The Role of Structured and Efficient Market Factors in Determining the Individual Investor's Satisfaction: Evidence from Pakistan

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Abstract: *This study examines the impact of structured and efficient market factors such as fundamental analysis, transaction processing system, information processing system and risk management on Pakistan stock exchange's investor satisfaction. We used descriptive statistics, confirmatory factor analysis, and structural equation modeling technique to test the proposed model. Our findings reveal that all the components of the structured and efficient market (S&EM) positively impact the individual investor's satisfaction (IIS) level. However, the individual investor's education and trading experience significantly moderate the impact of S&EM and IIS model. We suggest that provision of quality trading facilities with low cost guiding investors; ensure a friendly market environment which can protect the retail investor's interest. Further, we highlighted that the availability of quality information, transparent transaction process at low fees & commissions, unbiased brokerage services and strict compliance of SOPs could enhance the investor's level of satisfaction and their investment decisions.*

Keywords: Fundamental analysis, risk management, structural efficiency and Pakistan stock exchange.

Introduction

Individual investors are important market participants because they mobilize resources, actively participate in trading activities and enhance the efficiency of the market, but it largely depends on individual investors' confidence as well as their satisfaction level (Luong & Ha, 2011; Obamuyi, 2013). Structural efficiency of the market is one of the key factors that directly impact the retail investor's satisfaction level (Rashid & Nishat, 2009). A market is said to be efficient and well-structured, where investors buy/sell the stock after detailed financial analysis; the transaction processing system is easy, transparent and less

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costly; the behavior of market agents is friendly & supportive; the variety of the financial products available for everyone; and the strict implementation of rules & regulation is assuring by the regulatory authorities (W. Lin H, 2012). However, previous researches show that the technical and financial analysis, information management, easy and transparent transaction processing system and risk management are considered important market factors that can impact the retail investor satisfaction level (Ahmed, Huda, & Rashid, 2006). The management of well-structured and efficient markets ensures the flow of rational information, provides the friendly and less costly transaction process, guide/help the investors in stock selection and make appropriate steps for the elimination of uncertain market environment (Waweru, Munyoki, & Uliana, 2008).

Previous researches in this vine suggested that the unstructured market elements force the individual investors to buy/sells the stocks based on heuristics and hunches, make biased decisions and suffered heavy losses. It has happened due to complex and costly trading mechanism; non-availability of rational information; unsupportive broker's behavior; lack of education with low trading experience; and weak government regulation (Rashid & Nishat, 2009; W. Lin H, 2012).

The merger of Islamabad, Lahore and Karachi Stock Exchanges results in the establishment of Pakistan Stock Exchange in 2016 with the total market capitalization of US $88.811bn (Rs.9, 312,237M). Currently, there are 558 listed companies, 400 brokerage houses and 21 asset management companies exist on PSE floor. The PSE sold 40 of its share to a Chinese consortium for US$85 million in December 2016. However, there are 2,769 institutional investors (Domestic and Foreigners) and more than 200,000 individual investors participate in trading activities. Kafayat (2014) suggests that the unstructured market environment for the financial markets of Pakistan causes frustration among small-scale investors which force them to minimize their trading activities. It presents strong motivation to examine the role of structured and efficient market factors in determining the individual investor satisfaction. We have also considered few moderating factors such as individual investor's education and their trading experience that can contribute to enhancing the investor satisfaction.

The purpose of the study is to identify the transaction processing mechanism of individual investors, to identify their investment plan, to recognize market elements that facilitate them during buying/selling of stocks and to know their opinion regarding the facilities as well as the efficiency of Pakistan Stock Exchange. Prior work in this vine analyze the impact of technical analyses, information management, corporate governance and risk management on corporate investors investment decision making in separate studies but this is one of the few studies that identify the impact of all these factors on the individual investors level of satisfaction. In this study, the researcher not only analyzes the cause and effect of structural market efficiency on individual investor's satisfaction, but also describes the moderating impact of retail investor demographics on the relationship of structural market efficiency and retail investor's satisfaction. This is the first study in Pakistan that describes how information management, technical analysis and risk management can effectively provide rationality to the retail investors during buying / selling of stocks. Therefore, it is important to investigate the impact of structured and efficient market (S&EM) factors on individual investors satisfaction (IIS) level. This study creates

awareness among the individual investors of PSE regarding the use of technical / financial analysis, acquisition & management of rational information, and the management of uncertain / unwanted events during their investment decision making process. We suggest that investor can analyze the products based on rational information, make wise decisions and earn handsome profits. The efficiency of financial markets is largely depends on the availability of basic infrastructural facilities, implementation of rules & regulations, high trading volume, fair & friendly environment and low transaction costs. The findings of this study will also help the regulators as well as the management of PSE to identify the weak areas of the market and make appropriate actions accordingly. Our findings reveal that all the components of structured and efficient market (S&EM) positively impact the individual investor's satisfaction (IIS) level. Individual investor's education and trading experience significantly moderate the impact of S&EM and IIS model. Besides with the retail investor is also an important stock market player.

