International Journal of Research in Finance and Marketing (IJRFM)
Available online at : http://euroasiapub.org/current.php?title=IJRFM
Vol. 7 Issue 7, July - 2017, pp. 9~18
ISSN(o): 2231-5985 | Impact Factor: 6.397

REVIEW OF THE INFLUENCE OF INVESTOR PERSONALITY (THE BIG 5 MODEL) ON INVESTOR BEHAVIOR

Renu Isidore. R[1]

Research Associate

Loyola Institute of Business Administration

Loyola College, Chennai

Dr.P.Christie[2]

Director

Loyola Institute of Business Administration

Loyola College, Chennai

ABSTRACT

An attempt has been made in this paper to assess the influence of the personality of the stock market investors on their investment behavior. The paper reviews various studies where the investor personality is assessed via the Big Five model and its influence on the various aspects of investor behavior are studied. The paper presents the introduction to the Big Five model followed by the description of the traits of the various personality types and then the behavior of each personality type with respect to stock market investments. The paper concludes that when the behavioral factors expressed by each investor personality type is known, financial advisors would be well equipped to guide the investors in making the right investment decisions thereby helping them avoid financial blunders.

Keywords: Extraversion, Agreeableness, Conscientiousness, Neuroticism, Openness, Behavioral Biases.

Introduction - Influence of Investor Personality on Investor Behavior

"Personality is the dynamic and organized set of characteristics possessed by a person that uniquely influences his or her cognitions, motivations, and behaviors in various situations" (Ryckman, 2008, p.4).

Investors' personality play an important role in determining their behavior (Sadi et al., 2011; Charles and Kasilingam, 2014a; Zaidi and Tauni, 2012). Hence the decision taken by the investor depended on the personality of the individual (Durand et al., 2008; Durand, Newby, Peggs, and

Siekierka, 2013; Durand, Newby, Tant and Trepongkaruna, 2013). McDougall (1932) was one of the early researchers who argued the difference between character and personality and indicated that personality which was composed of several factors determined the behavior of the individual. Durand, Newby, Tant and Trepongkaruna (2013) proposed that once the personality of an individual was determined, his interactions with the outside world could be explained. Charles and Kasilingam (2014b) proved that investor's personality also had a moderate influence on the decision frames of investors.

Pompian and Longo (2004) insisted the importance of profiling investors based on their personality traits which in turn would help investors reduce the susceptibility to behavioral biases through customized investor programs. "Investors with any personality trait will gain the knowledge about the respective bias that performs critical role while making financial decisions. By gaining the knowledge about the bias they can take steps so as to avoid the interruption of the biases while making financial decisions" (Bashir et al., 2013, p.279).

Personality of individuals can be assessed using various models such as internal/external personality proposed by Rotter (1966); investor types (i.e.) BB & K model proposed by Bailard et al. (1986) and Myers-Briggs Type Indicator (MBTI) by Myers and McCaulley (1985) and the Big five personality traits by Costa and McCrae (1992).

Barnewall (1987) was the pioneer to categorize investors into active and passive types. Using focus group interviews for various occupational groups, the characteristics of active and passive investors were identified. Active investors were characterized by the characteristics, risk- takers, low dress consciousness, credit user and high self-confidence and passive investors as risk-avoiders, high dress consciousness, noncredit user and low self-confidence.

Thomas Bailard, David Biehl and Ronald Kaiser developed the five way investor model where investors were classified into five categories, namely, straight arrow, individualist, celebrity, guardian and adventurer. These personalities were based on the dimensions namely, method of action, which ranged from careful to impetuous and level of confidence which ranged from confident to anxious (Bailard et al., 1986; Charles and Kasilingam, 2014a; Thomas and Rajendran, 2012).

