Foundation University Journal of Business & Economics

FUJBE

ISSN: 2414-4770
Volume 1 No. 1
August 2016

Foundation University Journal of Business & Economics
fujbe@fui.edu.pk, http://fujbe.edu.pk, Phone: +92-51-5152266

FUJBE

Foundation University Journal of Business and Economics

Vol. 1, No. 1, Aug 2016
ISSN: 2414-4770

Online issue available at:
http://fujbe.fui.edu.pk
Email (for electronic submission of articles):
fujbe@fui.edu.pk

From Editorial Desk

Foundation University's mission is to inspire creative activity and research to foster personal and professional development of its students. This issue of the journal is the first step in line with this mission. Research articles, papers and reviews of high quality are accepted for publication weather the writer is from Foundation University or not. With the passage of time the journal is poised to be international in status with high impact factor.

Due to the interdisciplinary nature of the subject of management, it is highly desired that research studies from varied fields like economics, sociology, anthropology, politics of business, total quality management, development and information technology etc., are included in the journal. Being an effective tool of knowledge sharing, the journal encourages publication of new theoretical perspectives, grounded theories, innovative measurement tools and procedures.

New innovative concepts, ideas and practices about businesses, industry, and management related disciplines are therefore welcomed. The submitted articles are undergone through a double-peer review; the first evaluation is carried out by the FUJBE Editorial Advisory Board members from each relevant discipline, and the second review by peer referees and experts working in the related fields in Pakistan and abroad.

The editorial board is hopeful to get enthusiastic cooperation and participation of not only students and teachers of Foundation University but of the entire sister institutions to make this effort and initiative a success. The board thankfully acknowledges the contribution of Peer Referees and FURC Graduate Research Center in the publication of first volume of FUJBE.

Dr. Amir Gulzar
Chief Editor

Table of Contents

Sexual Harassment and Personality Traits effecting Job Satisfaction as a Moderator

*Shahbaz Khan

**Owais Ahmed Khan

Abstract

Organizational culture has been a key factor for many organizational consequences. It has been observed in the previous researches that organizational culture has a direct relationship with job satisfaction. This paper introduce two new moderators namely sexual harassment and personality traits between the organizational culture and job satisfaction. In an Islamic country like Pakistan; high on Hofstede's masculinity and high on glass ceiling for women, sexual harassment from male bosses towards female subordinates and colleagues is of concern. Time and again research has shown the negative outcomes of sexual harassment on the organizational outcomes. For this study a convenience sample of 300 employees was selected from software houses working in twin cities of Rawalpindi and Islamabad. Standard deviation, correlation, regression and moderation have been used for interpretation of the results. This research will help those project based organizations in retaining their skilled employees for increase productivity and developing the personalities of their employees as strong professionals.

Key words: Organizational culture, job satisfaction, sexual harassment, personality traits, productivity, commitment, motivation

Introduction

Job Satisfaction is widespread concept throughout the corporate world. It has been regarded as one of the key elements in gauging and mapping the success of any company. The different components of Job Satisfaction can be a great source for eliminating the problems in a company and improving the work environment, the workflow processes and the overall productivity of that company. In addition, a high comparative level of job satisfaction will gain an organization a higher standing among its competitors in terms of employee loyalty as well as favorable image in the market.

Green (2010) argues that Job Satisfaction will determine the Employee Loyalty and the turn-over rate in any organization in the future. If the level of job satisfaction is high, the employees will stay committed to the organization for a longer period and will rarely leave the company even if presented with a more lucrative opportunity elsewhere.

*MS (HR), SZABIST, Islamabad, Pakistan

**MBA SCM Federation University, Australia

Additionally even if they remain in a company where they have a comparatively lower degree of job satisfaction they will tend to show higher absenteeism rates in the organization and vice versa (Drago & Wooden, 1992).

An analysis conducted by Judge et al. (2001) revealed that Job Satisfaction has a direct association to Job Performance. It is common sense that a worker who enjoys his job and is contented will yield better performance and higher, more efficient productivity. A study by Patterson et al. (2004) also reflected similar findings saying that happy workers are more in tune with their jobs. They own their organization and work towards its growth with all their dedication.