The aim of retail investors is to earn maximum return and enhance their level of satisfaction. We suggest that the management should provide quality trading facilities with low cost, create a help desk for the guidance of investors, ensure friendly market environment to protect the retail investor's interest. From the regulation point of view, we suggest that the regulatory bodies should ensure the availability of quality information, transparent transaction process at low fees and commissions, unbiased brokerage services and strict compliances of SOPs. These steps enable the retail investor to make wise investment decisions, earn good profits and enhance their level of satisfaction.

Literature Review

The structural efficiency of market refers the availability of essential facilities that are essential for the effective participation of small investors in trading activities. These facilities include the availability of rational information disclosures, easy and unbiased transaction mechanism, friendly and supportive brokerage services, low transaction cost, online trading facilities, abroad range of financial product and, strict government regulations. These facilities motivate the retail investors to invest in market activities with confidence, earn more profits and enhance their level of satisfaction. The fundamental analyses, information management, easy and transparent trading system, and effective portfolio management for the elimination of risk are considered the cornerstone of structured and developed markets (W. Lin H, 2012; Banerjee, 2011; Waweru et al., 2008)

The investment decision based on rational information helps the retail investors to buy or sell the right stock at the right time and earn good profit. The rational information includes both financial and non-financial information sources. The market price of the share, earnings per share, company dividend policy, the capital structure of the company, financial cost, and subsequent year's profits are considered the important financial information sources. In contrast, firm's market share, customer satisfaction data, product innovation and employee's turnovers are grouped as non-financial information sources. The investment decisions based on deep technical analyses helps to safeguard the retail investors from errors and enhance their wealth.

Rashid and Nishat (2009) suggest that deep fundamental analysis helps the retail investors to visualize the market situation accurately at the time of buying/selling of stocks. The SWOT analysis of market, industry and company, inflation rate, GDP growth, exchange rate, earning per share, retained earnings, market growth, and customer level of satisfaction and government policies are considered important factors for technical analysis. Investment decision based on fundamental analysis motivates the small investors to confidently participate in market activities, make rational decisions and maximize their wealth through capital gain. Past studies suggested that the individual investors of underdeveloped countries like Pakistan, Bangladesh, and India usually make an investment decision based on heuristics and do not make a fundamental analysis. Therefore, they suffer heavy losses that increase dissatisfaction among them. However, in contrast, in most of the developed countries stock exchanges, the retail investors give importance to the technical analysis and earn handsome profits (Barber, Lee, Liu, & Odean, 2008; Bluethgen, Intschel, Hackethal, & Muller, 2007; Fisher & Gerhardt, 2007; Guiso & Jappelli, 2006).

The easy, quick and transparent transaction process is signific for the structural efficiency of the market. In developing countries, the retail investors face serious trouble during the trading process, as no adequate facilities are available in the market that results in dissatisfaction among them. However, with the implementation of advanced IT infrastructure, low transaction cost, online access to market information, availability of wide variety of financial products, unbiased, friendly and motivating behavior of market agents attracts the retail investors to invest in productive portfolio, earn maximum profits and enhance their level of satisfaction (Ahmed et al., 2006; Chong & Lai, 2011; Merikas, Merikas, Vozikis, & Prasad, 2008)

Canarslan (2013) describes that the availability of online information, economical agent commissions, the supportive behavior of market dealers and easy to use operating system help the retail investors to analyze the market activities with ease and confidence, make a correct investment decision and maximize their wealth by earning enough profit. Hence, the accuracy in investment decisions is considered important factor which enhances the retail investor's level of satisfaction (Rashid & Nishat, 2009).

Rashid and Nishat (2009) suggest that the effective information processing system is considered one of the important cornerstones of structured markets. The availability of real-time, less costly and easy to understand information helps the retail investor to decide with confidence regarding the purchase and sales of particular stock, earn more profit and maximize their wealth. However, inunstructured markets, the individual investors cannot do so because of the uncertain market environment and due to lack of adequate financial knowledge. The cost of information is another reason for the non-reliance of information management by the retail investors during investment decision-making process (Campbell, Gordon, Loeb, & Zhou, 2003; Richardson, Tuna, & Wysocki, 2010; Schwartz, 2008).

Low cost, quick, readily available, reliable, refine and easy to understand information is considered important characteristics of information management. The availability of latest soft/hard technological tools, training, expert's guidelines, and presentation of important disclosures ensure the management of rational information and reduces the uncertainty from the market. Effective information management gives confidence to the retail investors

and raises their level of satisfaction (Bushee, Core, Guay, & Hamm, 2010; Dilla & Steinbart, 2005).