Researchers generally indicated the importance of five dimensions to classify individuals into distinct personality categories, (Digman, 1990). Goldberg (1990) did several studies to improvise on the five factor taxonomy to describe the personality. The Big Five personality model by Costa and McCrae (1992) was referred to as the "pioneering model of all personality research" in the Indian study by Charles and Kasilingam (2014a, p.47) on the effect of emotions on the personality of the investor. The appropriateness of the Big 5 Model across cultures was tested by McCrae and Costa Jr (1997). This five-factor model was referred to as "psychology of the stranger" (McAdams, 1992, p.329). Sneed et al. (1998) confirmed the understandability of the five-factor among lay people.

Barrick and Mount (1991) identified the Big 5 model as an important taxonomy with five

independent axes which help to study individual differences. They also mentioned that such a methodical classification of personalities was applicable in any field. McCrae and John (1992) further stressed the applicability of the Big Five Personality model across various observers. The inventory of the Big Five Personality model has undergone several revisions, (McCrae and Costa Jr, 2004).

In spite of studies from Previn (1994) and Block (1995) which listed the limitations of the Big Five model, the strength of the model has been validated and supported in latter studies like DeYoung et al. (2007) and DeYoung (2006).

The five dimensions of the Big Five Model include

Extraversion

An individual of this type is easily influenced by external elements and lacks self control. They are characterized by low intellectuality, lack of principles, friendliness, low resistance, carelessness, good flexibility, vulnerability and good sense of humor, (Sadi et al. 2011). Their adjectives include outgoing, enthusiastic and talkative. They tend to agree to statements like, I start conversations, I don't mind being the center of attention and I feel comfortable around people, (Pan and Statman, 2013). Investors with this personality type tend to be risk averse and continue holding losing stocks with the hope of revival, (Jamshidinavid et al. 2012).

Zaidi and Tauni (2012) studied the individual investors in the Lahore stock exchange in order to determine the relationship among overconfidence bias, demographics and personality traits. The study found that the there was a positive relationship between overconfidence bias and extraversion, which means that investors with full of energy, higher positive emotions, and excitements were prone to be overconfident than others.

Lin (2011) examined the impact of the biases, herding, disposition effect and overconfidence on the personality traits and demographics of investors in the Taiwan stock market. Using SEM, a model was developed linking the biases and the personality dimensions of the Big 5 Model. The study found that extraversion also had a significant positive relation with overconfidence and herding, implying that investors with this trait would tend to follow others' opinion and would also hold on to losing stocks with the hope of revival.

Bashir et al. (2013) examined the relation between the personality dimensions of the Big Five Model and the behavioral biases like disposition effect, overconfidence and herding in Pakistan. The SEM results revealed that extraversion had a significant positive influence on overconfidence. Correlation results also revealed that the correlation between overconfidence and extraversion was significantly positive.

Sadi et al. (2011) examined the personality traits of Tehran investors and their impact on the behavioral errors like availability bias, randomness bias, escalation of commitment, hindsight bias and overconfidence. The results revealed that there was a significant positive correlation between extraversion and hindsight bias.

Jamshidinavid et al. (2012) studied the relation between the personality traits, demographics and behavioral biases like overconfidence, herding and disposition effect in the Tehran stock market. SEM model revealed that extraversion had a significant positive relationship with overconfidence and disposition effect, implying that extrovert investors had high confidence levels and preferred to hold on to losing stocks after obtaining profits from pre-sale stocks.

Pan and Statman (2013) surveyed around 2500 investors to link between the personality traits and investors' propensities like, overconfidence, regret, risk tolerance, maximization, trust, attribution of success to skill/luck and life-satisfaction. The study found that high risk tolerance related to high levels of extraversion. Overconfidence directly related to extraversion. High tendency for maximization was positively related with extraversion. Trust ranked high on extraversion. Life-satisfaction was positively correlated to extraversion.

Schaefer et al. (2004) analyzed the relation between overconfidence (measured in terms of accuracy and confidence) and the personality dimensions of the Big five model. The results confirmed by partial correlation tests were that extraversion significantly predicted overconfidence. Mayfield et al. (2008) found that individuals with this personality trait had a propensity to engage in short term investing.