There is a theory proposed in the academic circles that the amount of importance one places on the different aspects of his or her job compared with how well the job actually fulfills his or her aspirations and expectations will determine their level of job satisfaction. The theory mentioned here is called the Affect Theory as presented by Locke (1976). In his studies, Locke takes his swing at defining Job Satisfaction as the state of pleasure and positivity an individual reaches as a result of appraising his or her job and the experiences derived from it.

For the purpose of this study, we are assigning Organizational Culture as the key variable that will affect Job Satisfaction. The strength of an organization's culture, in the context of the values and norms woven in the organization's fabric, as well as the intensity of the rules imposed with the organization, has a considerable impact on the behaviors and attitudes of its members. Put simply "The Culture of an Organization is a system of common connotation owned by the individuals within that organization that differentiates the given organization from others within the industry," although the term Organizational culture has alluded being defined and explained unanimously (Abdullah, 2014). Consequently researchers have formulated a plethora of different interpretations originating from different schools of thought and based on varying postulations (Alvesson, 2002; Martin, 1999; Martin, 1992). Rousseau (1990) would argue that Organizational Culture refers to the Fundamental and "unconscious" assumptions individuals use to direct their behaviours within organizations to values, behavioral norms, patterns of behavior, and more perceivable artifacts. Concurrently, Organizational Culture as a complex system of norms existing within a certain organization and the underlying values and beliefs of an organization as perceived by its employees (Maehr & Braskamp, 1986). Similarly Uttal (1983) insinuates the same as a "Machinery of shared values and beliefs that delineates the interaction with three key area: with personnel in the company, the structure within the organization, and a mechanism of control produce behavioral norms." One key idea to note here is that all the three definitions above revolve broadly around the same grounded ideas and involve the same key terms: The Organizational Culture is a phenomenon originated from and shared by the members of the organization; the beliefs, values, assumptions etc. hold true for all the individuals of the organizations and collectively become the “group think”; and that this culture molds and drives the organization in the same way as a collective instinct within a school of tuna fish determines which way to swim.

Hofstede (1980 & 1984) conducted various researches for investigation of different dimensions of the culture which exists in an organization. His continuous work and struggle at last provide us four main cultural dimensions. He describes that two nations differ from each other on the basis of four most important cultural dimensions.

Individualism vs. Collectivism

This cultural dimension measures the tendency of society members that how much they are interdependent. In individualism, individuals of a society are directly linked to their own families and they are more concerned and focused towards their personal achievements and accomplishment of personal goals rather than to work for a collective group of society. But if we talk about collectivism approach of a society the participants like to work as a whole and as a broader family rather than as the separated parts of society.

Small vs. Large Power Distance

The 'small vs. large power' dimension explains that how much an organization accepts the imbalance and unfair power distribution working in a particular society. In a society where small power distances prevail does not accept the imbalance of power distribution unless or until it is legally predefined and justified by the law of society. Whereas in a society that has large power distance, individuals who are placed on the higher hierarchical ranks in an organization are less accountable and answerable to their subordinates.

Strong vs. Weak Uncertainty Avoidance

This cultural dimension explains the tendency of a particular society that has an ability to cope up with the uncertain or vague situations. A society which is based on the strong uncertainty avoidance, people are more willing to live and work in a formal working systems because they believe that this system of society provide them efficient and well-structured rules and regulations which are less faulty or avoid unconformity. In contrast, a society which is based on weak uncertainty avoidance, individuals of the society prefer to work in a more relaxed, friendly working environment and they compromise with the principles, norms and values of their organizations because they are more dependent on the industrial practices rather than principles.

Masculinity vs. femininity

This cultural dimension is based on the extent to which social roles are distributed in a society on the gender bases. In this background, masculinity based on the materialistic success and prefers to focus on achievements of goals. On the other hand femininity societies based on the life quality and more focus towards the relationship building.

Now for this research work "Power Distance" is a significant aspect for the study of Organizational Cultures. It is a concept that significantly impacts the level of Job Satisfaction in any Organization. The concept depicts that if there is a higher perceived Power Distance in an organization, the lower tier staff will always feel comparatively less satisfied with their jobs because they will believe that their bosses have more authority an autocratic approach to do whatever they want. On the other hand, in companies where there is a lower perceived Power Distance, the lower tier staff will generally report a higher degree of job satisfaction due to the fact that the staff will feel comparatively empowered and more closely knit with the upper tiers of management.