The mitigation of risk through effective portfolio management is essential for effective decision making. It considers a critical element of structural market efficiency. The process of risk management refers to the identification, control, and elimination of risk factor through effective strategic management. Use of latest technological tools, availability of rational information and effective portfolio management helps the retail investors to mitigate risk, make wise decisions and earn handsome profits. The market risk, inflation and foreign exchange risk, the rule of the game, and operational risk are considered important types of risk. For effective risk management, it is very important for the retail investors to know about the type, nature, and sensitivity of the risk factor. It is evident from the facts that effective risk management is directly associated with retail investors' level of satisfaction (Ahuja, 2012; Bala, 2013).

The term satisfaction refers the pleasant feelings of retail investors which arise due to the fulfillment of their desired objective. The growth of stock markets is directly associated with investors level of satisfaction. Structural efficiency of the market can play a vital role in boosting retail investor's level of satisfaction (Rashid & Nishat, 2009). A satisfied investor tries to participate more in trading activities, buy/sell more financial products, stay in the market for the longer period, take an interest in market activities and provides consistency in market activities (Aksoy, Cooil, Groening, Keiningham, & Yalcin, 2008; Bodet, 2008).

The satisfaction of individual investors is mainly dependent on structured and efficient market environment. A market is said to be structured and efficient if it includes adherence to government regulation, easy and quick transaction process, accessibility of reliable and rational information sources, availability of hardware/software for risk assessment, friendly and cooperative management behaviors and a large variety of financial products. More investment largely depends on investor satisfaction and market performance (C. Y. Lin J. S. C.and Wu, 2011). Individual investor's satisfaction largely depends on various factors of the structured market. However, there are many demographic characteristics of the individual investors like age, education, income and trading experience which can moderate their stock selection process in developing countries (Bashir, Rasheed, Raftar, Fatima, & Maqsood, 2013; Jain & Mandot, 2012).

Rashid and Nishat (2009) suggest that retail investor's education and trading experience is a significant factor for effective investment decision making. The trading experience and education help them to analyze the market situation based on latest information sources and then make rational decisions. They advocate that retail investor demographics can moderate the relationship between market efficiency and small investor's satisfaction in developing countries (Ahmed et al., 2006; Bashir et al., 2013).

Prior work of W. Lin H (2012); Banerjee (2011); Rashid and Nishat (2009); Waweru et al. (2008) suggested that the fundamental analyses, information management, easy & transparent trading system, and effective portfolio management for the elimination of risk are considered the important cornerstones of structured and developed markets. The structured and efficient market motivates the retail investors to invest in market activities with confidence, earn more profits and enhance their level of satisfaction. But unfortunately, in developing countries, like Pakistan, Bangladesh & Vietnam, the markets are unstructured

and unequipped with basic facilities, which ultimately impact retail investor's investment decision making process as well as their level of satisfaction (Ahuja, 2012; Bodet, 2008; Dilla & Steinbart, 2005; Rashid & Nishat, 2009). Therefore, based on the literature support, we developed and proposed following research hypothesis:

H_1: *There is the positive impact of fundamental analysis on individual investor satisfaction.*

H_2: *There is the positive impact of transaction processing system on individual investor satisfaction.*

H_3: *There is the positive impact of an effective information processing system on individual investor satisfaction.*

H_4: *There is the positive impact of risk management on individual investor satisfaction.*

H_5: *The individual investor education positively moderates the impact of the structured & efficient market on individual investor satisfaction.*

H_6: *The individual investor trading experience positively moderates the impact of the structured & efficient market on individual investor satisfaction.*

Figure 1
Theoretical Framework
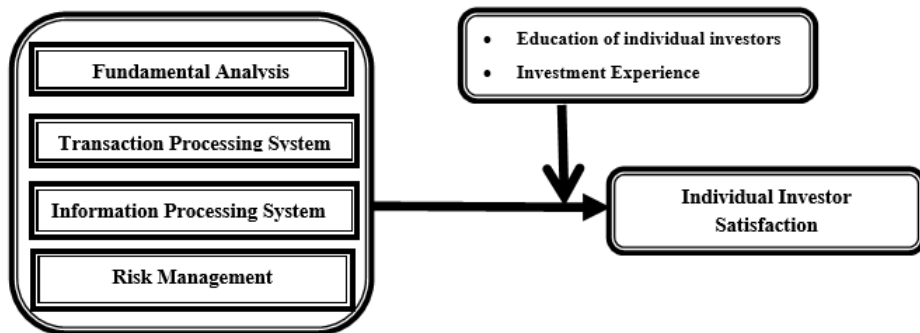
Methodology

This section briefly explains the target population, survey instrument, sampling design and data collection methods used in this study.

Target Population

This study has intended to identify important factors that can impact individual investor's stock selection mechanism and their level of satisfaction. Therefore, the individual investors of Pakistan Stock Exchange are considered as the target population of the study.