Durand, Newby, Tant and Trepongkaruna (2013) found that extraversion had a positive association with overconfidence and overreaction. They also proposed that extraversion had an important influence on the entry and exit decision in the stock market. Nicholson et al. (2005) proposed that high extraversion led to higher propensity to take high risks.

Fenton-O' Creevey et al. (2004) found that for investors to succeed, they need to be introverts and also open to new experiences. However, Lo et al. (2005) found no significant relationships when they correlated the traits of the Big 5 model with the actual and self-reported trading performance.

Agreeableness

Individuals of this personality type have the propensity to respect peers and be sincere in their relations with others. Their main characteristics include modesty, straight forwardness and trust. They tend to be very flexible towards others desires, (Sadi et al., 2011). People of this personality agree to statements like, I make people feel at ease, I sympathize with others' feelings and I take time out for others. They tend to be generous and appreciative, (Pan and Statman, 2013). Investors of this personality type generally tend to follow peer recommendations which may result in herding effects, (Jamshidinavid et al., 2012).

Zaidi and Tauni (2012) found that there was a positive relationship between overconfidence bias and agreeableness, implying that the Lahore investors who were generous, helpful, co-operative, friendly, kind and compromising were susceptible to overconfidence bias.

Jamshidinavid et al. (2012) found that agreeableness had a significant positive relationship with herding in the Tehran stock market, implying that these investors with lack of confidence tended to succumb to peer recommendations.

Pan and Statman (2013) found that overconfidence and high tendency for maximization related indirectly to agreeableness. Trust ranked high on agreeableness. The tendency to attribute success to luck over skill was prominent among those with high agreeableness.

Schaefer et al. (2004) found that agreeableness did not predict confidence, accuracy, or overconfidence significantly. Nicholson et al. (2005) proposed that low agreeableness avoided the anxiety towards negative outcomes of decisions.

Conscientiousness

The main traits of this personality type are self-discipline, competence, order and dutifulness. Conscientious people are responsible, trusted, stable, structured and reliable, (Sadi et al., 2011). Individuals with this personality are very organized and have the propensity to agree with statements like, I follow a schedule, I am always prepared and I pay attention to details, (Pan and Statman, 2013). Investors of this personality type have the propensity to believe that their own investments are better than peers, (Jamshidinavid et al., 2012).

Zaidi and Tauni (2012) found that there was a positive relationship between overconfidence bias and conscientiousness, implying that the Lahore investors who were organized, responsible, highly disciplined and dutiful succumb to overconfidence bias.

Lin (2011) found that the trait conscientiousness had a positive relation with overconfidence and disposition effect implying that the Taiwan investors with this trait cautiously sold the winning stocks in advance.

Bashir et al. (2013) found that the SEM results showed a significant positive influence of conscientiousness on overconfidence in the Pakistan stock market. Correlation results also revealed a significant positive relationship between overconfidence and conscientiousness.

Sadi et al. (2011) found that there was a reverse correlation between conscientiousness and randomness bias in the Tehran stock market.

Jamshidinavid et al. (2012) found that conscientiousness had a significant positive relationship with disposition effect and overconfidence in the Tehran stock market, implying that these kinds of investors were cautious and confident and tended to make investment decisions based on their own investment knowledge.

Pan and Statman (2013) found that high risk tolerance related to low levels of conscientiousness. The propensity for regret was related directly to conscientiousness. High tendency for maximization was positively related with conscientiousness. Trust ranked low on conscientiousness. The tendency to attribute success to luck over skill was prominent among those with low conscientiousness.

Schaefer et al. (2004) found that conscientiousness did not predict accuracy, confidence, or overconfidence significantly. Durand, Newby, Tant and Trepongkaruna (2013) found that investors with this trait tended to reduce risk. Akhtar and Batool (2012) found that investors with the conscientiousness trait were prone to have short term investment intentions.