"Organizational culture" is a crucially important factor which distinctively affects any type of sexual harassment at any stage in an organization (Martin & Siehl, 1983). Furthermore it has a strong influence on the organizational values to support, improve or oppose acts of such nature (Rose, 1988).

Since organizational culture embodies the norms of suitable behaviour and values assumed by members of that organization (Hall 1994), it is valid to expect that researchers are looking at culture to illuminate why sexual harassment occurs in some and not in other organizations (Hulin et al., 1996; Kauppinen-Toropainen & Gruber, 1993; Pryor et al., 1993). It may be an organizational norm in conservative societies like the middle-east for women to wear head scarves. However the same has been proven troublesome for similar individuals in places like Europe where Muslim women were harassed for wearing head scarves. It may be fine for women in western countries to wear skirts to the office whereas the same doesn't hold true in places like Saudi Arabia. At the same time male harassment can be recognized in western countries where the phenomenon has been studied while it may not get the same level of recognition in other parts of the world where most organizations are male dominated and men are automatically considered to be the aggressors in the instances of sexual harassment. Additionally same sex harassment would be accepted as a real phenomenon in western countries where Gay sexual orientation is an acceptable idea while the same may not hold true in the more conservative societies where being Gay is looked down upon and even punishes and consequently punished. In such societies, same sex harassment is not even identified let alone remedied.

Sexual harassment is a widespread and a growing problem in every country for many years and it has gained significantly increasing interest and attention of researchers to work on this topic because of its substantial impact on the job related issues like job performance, productivity, commitment, absenteeism and job satisfaction of the individuals or teams in an organization (Schneider & Swan, 1994; Schneider & Swan et al., 1997; Martindale, 1990; Culbertson &

Rosenfeld et al., 1992). Different authors view sexual harassment from different perspectives. In several previous studies one school of thought considers sexual harassment as a mean to fulfill unwanted or unwelcome sexual desires, likewise others believe that sexual harassment takes place in order to protect own social status when it seems to be endangered. For example a man sexually harasses a woman because he has a desire exert/display his dominance over her. If we define harassment in general terms, then it is a repeated or persistent action that pressures, irritates, terrifies, threatens, demeans or humiliates an individual (Alagappar & Marican, 2014; Einarsen, 2000; Adams & Bray, 1992; Brodsky, 1976). Schneider and Fitzgerald (1997) explained, harassment can be based on different preferences of individuals, for instance on the basis of sexual orientation or religion or even ethnicity etc. Harassment is sometimes confused with discrimination which thereby causing problems; however the definition of harassment is quite different than that of discrimination. Discrimination is when people scarcely get positive chances to grow due to different and unfair treatment, on the other hand, harassment includes both verbal and non-verbal threatening behaviours towards the recipient because of their racial/ethnic background, religious conviction, gender or sexual preference etc. Sexual harassment is a particular type of harassment that consists of such behaviours as asking for sexual benefits, to make annoying sexual advances and extra physical or verbal sexual action."

Literature Review

Organizational culture and Job satisfaction

Studies concerning Job Satisfaction aim to study the phenomenon from the perspective of compensation and the perceived fairness of the compensation and rewards, organizational advancement, empowerment through decision making, and involvement of management. Organizational Culture is the key factor in the determination of Job Satisfaction (Navaie-Waliser et al., 2004; McKinnon et al., 2003; Jiang & Klein, 1999; Taber, 1975). Organizational culture plays an acute role in ascertaining employee satisfaction (Arnold & Spell, 2006). Supportive organizational culture will help employees to grow personally and professionally and in return increases the level of job satisfaction (Chang & Lee, 2007; Mansoor & Tayib, 2010).

(Huang & Chi, 2004) reasoned that degree of job satisfaction with an organization will depend on its culture vis-à-vis the provision of ample encouragement and incentive to work harder, also help long term growth. A similar study by Tang (2006) also presented similar findings and conclusion.

Further studies by Johnson (2004); Chang and Lee (2007); Yousaf (1998); McKinnon et al. (1993); Arnold and Spell (2006); and Mansoor and Tayib (2010) reported aggressive direct association between Job Satisfaction and Organizational Culture.

Personality and Organizational culture

An organization's culture becomes the superlative umbrella which overlooks the organization in its entirety including the formal and informal verbal and non-verbal communication amongst the employees, the processes and procedures as well as the unwritten norms being exercised within the organization, and the extent of cumulative involvement of employees of all tiers in the decision making process in that organization (Graham & Nafukho, 2007).