Survey Instrument

The data has been collected through a structured questionnaire that was developed by Rashid and Nishat (2009). We used a 5-point Likert scale because it is considered more appropriate and easy to understand (Zaheer, Rehman, & Saif, 2008). The adopted questionnaire has three sections: Section 1 measured the demographic characteristics of retail investors. There are seven questions in this section which measured the age, education, trading experience, income, savings and preferred sector of working. Section 2 measured the structural efficiency of the market. This section includes 46 items which measured Fundamental Analysis, Transaction processing system, Information processing system and Risk Management. The final part of the instrument measured the individual investor satisfaction of Pakistan Stock Exchange which includes six questions.

Sampling Design

We used stratified random sampling technique and sample is selected according to predetermined plan and some specific criteria. We distributed 450 questionnaires to the retail investors through the selected brokerage houses of Pakistan Stock Exchange. Out of 450 individual investors surveyed, the response rate was 55.11%. Hence, 248 completed questionnaires are the sample size of the study.

Data Analysis Methods

In this study, the researcher gathered data through structured questionnaires and then analyzed the same by using Descriptive Statistics, Factor Analysis, Reliability Analysis and Structural Equation Modeling (SEM). For this purpose SPSS-15 and AMOS-20 software are used as data analysis tool.

Preliminary Analysis

The demographic characteristics of individual investors of Pakistan Stock Exchange are presented in Table 1 over 81.9% of the retail investors were less than 50 years, and around 18% were more than 50 years of age. Around 54% of retail investors have trading experience of more than five years, whereas 46% of the respondents involved in buying and selling of stock for less than five years. Approximately 55% of the respondents were a salaried person, 19% were a self-owned businessman, 20% were general investors and 7% were students. Around 65% of the retail investors were earning less than Rs.60,000/- and 18.5% of the respondents earned less than Rs.90,000/-. The savings of 88% of the retail investors

of Pakistan Stock Exchange were less than Rs.50,000/- and around 12% had saved more than Rs.50,000/-. These statistics depict that majority of the retail investors were small investors (Rashid & Nishat, 2009). Around 29% of the retail investors had completed bachelor degree; 18% had not completed their bachelor degree; 19% had a master degree;

Table 1
Demographic variables of individual investors

Variable	Frequency	%	Cumm. %
Age			
Less than 30 Years	63	25.4	25.4
30 to 40 Years	89	35.9	61.3
40 to 50 Years	51	20.6	81.9
More than 50 Years	45	18.1	100
Experience			
Less than 5 Years	114	46.0	46.0
5 to 10 Years	78	31.5	77.4
More than 10 Years	56	22.6	100
Profession			
Financial Institutions	42	16.9	16.9
Academics	23	9.30	26.2
Corporate(Salaried)	56	22.6	48.8
Students	17	6.90	55.6
Government Officials	15	6.00	61.7
Self-owned Business	47	19.0	80.6
General Investors	48	19.4	100
Monthly Income			
Less Than 30,000 Rupees	71	28.6	28.6
30,000 t0 60,000 Rupees	89	35.9	64.5
60,000 to 90,000 Rupees	46	18.5	83.1
More than 90,000 Rupees	42	16.9	100
Monthly Savings			
Less Than 10,000 Rupees	93	37.5	37.5
10,000 to 30,000 Rupees	77	31.0	68.5
30,000 to 50,000 Rupees	50	20.2	88.7
More than 50,000 Rupees	28	10.9	100
Education			
No Educational background	4	1.60	1.60
Below HSC	9	3.60	5.20
HSC Complete	9	3.60	8.90
Bachelor/Degree Incomplete	21	8.50	17.3
Bachelor/Degree Complete	71	28.6	46.0
Master/MBA Incomplete	47	19.0	64.9
Master/MBA complete	60	24.2	89.1
Higher than Master	26	10.5	99.6
Other	1	0.40	100
Investement Sector			
Financial Institutions	39	15.7	15.7
Engineering	21	8.50	24.2
Power, Oil, gas	91	36.7	60.9
Technology	13	5.20	66.1
Telecom	26	10.5	76.6
Investment, Mutual Funds	20	8.10	84.7
Pharmaceuticals	11	4.40	89.1
Textiles	27	10.9	100

24% respondents master degree is in the process and 11% of the respondents had M-Phil and Ph.D. degree. Sector wise investment shows that 36.7% of the retail investors were investing in power, Oil Gas sectors, 15.7% were investing in financial institutions, 10.9% were investing in textile, 10.5% in telecom and rest of 25% retail investors invested in engineering, mutual funds, and pharmaceutical sectors.

Descriptive Statistics

The descriptive statistics and an alpha score of the constructs are reported in Table 2. The Cronbach Alpha is used for the reliability of scale; our result shows that the Alpha scores are more than 0.70, i.e., highly acceptable (Zaheer et al., 2008; Nunnally, 1978). The Alpha values of all the constructs are above 0.70 except information processing system for which alpha statistics was 0.644. The mean score of all the constructs ranges from 3.537 to 3.786 which are above average which presents the internal consistency and reliability of the constructs.