Neuroticism

Its main traits include impulsiveness, depression, anxiety and anger. Neuroticisms are self-centered and are on the lookout for superior goals, (Sadi et al., 2011). These individuals are unstable and tend to agree to I worry about things, I am easily disturbed and I get irritated easily, (Pan and Statman, 2013). Investors with this personality tend to be nervous, anxious and emotionally unstable, (Jamshidinavid et al., 2012).

Zaidi and Tauni (2012) found that there was a negative relationship between overconfidence bias and neuroticism, implying that the Lahore investors who were tensed, had worries, emotionally suffered and depressed were less overconfident than others.

Lin (2011) found that neuroticism had a significant positive relation with herding and disposition effect, implying that the Taiwan investors with this trait would make profits when they sold holding stocks in advance as they were worried about the loss of investment. They also succumbed to peers' recommendations due to lack of self confidence.

Bashir et al. (2013) found that the SEM results showed that neuroticism had a significant positive impact on herding in the Pakistan stock market implying that the investors with this trait would invest based on peer recommendations. Correlation results also revealed a significant positive relationship between neuroticism and herding.

Sadi et al. (2011) found that there was a significant positive correlation between neuroticism and the escalation of commitment and between neuroticism and randomness bias in the Tehran stock market.

Jamshidinavid et al. (2012) found that neuroticism had a significant positive relationship with disposition effect and herding in the Tehran stock market.

Schaefer et al. (2004) found that neuroticism had no association with overconfidence. Mayfield et al. (2008) found that individuals with this personality trait had a propensity to avoid short term investing. Nicholson et al. (2005) proposed that low neuroticism avoided the anxiety towards negative outcomes of decisions.

Openness

Individuals of this type are adjustable and tend to succumb to novel ideas and unique values. They are prone to receive new ethnic, political and social beliefs. They have a preference for simplicity over vagueness, (Sadi et al., 2011). They are curious, imaginative and original. They are prone to agree to statements like, I am quick to understand things, I have a vivid imagination and I have excellent ideas, (Pan and Statman, 2013). Investors of this type tend to buy and sell shares because of their high confidence levels, (Jamshidinavid et al., 2012).

Zaidi and Tauni (2012) found that there was no relationship between overconfidence bias and openness in the Lahore market. Lin (2011) found that the trait openness had a positive significant relation with overconfidence and herding implying that the Taiwan investors with this trait tended

to seek new investment information hence resulting in herding.

Bashir et al. (2013) found that the SEM results revealed that openness had a significant positive relationship with herding in the Pakistan stock market implying that the investors with this trait would tend to seek new investment information and be more overconfident.

Sadi et al. (2011) found that there was a significant positive correlation between openness and hindsight bias and between openness and overconfidence in the Tehran stock market. There was also a reverse correlation between openness and the availability bias.

Jamshidinavid et al. (2012) found that openness had a significant positive relationship with overconfidence and herding in the Tehran stock market. Pan and Statman (2013) found that high risk tolerance related to high levels of openness. High tendency for maximization was negatively related with openness. Trust ranked high on openness. The tendency to attribute success to luck over skill was prominent among those with high openness. Life-satisfaction was negatively correlated to openness.

Schaefer et al. (2004) found that openness was significantly related to both accuracy and confidence (but not overconfidence). The correlation between openness and accuracy implied that this type of people seek knowledge from different fields. Mayfield et al. (2008) found that individuals with this personality trait had the propensity to engage in long term investing, but in the study openness did not seem to anticipate short-term investing. But, on the other hand, Akhtar and Batool (2012) found that investors with the openness trait were prone to having short term investment intentions. Nicholson et al. (2005) proposed that high openness led to higher propensity to take high risks. Kowert and Hermann (1997) also indicated that the openness trait of the investor had a strong relationship with risk taking.