Personality and Job satisfaction

A strong dependency has been identified of personality on an individual's perceived degree of job satisfaction since the early research studies (Hoppock, 1935; Fisher & Hanna, 1931). In 20th Century and even further researchers were studying the core reasons behind Job Satisfactions, the respondents' personalities were never really the focal point of the studies rather taken a static component of the studies (Arvey et al., 1989).

McCrae and John (1992) worked on big five traits, these traits can be used to broadly cover, decipher, and categorize the personality of any individual. These traits are used to work out the type personality in and HR based studies. The Big Five Personality Traits as discussed by McCrae and John and many other researchers are:

1. Agreeableness: Individuals that display the Agreeableness are generally always ready to help other whenever they are asked. They display friendliness, generosity, and the willingness to put the interest of others before theirs (Pervin & John, 2001).

2. Conscientiousness: Conscientious people are very alert what they want and are very vigilant of and clear about their goals and aspirations. They generally display a comparatively high level of intellect (Allen, 2000).

3. Extroversion: An Extrovert is a people's person. He will thrive in the attention of others around him. Extroverts display bundles of energy in their persona, talkativeness, positivity, enthusiasm and are willing to jump into demanding situations because they enjoy the action (Rentfrow et al., 2003).

4. Neuroticism: These individuals display negativity. Generally, neurotics will shy away from situations and let others take control, hence they reflect submissiveness. Neurotics will generally perceive any situation as a threat (Friedman & Schustack, 2003).

5. Openness to Experience: Individuals who display openness are the creative types. These individuals appreciate beauty, art, nature, and are quite cognizant of aesthetics and they are in touch with themselves (Rayckman, 2004).

Sexual harassment and Job satisfaction

Sexual Harassment became the number one culprit in a study by Willnes et al. (2007) it reduces level of job satisfaction which caused withdrawal from work and lowers ownership and reducing their levels of commitment. This would translate into loss of productivity for the organization and raise the level of absenteeism within it meaning higher costs and eventually reduced profitability.

Cortina et al. (2001) would argue that women generally are able to tolerate a greater amount of incivility as compared to men; however sexual harassment will affect both. Gruber (2003) say's consequences of sexual harassment are universal. The issue of sexual harassment has been amplified and pose a larger threat to companies and individuals than ever before (DeSouza & Solberg, 2003).

Organizational Culture and Sexual Harassment

The most common key terms that these researches used can be consolidated into a sentence: Sexual Harassment occurs when a member of one gender puts forth unsolicited advances of sexual (often offensive) nature, verbal or physical, at one or more members of the same or the opposite gender in a social setting where such advances are normally looked down upon (Huerta, Cortina, Pang, Torges, & Magley, 2006; Cortina & Wasti, 2005; Cortina, Swan, Fitzgerald, & Waldo, 1998; Gutek, 1985; Dansky & Kilpatrick, 1997).

Fitzgerald, Gelfand, and Drasgow (1995) discussed three distinct sides to sexual harassment in their Sexual Experiences Questionnaire (SEQ). The SEQ would gauge sexual harassment in three broad parameters; (1) Gender based harassment: where there is socially unacceptable sexual behaviour (verbal and physical) towards women; (2) Sexual Attention: Coming on to the victim sexually in ways that make them feel uncomfortable or even offended e.g. Uninvited physical contact, talking in way that has sexual insinuation etc. (3) Sexual Coercion: Using sex as a bribe or prerequisite for survival in the workplace.

In organizations, the inherent culture paves the way how different organizational events are accepted and owned by the members of that organization. Companies where the bosses rarely mingle with their subordinates will have a much harder time finding enthusiasm in those subordinates when the going gets tough (Schein, 2004; Rentsch, 1990; & Louis, 1980). Schneider highlights Organizational culture as a communal phenomenon evolving from the participants' beliefs and societal interactions (Trice & Beyer, 1993; Schneider, 1987), comprising of collective values, con joint considerations, belief patterns, and behavioural anticipations (Rousseau, 1990) that bond individuals within an organization with each other over time (Schein, 2004). Overtime this collective pool of the members' chunks of cultures take a form of its own and every new members who joins the organization add his/her own little share to this pool and is also influenced by the collective culture. This passing of the culture into the generations of the inductees in the organization as an effective way of coaching has been discussed by Schein (2004).