Table 2
Construct Reliability and Descriptive Statistics

Constructs	No. of Items	No of Items Deleted	Alpha	Mean	Std. Dev
Fundamental Analysis	16	2	0.732	3.556	0.424
Transaction Processing System	11	2	0.74	3.576	0.512
Information Processing System	7	1	0.644	3.588	0.551
Risk Management	6	1	0.724	3.562	0.500
Individual Investor Satisfaction	6	-	0.816	3.537	0.544
n=248					

Correlation Analysis

To identify the relationship among all the variables, we reported correlation analysis in Table 3, which shows that the information processing system, risk management, and individual investor satisfaction are positively and significantly correlated with each other.

Table 3
Correlation Analysis

Construct	FA	TRM	INFM	RSK	INVSA
Fundamental Analysis	-	0.608***	0.405***	0.468***	0.462***
Transaction Processing system	-	-	0.452***	0.451***	0.460***
Information Processing System	-	-	-	0.530***	0.460***
Risk Management	-	-	-	-	0.508***
Individual Investor Satisfaction	-	-	-	-	-

Note: *** indicates level of significance at 1%

Confirmatory Factor Analysis

The Confirmatory Factor Analysis is conducted to validate the internal consistency of the constructs. Table 4 illustrates the generally model fit indices of Fundamental Analysis (FA), Transaction Processing System (Trm), Information Processing System (Infrm), Risk Management (Rsk), and individual Investor Satisfaction (InvSat). The values of χ^2/def.

Ratios are 1.320 to 2.891 are in acceptable range ($\chi^2/\text{def} \leq 3$). The constructs values of CFI, GFI, AGFI, and TLI are above 0.90 indicating best fits. The RMSEA values of all the constructs are within acceptance range that is 0.064 to 0.08 (Asberg, Bowers, Renk, & McKinney, 2008; Mehmet, Apan, & Ayval, 2015).

Table 4
Model Fit Indices of the constructs

Constructs	χ^2	Df	χ^2/df	RMSEA	CFI	GFI	AGFI	TLI
Fundamental Analysis	54.516	40	1.363	0.064	0.937	0.913	0.916	0.917
Transaction Processing System	48.129	17	2.831	0.086	0.901	0.959	0.914	0.903
Information Processing System	12.454	5	2.49	0.086	0.927	0.973	0.92	0.854
Risk Management	8.383	4	2.096	0.089	0.991	0.977	0.914	0.978
Individual Investor Satisfaction	9.462	4	2.366	0.073	0.99	0.958	0.972	0.966

Note: The values of χ^2/def. ratios are 1.320 to 2.891 are in acceptable range ($\chi^2/\text{def} \leq 3$)   .

Empirical Findings

The SEM technique is used to analyze the impact of independent variables (Fundamental Analysis (FA), Transaction Processing System (Trm), Information Processing System (Infrm) and Risk Management (Rsk) on the dependent variable (Individual Investor Satisfaction (InvSat)). Figure 2 displays the relationship between the structured and efficient market factors on individual investor satisfaction. Our finding reveals that there are many economic, financial and behavioral factors that impact individual investor satisfaction. The current economic scenario, GDP growth rate, efficiency of the company management, Earning Per Share (EPS), net income, sale and EBIT of the company, government regulations, inflation, exchange rate, industry performance, low transaction costand effective portfolio management are most influential factors that affect the individual investor satisfaction.

Individual investor satisfaction is an essential element for the mobilization of economic resources and the participation in trading activities (Rashid & Nishat, 2009). The finding of the study suggests that individual investors of Pakistan Stock Exchange want to make their investment decisions after deep technical analysis based on rational information, which is good for the health of financial market but they cannot do so because they have less capability to acquire & manage relevant information due to complex market structure and lack of appropriate market knowledge & investment skills (Murphy & Soutar, 2004). Therefore, they make investment decisions based on heuristic instead of rational information sources and suffered heavy losses.

Table 5 describes the overall model fit indices which meet the accepted criteria. The Chi-square (χ^2) statistics is 16.928 with a degree of freedom 11 and p-value greater than 0.001. The χ^2/df ratio has a value 1.880 that is within acceptance region (≥ 3.00) indicating the best fit. The values of CFI (0.981), GFI (0.972), NFI (0.921), AGFI (0.911) and TLI (0.965) are above 0.90 and considered best fit. The RMSEA value is 0.075 that is less than 0.080 and within acceptance range.