Other Studies

Sreedevi and Chitra (2011) on the basis of the Big five personality model developed seven personality traits like Emotional stability (rational/irrational), Extraversion (extrovert, introvert), Risk (risk lover, risk averter), Return (more economic, economic), Agreeability (skeptical, trusting), Conscientiousness (moral, expedient) and Reasoning (abstract, concrete) in order to study the influence of personality traits and demographics on choices of investments like derivatives, equity and commodities. The study found that the investors were majorly extroverts, emotional, moral while taking decisions, focusing on more returns, concrete on their ideas of decision making, risk lovers and skeptical in their views. The important trait that influenced the investments in general was emotional stability. The discriminating variables of equity investments were extraversion, emotional stability, family size, returns and age. It was found that emotional stability and returns were more strongly correlated with equity than others.

Conclusion

The influence of personality on the behavior of investors in the stock market is vivid via the

various studies reviewed in this paper. An Indian study analyzing the investor personality and categorizing the investors into different personality types along with an understanding of the behavioral biases exhibited by the investors would be necessary to study the influence of the personality on the behavior in the context of the Indian stock market. Such a study would help financial advisors customize financial advice to each personality type. Hence by identifying the factors which influence the behavior of investors belonging to the various personality groups, the financial advisors would find it useful to educate the individual investors based on their personality type and also customize investor programs for them.

References

1. Akhtar, M. N., and Batool, I. (2012). Psychological factors, information asymmetry and investment decision making. *Actual problems of economics*, (130), 200-205.
2. Barnewall, M. M. (1987). Psychological characteristics of the individual investor. *ICFA Continuing Education Series*, *1987*(2), 62-71.
3. Barrick, M. R., and Mount, M. K. (1991). The big five personality dimensions and job performance: a meta-analysis. *Personnel psychology*, *44*(1), 1-26.
4. Bashir, T., Azam, N., Butt, A. A., Javed, A., and Tanvir, A. (2013). Are Behavioral Biases Influenced By Demographic Characteristics and Personality Traits? Evidence from Pakistan. *European Scientific Journal*, *9*(29), 277-293.
5. Block, J. (1995). A contrarian view of the five-factor approach to personality description. *Psychological bulletin*, *117*(2), 187.
6. Charles, A., and Kasilingam, R. (2014a). Do Investors' Emotions Determine their Investment Personality?. *Parikalpana: KIIT Journal of Management*, *10*(2).
7. Charles, A., and Kasilingam, R. (2014b). Do Framing Effects of Investors Determine their Investment Personality?. *Anvesha*, *7*(2), 38-45
8. Costa Jr, P. T., and McCrae, R. R. (1992). Neo personality inventory–revised (neo-pi-r) and neo five-factor inventory (neo-ffi) professional manual. *Odessa, FL: Psychological Assessment Resources*.
9. DeYoung, C. G. (2006). Higher-order factors of the Big Five in a multi-informant sample. *Journal of personality and social psychology*, *91*(6), 1138.
10. DeYoung, C. G., Quilty, L. C., and Peterson, J. B. (2007). Between facets and domains: 10 aspects of the Big Five. *Journal of personality and social psychology*, *93*(5), 880.
11. Digman, J. M. (1990). Personality structure: Emergence of the five-factor model. *Annual review of psychology*, *41*(1), 417-440.
12. Durand, R. B., Newby, R., and Sanghani, J. (2008). An intimate portrait of the individual investor. *The Journal of Behavioral Finance*, *9*(4), 193-208.
13. Durand, R., Newby, R., Tant, K., and Trepongkaruna, S. (2013). Overconfidence, overreaction and personality. *Review of Behavioral Finance*, *5*(2), 104-133.