Organizational culture, with its attitude towards sexual harassment, is greatly influenced by the attitudes of the individuals within it towards sexual harassment. In simple words, if a majority of the employees in an organization come from cultures where certain actions or behaviours may not be considered as sexually offensive, or those actions are not curtailed in the strictest manner, then there is a high probability that their company has a lenient approach to sexual harassment even if the company has a formal harassment policy. On the other hand, if a majority of the members of that organization come from conservative backgrounds like Arabic countries, then the company will generally have a firm attitude towards sexual harassment (Martin & Siehl, 1983; Rose, 1988).

Company's collective culture is a holistic representation of the member's individual norms and beliefs systems, has led the researchers all over the globe to Sexual Harassment. This perspective helps a great deal is discerning why the degree of sexual harassment varies among organizations that otherwise appear similar (Hulin et al., 1996; Kauppinen-Toropainen & Gruber, 1993; Pryor et al., 1993).

As it happens, sometimes females would compromise and endure behaviours of their colleagues because their society has not empowered them enough to take a stand against such things. They take bear with such actions and behaviours, which otherwise they would refute because it offends or harasses them, as a requirement for taking that job. These women may not have many work alternatives in their society or that society may not empower them enough to take a stand against them.

In collective high-power-distant cultures, people are much more concerned with saving face and would, therefore, avoid direct communication strategies in response to sexual harassment, if at all possible, to preserve social harmony (Ino & Glicken, 2002). On the other hand, in low-power-distant and individualistic cultures, direct communication is preferred even if it threatens the relationship (Merkin & Ramadan, 2010).

Methodology

In this study, we will use organizational culture as an independent variable and job satisfaction as a dependent variable and sexual harassment and personality traits are two moderators. For the purpose of this study, the instrument developed by Rammstedt and John (2007) was used to determine the personality. The choice was made based on the shortness of the instrument since the questionnaire has to have further questions concerning the different personality traits. The questionnaire is based on only 10 items which describe the personality traits in a brief way to generate effective data collection which can help for the better analysis and findings. As personality traits consist of big five model so in late 1980s the Big Five inventory shaped (John, Donahue, & Kentle, 1991) as a very short tool. The instrument consist of this questionnaire has also been used in the previous research paper written by Beatrice and Oliver (2007) the journal of research in personality.

Other instrument selected for this research study is about the job satisfaction. There are many factors on the basis of which this questionnaire was selected those factors are; pay, top management, supervision, fellow workers and promotional opportunities. This questionnaire has been previously used by the Gilbert, Orville, Churchill, and Neil (1974) and purpose of its selection is because it was spread up to249 members in the industry out of which 74 % members completely filled and submitted their opinion then after the elimination of unnecessary elements which were not related to the job satisfaction or causing the biasness in the data collection, it was finalized by the researchers. The reliability of the whole data was measure through the alpha coefficient and its value was about 0.85.

Another important variable of this research study is sexual harassment. Sexual harassment consists of 3 main items gender harassment, sexual attention and sexual coercion and under each heading there are 5, 7 and 5 questions respectively. Researcher personally visited the sites continuously 5 days for the data collection and also mailed the questionnaire to the employees working in software companies. And researcher promised the employees that the given information will keep in secret and it will use purely for the purpose of research work. For this purpose researcher selected the instrument from the Michele, Louise, and Fritz research paper named as Measuring Sexual Harassment: Theoretical and Psychometric Advances. The Alpha reliability of this questionnaire was 0.89.

In this research study organizational culture is used as an independent variable for the purpose of data collection researcher used the questionnaire generated by Srite & Karahanna in 2006. This questionnaire was previously used in order to identify the culture prevail in an organization by spreading and floating it in the different industries. The reliability test for this instrument produced results as IC =.79; PD=.74; UA=.80; MS=.92.

Participants selected for the study were the employees working in software companies running their operations in Rawalpindi and Islamabad. From the total of 230 software development houses only 20 were chosen in Islamabad and form the total of 218 software working in Rawalpindi we only selected 10 companies for the purpose of collection of data and filling of questionnaire. The total sample size for this research paper is 300 participants which include 130 female and 170 male respondents. All the respondents who took part in the filling of questionnaire were between the ages of 20 to 45. Method used for the selection of the sample is convenience sampling. This is a non-probability sampling technique where participants are easily accessible and available closer to a researcher. The selection of the participant is purely on the bases of easiest approach of researcher and due to the limited time and lack of availability of financial resources.