Figure 2

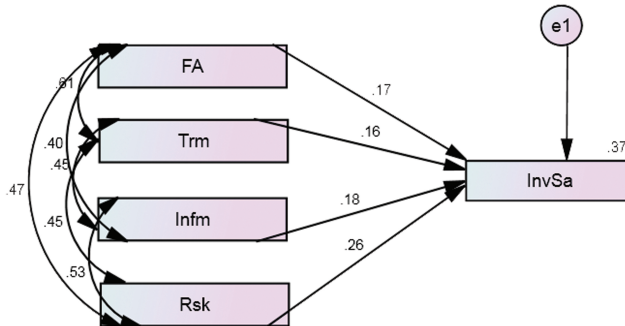Structured and Efficient Market Factors and Individual Investor Satisfaction

Table 5

Generally Accepted Model Fit Indices Model of the relationship between
Structured & Efficient Market and Individual Investor Satisfaction:

χ^2	Df	χ^2/df	RMSEA	CFI	GFI	NFI	AGFI	TLI
16.928	9	1.88	0.075	0.981	0.972	0.921	0.911	0.965

Table 6 summarizes the estimated regression weights of Fundamental Analysis (FA), Transaction Processing System (Trm), Information Processing System (Infrm), Risk Management (Rsk) and Individual Investor Satisfaction (InvSat) with standard errors. It indicates that there is the positive and significant impact of FA, Trm, Infm, and Rsk on InvSa. Therefore, the null hypothesis H1, H2, H3 and H4 are rejected. The result of the study suggests that the impact of fundamental analysis on individual investor satisfaction is positive and significant. These results are consistent with the results of Ahmed et al. (2006); Rashid and Nishat (2009); W. Lin H (2012). The deep fundamental analysis helps the individual investor to buy those stocks that will provide a maximum return, gives them confidence and raise their level of satisfaction. There is the positive and significant impact of transaction processing system on individual investor satisfaction. This result is consistent with the study of Ahmed et al. (2006); Canarslan (2013); Rashid and Nishat (2009); Wang, Shi, and Fan (2006). The easy, quick, transparent trading system, friendly agent's behavior, strict compliance with rules & regulations, low transaction cost and frequent arrangement of training programs are considering important factors that can impact individual investor's satisfaction (Wang et al., 2006). The result of the study reveals that there exists the impact of transaction processing system on the satisfaction level of individual investors of Pakistan Stock Exchange.

The information management system is considered an important cornerstone for rational investment decision-making. The estimated regression weight (0.190) with standard

error (0.004) summarizes the positive impact of information processing system on individual investor satisfaction. This result is consistent with the study of W. Lin H (2012); Rashid and Nishat (2009); Schwartz (2008). The result reveals that the investment decisions based on rational information provides accuracy in investor's stock selection process, maximize their wealth and enhance their level of satisfaction.

The result of the study reveals the significant impact of risk management on individual investor satisfaction with estimated regression weight (0.258) and standard error (0.000) which is consistent with the study of Ahmed et al. (2006); Bala (2013); Rashid and Nishat (2009). The adequate market knowledge, use of advanced statistical tools and effective portfolio management helps the retail investor to mitigate risk and earn a maximum profit (Chenhall, 2003). Past studies suggest that the individual investors of underdeveloped countries are overconfident and participate in trading activities without analyzing the market situations and face uncertain situations. The basic reason for this behavior is a lack of education and trading experience. The finding of this study suggests that the individual investors of Pakistan Stock Exchange are agreed that risk management impacts their level of satisfaction.

Table 6
Regression Weight

Variables			Estimate	S.E.	C.R.	P	Accept/Reject
InvSa	<—	FA	0.234	0.09	2.592	0.001	Accepted
InvSa	<—	Trm	0.175	0.075	2.324	0.002	Accepted
InvSa	<—	Infm	0.190	0.065	2.917	0.004	Accepted
InvSa	<—	Rsk	0.258	0.063	4.086	0.001	Accepted

Table 7 describes thatthe individual investor education can moderate the impact of the structured and efficient market on individual investor satisfaction with a beta value of interaction term INTMEEDU (-0.2915), i.e., significant at ($p<0.01$). Therefore, the null hypothesis H5 is rejected. The demographic characteristics of retail investors play a vital role in stock selection, assessing market efficiency, analyzing market volume and trends and acquiring rational information (Rashid & Nishat, 2009). The retail investor education is essential for rational investment decision because this demographic characteristic helps the retail investors to identify the real market situation and refrain themselves from behavioral biases (Geetha & Vimala, 2014; Murphy & Soutar, 2004).