14. Durand, R.B., Newby, R., Peggs, L. and Siekierka, M. (2013), Personality, *Journal of Behavioral Finance*, 14(2), 116-133.
15. Fenton-O'Creevy, M., Nicholson, N., Soane, E., and Willman, P. (2004). Traders: Risks, decisions and management in financial markets. *Oxford University Press.*
16. Goldberg, L. R. (1990). An alternative description of personality: the big-five factor structure. *Journal of personality and social psychology*, *59(6)*, 1216.
17. Jamshidinavid, B., Chavoshani, M., and Amiri, S. (2012). The Impact of Demographic and Psychological Characteristics on the Investment Prejudices in Tehran Stock. *European Journal of Business and Social Sciences*, *1*(5), 41-53.
18. Kowert, P. A., and Hermann, M. G. (1997). Who takes risks? Daring and caution in foreign policy making. *Journal of Conflict Resolution*, 41(5), 611-637.
19. Lin, H. W. (2011). Elucidating the influence of demographics and psychological traits on investment biases. *World Academy of Science, Engineering and Technology*, *77*, 145-150.
20. Lo, A. W., Repin, D. V., and Steenbarger, B. N. (2005). Fear and greed in financial markets: A clinical study of day-traders (No. w11243). *National Bureau of Economic Research.*
21. Mayfield, C., Perdue, G., and Wooten, K. (2008). Investment management and personality type. *Financial Services Review*, *17*(3), 219-236.
22. McAdams, D. P. (1992). The Five-Factor model in personality: A critical appraisal. *Journal of personality*, *60*(2), 329-361.
23. McCrae, R. R., and Costa Jr, P. T. (1997). Personality trait structure as a human universal. *American psychologist*, *52*(5), 509.
24. McCrae, R. R., and Costa, P. T. (2004). A contemplated revision of the NEO Five-Factor Inventory. *Personality and Individual Differences*, *36*(3), 587-596.
25. McCrae, R. R., and John, O. P. (1992). An introduction to the five-factor model and its applications. *Journal of personality*, *60*(2), 175-215.
26. McDougall, W. (1932). Of the words character and personality. *Journal of Personality*, *1*(1), 3-16.
27. Myers, I. B., McCaulley, M. H., and Most, R. (1985). Manual, a guide to the development and use of the Myers-Briggs type indicator. *Consulting Psychologists Press.*
28. Nicholson, N., Soane, E., Fenton-O'Creevy, M., and Willman, P. (2005). Personality and domain specific risk taking. *Journal of Risk Research*, 8(2), 157-176.
29. Pan, C. H., and Statman, M. (2013). Investor Personality in Investor Questionnaires. *Journal of Investment Consulting*, *14*(1), 48-56.
30. Pompian, M. M., and Longo, J. M. (2004). A new paradigm for practical application of behavioral finance: creating investment programs based on personality type and gender to produce better investment outcomes. *The Journal of Wealth Management*, *7*(2), 9-15.
31. Previn, L. A. (1994). A critical analysis of current trail theory. *Psychological Inquiry*, 5, 103–113

32. Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological monographs: General and applied*, *80*(1), 1.
33. Ryckman, R. (2008). Theories of personality. Ninth edition, Thomson Wadsworth Press.
34. Sadi, R., Asl, H. G., Rostami, M. R., Gholipour, A., and Gholipour, F. (2011). Behavioral Finance: The Explanation of Investors' Personality and Perceptual Biases Effects on Financial Decisions. *International journal of economics and finance*, *3*(5), 234-241.
35. Schaefer, P. S., Williams, C. C., Goodie, A. S., and Campbell, W. K. (2004). Overconfidence and the big five. *Journal of Research in Personality*, *38*(5), 473-480.
36. Sneed, C. D., McCrae, R. R., and Funder, D. C. (1998). Lay conceptions of the five-factor model and its indicators. *Personality and Social Psychology Bulletin*,*24*(2), 115-126.
37. Sreedevi, V. R., and Chitra, K. (2011). Does personality traits influence the choice of investment?. *The IUP Journal of Behavioral Finance*, *8*(2), 47-57.
38. Thomas Bailard, David Biehl and Ronald Kaiser. (1986) *Personal Money Management*, 5th edition. Science Research Associates: Chicago.
39. Thomas, T., and Rajendran, G. (2012) BB and K Five-way Model and Investment Behavior of Individual Investors: Evidence from India, *International Journal of Economics and Management, 6(1),* 115 – 127.
40. Zaidi, F. B., and Tauni, M. Z. (2012). Influence of Investor's Personality Traits and Demographics on Overconfidence Bias. *Institute of Interdisciplinary Business Research*, *4*(6), 730-746.