In all the research techniques every researcher would like to test the whole population but most of the times the population size is too much large that it's not possible to generate response from every single of them. That's why most of the researchers depend on different sampling methods and convenience sampling is one of the very popular sampling methods to use. Because time and cost are very important factor for any researcher so this sampling method is very fast in term of time and less expensive as compare to other sampling techniques.

Research Questionnaire for this study is divided into 2 parts. In first part I gathered the demographics of the participants which include the age,gender, job experience,and qualification. Then there is 2nd part in the questionnaire related to research variables (organizational culture, job satisfaction and personality) where I used 5 scale measures from 1 to 5. Strongly agree holds the value of 1, agree as 2, 3 as neutral, and 4 as disagree and similarly at the end strongly disagree as 5. The last portion of the questionnaire was about the sexual harassment where I used the 5 scale measure for the data collection; here the scale 1 indicates to " never", 2 indicates the "Once or twice", 3 indicates "sometimes", 4 holds the value of "often", and at last 5 indicates the "many times".

Analysis and interpretation

First of all in the analysis I will present the different variables and the distribution of number of items used under these variables in the survey questionnaire.

There are total 7 items in the questionnaire related to the organizational culture. Which I used to take an opinion from participants in order to perceive what kind of organizational culture prevails in the software houses, 10 items are dedicated to the job satisfaction in the questionnaire which will be helpful in order to evaluate that how many employees are satisfied from their job.

For the evaluation of sexual harassment there are 20 items which will indicate the degree of sexual harassment prevails in the software houses and at the end there are also 10 items for the personality traits. Consequently if we add all the items included in the questionnaire the total sum of these items is 47.

Table 1. *Reliability Analysis*

Variable	Cronbach's Alpha	No of items
Organizational Culture	0.721	7
Job Satisfaction	0.885	10
Sexual Harassment	0.720	20
Personality Traits	0.885	10
Total	0.929	47

Once the data has been collected initially from the sample of 30 employees working in software houses situated in the twin cities Rawalpindi and Islamabad, researcher conducted a pilot testing on the collected data. The questionnaires received during the pilot testing were completely filled by 13 female and 17 male employees. Participants who took part in the completion of the questionnaire out of total 30, all the participants were between the ages of 20 to 45. During the pilot testing researcher conducted a cronbach's alpha test which checks the internal consistence reliability of the data. We found the data collected for organizational culture is 72.1% reliable and the data collected for job satisfaction is highly reliable as its reliability value is 88.5%.

The results of pilot testing for the sexual harassment data analyzed by the researcher and he found the data very highly reliable because the calculation showed the results of cronbach's alpha value is 72.1%, which indicates that the data is reliable and real.

The reliability rest for personality showed the alpha value is 88.5% in this research study. Researcher used big five model for personality questionnaire which consist of 10 questions. This is the very precise and well-structured questionnaire to evaluate the personality traits of participants.

Table 2. *Statistics*

	OC	JS	SH	PT
Mean	3.8264	3.8288	3.8768	3.8288
Std. Deviation	.48451	.50761	.30790	.50761
Minimum	1.29	1.80	3.05	1.80
Maximum	5.00	5.00	4.55	5.00

Table 3.*Correlation Analysis*

	OC	JS	SH	PT
OC	1			
JS	.613**	1		
SH	.522**	.623**	1	
PT	.613**	1.000**	.623**	1

**. Correlation is significant at the 0.01 level (2-tailed).

In order to notice the relationship between variables I computed and evaluated the correlation for variables presented in Table 3. The coefficient calculations show significantly positive correlation relation between all the variables. If we look back at the first hypothesis which states that there is a positive correlation between the organizational culture and job satisfaction, while keeping this hypothesis in view if we take a glance on the given table the correlation value for Organizational culture and job satisfactionapprove the first hypostasis andit indicates the strongpositive correlation between the two variables and value reached at the level of 0.613** which predicts that greater number of respondents believe that where power distance in an organizational culture is low between employees and top management the rate of job satisfaction will be high. If we calculate the same for organizational culture and sexual harassment the correlation value is 0.522** which is an indication of a positive strong relationship between Organization culture and Sexual harassment. And the value of correlation between Organizational culture and Personality traits touched the value of 0.613** which is an indication of strong positive relationship between the variables.

