance tools and techniques. Deviation from rationality is observed and the idea of rational investor is inadequate to understand the investment decisions of financial practitioners in the stock market. Investors critically observe different dimensions and corporate attributes while making investment decisions (McCahery et al., 2010). The current research problem is that investors are not taking into consideration the behavioral factors and firm level corporate governance while formulating investment decisions. Institutional investors are the key player and set the trend of the market. The study will help financial practitioners to understand how emotional, psychological, and behavioral factors influence the decision making thus helping in reducing the stock price fluctuation and market volatility. The purpose of the present study is to analyze the importance of Heuristics, Risk Aversion, Financial Tools and firm level corporate governance as antecedents of investment decision making. In continuation to this, the study attempts to validate the scale to measure these variables.

2. Review of Related Literature

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Making investment decision is even more critical and difficult in a stock market and such decisions need better insight and understanding. Investment decision may have effect due to psychological and behavioral factors (Evans, 2006 and Waweru et al., 2008). Traditional finance expects investor to be rational but behavioral finance believes that investors in stock markets act irrational. While making decisions in market the investors' process available information. Their emotions, psychology, and behavioral biases lead to systematic errors in the manner in which they process information (Pavabutr, 2002). In complex and uncertain situation individuals use rules of thumb for making decisions and is referred to heuristics. Common examples of heuristics include: Representativeness, Gambler's fallacy, Anchoring, Overconfidence, and Availability bias. Representativeness occurs in financial markets when investors buy hot stock and avoid stocks that perform poorly (DeBondt and Thaler, 1995). Gambelers fallacy occurs when the investors anticipate inappropriately that the trend will reverse (Kempf and Ruenzi, 2006). Anchoring begins when a value is fixed (anchored) by current observations. Optimistic behavior occurs in investors when market rises and they become pessimistic when it falls (Shiller, 1998). When investors overestimate analytical skills it leads to overconfidence and studies have shown that it leads to excessive trading (Allen and Evans, 2005). Another type of heuristics appears when investors give unnecessary weight to easily available information. Such type is referred to as availability bias (Barberis, 2001).

Risk aversion is also a major determinant of investment decision making (Pennings and Smidts, 2000). Weber et al., (2002) engaged a scale of psychology to find out that individual's risk taking and conclude that individuals are highly domain specific rather than a stable attitude. Studies show that risk averse investors are less interested in risky investment (Shum and Faig, 2006). Expected utility and prospect theory have dominated the analysis of decision making under risk. The earlier argued that individuals are risk averse, rational, and try to maximize the wealth under complex alternatives (Nagy and Obenberger, 1994). Whereas, the later, suggest that investor is irrational and they are not consistent towards risk tendency under risky choices (Kahneman and Tversky, 1979).

Empirical evidence suggests that investment professionals employ a range of practices in different markets and use various techniques for market forecasting across alternative time horizons (Lui and Mole, 1998). Annual reports are focused while making investment decisions in developed countries (Waweru et al., 2008). Studies relating to institutional investors in developed capital markets, such as Hong Kong (Wong and Cheung, 1999), the UK (Collison et al., 1996) and the US (Frankel and Froot, 1990) stated that institutional investors focus more on fundamental and technical analysis and less on portfolio analysis.

Corporate governance refers to the ways and means by which publicly listed companies are controlled and directed (Charkham, 2005). Investors critically observe the firm-level corporate governance and to understand the corporate attributes is of great importance for them. Firm-level corporate governance has impact on the institutional investment decision making (McCahery et al., 2010). Klapper and Love (2004) gave dimensions to measure firm level corporate governance as Discipline, Transparency, Independence, Accountability, Responsibility, Fairness, and Social Awareness.

3. Method

The scale for this research study was adapted after an extensive literature review. The total numbers of items in the scale were 41. The items for measuring heuristics and use of financial tools were adapted from Waweru et al. (2008). The scale items for measuring the risk aversion, firm level corporate governance, and investment decision making were adapted from Mayfield et al. (2008), Klapper and Love (2004), and Pasewark and Riley (2010), respectively. The questionnaire was divided in to two parts. The first part addressed the organization in which the respondents were currently employed i.e., equity investment companies, insurance companies, and banks. The next part was designed to gather the response about the variables. The items were measured on a 5 point likert scale (check the level of frequency). The content validity of the questionnaire items was assured by getting it reviewed from the subject experts and professionals. Data from Ninety four (94) equity fund managers was collected and CFA was applied for the instrument refinement.