Table 7
S&EM-IIS Regression Model with Individual Investor Education as Moderator

Model	Unstandardized Coefficients		Standardized Coefficients	t.stat.	Sig.	Accept/Reject
	B	**Std. Error**	**Beta**			
Std-S&EM	0.357	0.047	0.627	15.002	0.007	
Std-Education	0.019	0.047	0.084	0.629	0.539	Accepted
INTMEEDU	-0.042	0.037	-0.179	-2.915	0.002	

Table 8 describes thatthe individual investor trading experience can moderate the impact of the structured and efficient market on individual investor satisfaction with a beta

value of interaction term INTMEEXP (-0.050), which is significant (p<0.01). Therefore, the null hypothesis of H6 is rejected.With the help of investment knowledge and market experience, an individual investor can understand market terminologies, easily understand the experts opinion, acquire and manage latest market and company information, can easily identify market trends and make effective portfolios to mitigate market risk (Tehrani & Ghare, 2012). The finding of the study suggests that the individual investors of Pakistan Stock Exchange understand the importance of trading experience required in effective investment decision making.

Table 8
S&EM-IIS Regression Model with Individual Investor Experience as Moderator

Model	Unstandardized Coefficients		Standardized Coefficients	t.stat.	Sig.	Accept/Reject
	B	**Std. Error**	**Beta**			
Std-S&EM	0.364	0.037	0.494	13.742	0.004	
Std- experience	0.033	0.037	0.112	2.3240	0.079	Accepted
INTMEEXP	-0.050	0.043	-0.129	-2.5270	0.001	

Conclusion

There are many micros as well as macro-economic factors that can impact the investment decision making process of individual investors. It is widely accepted reality that the investment decision making is the complex process. It requires sound knowledge & expertise, plenty of trading experience and sufficient resources, which are possible for the institutional investors but individual investors in this regard, face serious trouble. Past studies suggested that in developing countries, due to unstructured markets, it is very difficult for the retail investors to identify all those factors that can impact their investment decision making process (Ahmed et al., 2006; W. Lin H, 2012). The complex trading procedure, unfriendly brokers' behavior, uncertain government regulations and irrational market environment reduce retail investor's level of satisfaction and force them to leave the market, which is not good for the economic growth of the country (Wang et al., 2006). Therefore, the aim of this study is to identify all those market factors which are important for retail investors' investment decisions, give them confidence and rise their level of satisfaction.

To achieve objective of our study, we developed a hypothesis to examine the impact of structured and efficient market factors (fundamental analysis, transaction processing system, information processing system and risk management) on individual investor's satisfaction. Our findings reveal that all the four market efficiency components are significantly correlated with retail investors' satisfaction level. Further, findings indicate that the retail investors feel more confident to buy the stock if sound knowledge and guidance regarding market is available. The flow of simple and unbiased information, transparent market environment, friendly transaction mechanism, efficient role of regulatory bodies, low fees, commissions and the availability of wide variety of financial products can enhance the retail investor's level of satisfaction significantly. Finally, we infer that educated and experienced investors are more concerned regarding the availability of basic market facilities.

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Appendix

SECTION-1
DEMOGRAPHIC INFORMATION

Age: (Please tick any one below)

1. Less than 30 years.   2.   30 to 40 Years.

3. 41 to 50 Years.   4.   More than 50 Years.

Experience with Islamabad/Lahore/Karachi Stock Exchange

1. Less than 5 Years   2.   5 to 10 Years

3. More than 10 Years

Professional Field: (Please tick any one below)

1.   Financial Institutions   2.   Academics   3. Corporate (salaried)   4. Students

5.   Government Officials   6.   Self owned Business   7. General investors

Others; please specify…………………………………………………………………………………

Monthly Total Income: (Please tick any one below)

1. Less than 30,000 Rupees   2. More than 30,000 to 60,000 Rupees

3. More than 60,000 to 90,000 Rupees   4. More than 90,000 Rupees

Monthly savings *(after all expenses and before all investment)* **(Please tick any one below)**

1. Less than 10,000 Rupees   2. More than 10,000 to 30,000 Rupees

3. More than 30,000 to 50,000 Rupees   4. More than 50,000 Rupees

Education: (Please tick any one below)

1. No Educational background   2. Below HSC   3. HSC Complete

4. Bachelor/ Degree Incomplete   5. Bachelor/ Degree Complete   6. Masters/ MBA Incomplete

7. Masters/ MBA Complete   8. Higher than Masters

Others; Please specify …………………………………………………………………………….

Highly Preferred Sectors for investment:

1. Financial Institutions   2. Engineering   3. Power, Oil, Gas

4. Technology   5. Telecom   6. Investments i.e. Mutual Funds

7. Pharmaceuticals   8. Textiles

Others; please specify……………………………………………………………………………

| SECTION –II |
| STRUCTURAL EFFICIENCY OF THE MARKETS |

The availability of basic market facilities like appropriate Fundamental analysis, ease of transaction system, effective information management and risk assessment are the elements of structural market efficiency of the financial market. Structured financial markets satisfied the retail investors that resulted investment decision-making process easier and efficient.

Please read each statement and indicate how much it is true about Stock Markets of Pakistan. You may encircle or mark at appropriate choice against each statement according to given coding.