The above table report the relationship between the between Job satisfaction and Sexual harassment the correlation values lie on the level of 0.623** which is showing strong positive relationship between both variables. The relationship between Job satisfaction and Personal traits is on higher side as it has a perfect positive correlation value of 1.00. At the end the of this table there is a correlation value of Sexual harassment and Personal traits which is also showing strong positive relationship level of 0.623 variables.

Table 4.*Regression for Organizational Culture and Job Satisfaction*

Model	R^2	$\triangle R^2$	B	T	Sig.
Organizational Culture	.376	.376	.613	12.803	.000

Dependent Variable: Job Satisfaction

This above given table report the regression analysis value of organizational culture and job satisfaction. Regression analysis indicates that how much an independent variable can bring change into the dependent variable. This table indicates that the value of R- square for OC and JS is 0.376 which means OC does change JS.

Table 5.*Moderation one*
Moderated Regression for Organizational Culture and Job Satisfaction, moderate Sexual Harassment

Model		R^2	$\triangle R^2$	β	T	Sig.
	Organizational Culture	.376	.376	.613	12.803	.000
	Interaction Term one OC*SH	.484	.108	.819	7.531	.000

Dependent Variable: Job Satisfaction

This table reports the collective impact of first moderator that is sexual harassment with independent variable organizational culture on the job satisfaction. We can notice that with the low sexual harassment and low power distance in organizational culture have significant impacts on the job satisfaction of the employees. Although there is a very less change in the R-square value has noticed which is 0.108.

Table 6.*Moderation two*
Moderated Regression for Organizational Culture and Job Satisfaction , Moderate Personality Traits

Model	R2	△R2	β	T	Sig.
Organizational Culture	.376	.376	.613	12.803	.000
Interaction Term Two OC*PT	.937	.561	1.497	48.921	.000

Dependent Variable: Job Satisfaction

This table reports the collective impact of second moderator that is personality traits with independent variable organizational culture on the job satisfaction. We can notice that with the personality traits and low power distance in organizational culture have significant impacts on the job satisfaction of the employees. And the results show that the personality traits have very strong impact on job satisfaction as its R-square value has very high value of .937.

Findings and Results

After going through this research work I would say that results of this work suggest a relationship between organizational culture, sexual harassment and job satisfaction may differ from the relationships between organizational culture, personality traits and job satisfaction. Because the moderating impact of sexual harassment is less than the moderating impact of personality traits on the relationship of organizational culture and job satisfaction. This may be due to the gender of participants as the greater numbers of respondents were male so the things which consider as a sexual harassment for females may not be having same meanings of sexually harassment for a male.

As we know that Pakistan is a high collectivist society and people like to work together in teams rather than individually except some cases. And in the culture of Pakistan people don't want to talk about sex openly especially when they are victims. The results show that the culture prevails in the software houses working in Rawalpindi and Islamabad prevail low power distance in their culture and employees have authority to share their views with seniors and this culture have less effect of the sexual harassment, but there is a definite impact of sexual harassment on the relationship organizational culture and job satisfaction but not significantly high.

But on the other hand personality traits have a strong moderating impact on the relationship of organizational culture and job satisfaction. This is because every individual possesses unique and different personality traits from other and personality of individuals play a vital role in the job satisfaction.

Limitations and Recommendations

There are number of limitations which can be point out but one of the most important limitations of this research study was the sample size, there are almost 500 small, medium and large software houses running their operations with in twin cities but I selected only 30 software houses between them for the purpose of this research work and still a large number of populations left. So one can expand his/her sample and population size for the future works on this topic. Secondly I noticed the impact of both moderators on the relationship of organizational culture and job satisfaction separately due to limited time span. For further studies in future I will recommend that one should use both moderators together and then conduct this study. This study can be carry forward in number of ways for future work like someone can use different dimensions of the organizational culture or different personality traits to evaluate their finding and results. Lastly I would recommend that this research work can be conducted only on the female respondent and different industries working in Pakistan.

Bibliography

Adams, A., & Bray, F. (1992). Holding out against workplace harassment and bullying. *Personnel management, 24*(10), 48-52.

Agbényiga, D. L. (2011). Organizational culture-performance link in the human services setting. *Administration in Social Work, 35*(5), 532-547.