4. Instrument Refinement

To reassure the validity of the items of each variable the present study applied confirmatory factor analysis using AMOS version 16. The estimates or factor loading of all the items against each variable are shown in table 1 below:

Table 1: Factor Loadings of Heuristic, Risk Aversion, Use of Financial Tools, Firm Level Corporate Governance, and Investment Decision Making items

Items	<---	Variable	Estimate ≥0.4	P-value
Our institution buys hot stocks and avoids stocks that perform poorly	<---	Heuristic	.931	0.000
Our Institution use trend analysis to make investment decisions	<---	Heuristic	.967	0.000
Our institution uses predictive skills for investment decision making	<---	Heuristic	.803	0.000
Our institution trading is affected by recent experiences in the market	<---	Heuristic	.817	0.000
Our institution purchase price of stock as a reference point in stock trading	<---	Heuristic	.888	0.000
Our institution anticipate good or poor market returns in stock markets	<---	Heuristic	.924	0.000
Our institution prefer to buy local stocks than trade in international stocks	<---	Heuristic	.823	0.000
Our institution avoids risk while choosing stock for investment	<---	Risk Aversion	.530	0.000
Our institution prefers to invest in low risk / high return stocks with a steady performance	<---	Risk Aversion	.991	0.000
Our institution remain with an investment strategy that has known problems rather than take the risk trying a new investment strategy that has unknown problems	<---	Risk Aversion	.833	0.000
Our institution view risk in investment as a situation to be avoided	<---	Risk Aversion	.890	0.000
Our institution uses financial models for investment	<---	Financial Tools	.571	0.000
Our institution utilize technical analysis while making investment decision	<---	Financial Tools	.894	0.000
Our institution employs fundamental analysis for investment decision	<---	Financial Tools	.779	0.000
Our institution consider clients demand at the time of investment decision	<---	Financial Tools	.882	0.000
Senior management have a significant portion of their net worth in the company	<---	Firm-level Corp Govn	.884	0.000
Management sticks to its clearly defined core businesses	<---	Firm-level Corp Govn	.860	0.000
Company publishes its quarterly reports in six week of the end of the quarter	<---	Firm-level Corp Govn	.903	0.000
Reports of company are clear and informative	<---	Firm-level Corp Govn	.899	0.000
Company consistently discloses major and market sensitive information	<---	Firm-level Corp Govn	.809	0.000
The chairman of the company is an independent, non-executive director	<---	Firm-level Corp Govn	.894	0.000
Board members and members of the executive / management committee are substantially different	<---	Firm-level Corp Govn	.872	0.000
Board members are provided with the necessary information, prior to the meeting, in a clear and informative manner	<---	Firm-level Corp Govn	.612	0.000
Audit committee supervises internal audit and accounting procedures	<---	Firm-level Corp Govn	.624	0.000
The board and senior management take measures to safeguard the interests of share holders	<---	Firm-level Corp Govn	.620	0.000

Items	<---	Variable	Estimate ≥0.4	P-value
Share trading by board members is fair, fully transparent and well intentioned	<---	Firm-level Corp Govn	.404	0.000
Small shareholders ability to call general meetings	<---	Firm-level Govn	.795	0.000
The senior management ensures that there is fair value reflected in the current stock market price	<---	Firm-level Corp Govn	.731	0.000
Company is explicitly environmentally conscious	<---	Firm-level Corp Govn	.854	0.000
Company participates in environment related campaigns	<---	Firm-level Corp Govn	.705	0.000
Company board is small enough to be efficient and effective	<---	Firm-level Corp Govn (deleted)	.124	0.236
Company head of investor relation report to CEO or board members	<---	Firm-level Corp Govn (deleted)	-.104	0.321
Company adhere to specified industry guidelines on sourcing of material	<---	Firm-level Corp Govn (deleted)	-.095	0.365
Our investment in stocks has a high degree of safety	<---	Invest Decision Making	.706	0.000
Our investment has the ability to meet interest payments	<---	Invest Decision Making	.710	0.000
Our investment repays the principal at maturity	<---	Invest Decision Making	.956	0.000
Our investment has a lower risk compared to the market in general	<---	Invest Decision Making	.791	0.000
Our investment in stocks has demonstrated increased revenue growth in past 05 years	<---	Invest Decision Making	.416	0.000
Our investment in stocks has demonstrated increased cash flow growth in past 05 years	<---	Invest Decision Making	.439	0.000
Our investment reports better results than expected	<---	Invest Decision Making	.443	0.000
Our investment proceeds will be used in a way that benefit society	<---	Invest Decision Making (deleted)	.112	0.297

The table shows strong factor loadings i.e., ≥ 0.4 (Cua et al., 2001) of all items of Heuristics, Risk Aversion, and Use of Financial Tools with significant p-values = $0.000 < 0.05$. Therefore, all the items are included in the instrument. Additionally, it proves that all the items of Firm-level Corporate Governance load on the factor except CG16, CG17, and CG18 with factor loadings less than 0.4 with insignificant p-values, 0.236, 0.321, and 0.365 respectively which are > 0.05 . Therefore, these items should be deleted from the instrument. The table also confirms that all items except IDM8 load on Investment Decision Making positively, as their factor loadings ≥ 0.4 with p-value < 0.05 . Item IDM8 should be deleted as its p-value is 0.297 with 0.112 estimates.

5. Conclusion and Future Direction

The instrument of thirty seven (37) items (Heuristics 07, Risk Aversion 04, Use of Financial Tools 04, Firm-level Corporate Governance 15, and Investment Decision Making 07) is finalized after applying confirmatory factor analysis using AMOS version 16. Items less than 0.4 estimates/factor loadings shall not be included in the instruments. To validate the scale prior conducting research in different environment and culture is of great importance. Scale items to measure the above mentioned variables have been validated in Pakistani culture and business environment. Future research may be conducted to use the items of the variables through the analysis of descriptive statistics and exploring the interrelationships of the variable.

6. References

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