5= Strongly Agree (SA)

4= Agree (A)

3= Neither Agree Nor Disagree (N)

2= Disagree (D)

1= Strongly Disagree (SD)

Fundamental Analysis						
		SA	A	N	D	SD
TA-1	I use fundamental variables like ROA, ROE etc. to take investment decisions.	5	4	3	2	1
TA-2	I consider efficiency of the company management before making investment decision.	5	4	3	2	1
TA-3	P/E (Price/Earning) ratio is imperative in stock market investment decision.	5	4	3	2	1
TA-4	I believe Earning per Share (EPS) is crucial.	5	4	3	2	1
TA-5	Inflation has important impact on investment decision.	5	4	3	2	1
TA-6	GDP growth rate has potential impact on investment decision.	5	4	3	2	1
TA-7	Current economic scenarios should be considered carefully before making an investment decision.	5	4	3	2	1
TA-8	International economic condition affects your level of motivation towards investment.	5	4	3	2	1
TA-9	Governmental reforms such as tax on dividend income etc. have severe impact on your decision.	5	4	3	2	1
TA-10	More foreign investment in stock market will motivate larger					

49

		SA	A	N	D	SD
	quantity of investors.	5	4	3	2	1
TA-11	Larger number of stocks will inspire more investors in stock market.	5	4	3	2	1
TA-12	Higher Industry growth rate has significant impact on investors.	5	4	3	2	1
TA-13	Better prospect of the industry in near and rear future would motivate newer investors to invest.	5	4	3	2	1
TA-14	Possibility of new export opportunities of specific industry would increase demand of investment.	5	4	3	2	1
TA-15	New restrictions and regulation would decrease the demand for financial investment in that sector.	5	4	3	2	1
TA-16	Recent stock market performance, i.e. market capitalization, should be critically considered while taking investment decision.	5	4	3	2	1
Transaction Processing System (Transaction Procedure, Cost and Tools used in Transactions)						
		SA	A	N	D	SD
TM-1	Transaction process is easier and quick.	5	4	3	2	1
TM-2	Transaction cost is reasonable.	5	4	3	2	1
TM-3	Transaction settlement process is satisfactory.	5	4	3	2	1
TM-4	Computers with the brokerage houses are sufficient in transaction processing.	5	4	3	2	1
TM-5	Transaction from remote locations will increase amount of investment.	5	4	3	2	1
TM-6	The process of B/O account opening is easier.	5	4	3	2	1
TM-7	Wide LCD Display of Share Market Activity in busy business places would create positive awareness.	5	4	3	2	1
TM-8	Friendly behavior of the brokerage firm motivates the investors.	5	4	3	2	1
TM-9	Existing government supervision is adequate for Isb/Lahore/Karachi Stock Exchanges.	5	4	3	2	1
TM-10	Stock exchange has better protection mechanism for general/ retail investors.	5	4	3	2	1
TM-11	Stock exchange arranges training and education programs at a regular basis.	5	4	3	2	1
Information Processing System						
		SA	A	N	D	SD

IM-1	Investors have easy access to information Company, Economy and Industry.	5	4	3	2	1
IM-2	Information that available with the stock exchange are of superior quality.	5	4	3	2	1
IM-3	Information is available at less cost.	5	4	3	2	1
IM-4	I use different tools and techniques to collect and manage information.	5	4	3	2	1
IM-5	I use different financial/ statistical tools to manage information.	5	4	3	2	1
IM-6	I take help from professional investment companies or brokerage firms to manage information..	5	4	3	2	1
IM-7	Number of accounts of the brokerage house provides quality information for investment decision.	5	4	3	2	1
Risk Management						
In Your (Karachi/Lahore/Islamabad) Stock Exchange		SA	A	N	D	SD
RM-1	I have adequate knowledge about security market risk.	5	4	3	2	1
RM-2	I use "diversification" strategy at a regular basis.	5	4	3	2	1
RM-3	I analyze the industries separately for riskiness.	5	4	3	2	1
RM-4	I use different statistical tools at a regular basis to measure risk.	5	4	3	2	1
RM-5	I take help from profession consultants and brokers while analyzing risk.	5	4	3	2	1
RM-6	I am willing to take risk for extra return.	5	4	3	2	1
Retail Investor Satisfaction						
		SA	A	N	D	SD
RIS-1	Retail investors are fully satisfied with the overall regulatory framework of the market.	5	4	3	2	1
RIS-2	All the investors are satisfied with the cost return tradeoff.	5	4	3	2	1
RIS-3	All the investors motivate other investors for investment.	5	4	3	2	1
RIS-4	You are happy with the overall supply of stocks.	5	4	3	2	1
RIS-5	You make investment decision with confidence.	5	4	3	2	1
RIS-6	You are satisfied with the performance of the market.	5	4	3	2	1

THANK YOU FOR SPARING YOUR PRECIOUS TIME.