Alvesson, M. (2012). Understanding organizational culture. *Thousand Oaks, CA; Sage Publications.*

Arnold, T., & Spell, C. S. (2006). The relationship between justice and benefits satisfaction. *Journal of Business and Psychology, 20*(4), 599-620.

Brodsky, C. M. (1976). The harassed worker. *DC Heath & Co.*

Chang, S. C., & Lee, M. S. (2007). A study on relationship among leadership, organizational culture, the operation of learning organization and employees' job satisfaction. *The learning organization, 14*(2), 155-185.

Cortina, L. M., & Wasti, S. A. (2005). Profiles in coping: responses to sexual harassment across persons, organizations, and cultures. *Journal of Applied Psychology, 90*(1), 182.

Culbertson, A. L., Rosenfeld, P., Kewley, S. B., & Magnusson, P. (1992). *Assessment of sexual harassment in the Navy: Results of the 1989 Navy-wide survey* (No. NPRDC-TR-92-11). NAVY PERSONNEL RESEARCH AND DEVELOPMENT CENTER SAN DIEGO CA.

Drago, R., & Wooden, M. (1992). The determinants of labor absence: Economic factors and workgroup norms across countries. *Industrial & Labor Relations Review, 45*(4), 764-778.

Einarsen, S. (2000). Harassment and bullying at work: A review of the Scandinavian approach. *Aggression and violent behavior, 5*(4), 379-401.

Fineran, S. (2002). Sexual harassment between same-sex peers: Intersection of mental health, homophobia, and sexual violence in schools. *Social work, 47*(1), 65-74.

Glomb, T. M., Richman, W. L., Hulin, C. L., Drasgow, F., Schneider, K. T., & Fitzgerald, L. F. (1997). Ambient sexual harassment: An integrated model of antecedents and consequences. *Organizational Behavior and Human Decision Processes, 71*(3), 309-328.

Green, F. (2010). Well-being, job satisfaction and labour mobility. *Labour Economics, 17*(6), 897-903.

Hamermesh, D. S. (1999). The changing distribution of job satisfaction (No. 7332). *National bureau of economic research.*

Han, K., Trinkoff, A. M., Storr, C. L., Lerner, N., Johantgen, M., & Gartrell, K. (2014). Associations between state regulations, training length, perceived quality and job satisfaction among certified nursing assistants: Cross-sectional secondary data analysis. *International journal of nursing studies, 51*(8), 1135-1141.

Herrera, A., Pina, A., Herrera, M. C., & Expósito, F. (2014). ¿ Mito o realidad? Influencia de la ideología en la percepción social del acoso sexual. *Anuario de Psicología Jurídica, 24*(1), 1-7.

Herrera, M. C., Herrera, A., & Expósito, F. (2014). Stop Harassment! Men's reactions to victims' confrontation. *The European journal of psychology applied to legal context, 6*(2), 45-52.

Herzberg, F., Mausnes, B., Peterson, R. O., & Capwell, D. F. (1957). Job attitudes; review of research and opinion.

Hofstede, G. (1984). Culture's consequences: International differences in work-related values. *Thousnds Oaks, CA; Sage Publications, 5.*

Hofstede, G. (1984). Cultural dimensions in management and planning. *Asia Pacific journal of management, 1*(2), 81-99.

Huang, Y. S., & Chi, T. C. (2004). Internal marketing, organizational culture, job satisfaction, and operational performance: A study on international-class tourist hotels in Taiwan. *Journal of Management and System, 11*(4), 485-507.

Jiang, J. J., & Klein, G. (1999). Supervisor support and career anchor impact on the career satisfaction of the entry-level information systems professional. *Journal of management information systems, 16*(3), 219-240.

Kimmel, M. S., & Aronson, A. (2003). Men and masculinities: A social, cultural, and historical encyclopedia. *ABC-CLIO.*

Locke, E. A. (1976). The nature and causes of job satisfaction. *Handbook of industrial and organizational psychology, 1*, 1297-1343.

Mansor, M., & Tayib, D. (2010). An empirical examination of organisational culture, job stress and job satisfaction within the indirect tax administration in Malaysia. *International Journal of Business and Social Science, 1*(1).

Martin, J. (1992). Cultures in organizations: Three perspectives. *Oxford University Press.*

Martin, J. (1995). The organizational culture war games: a struggle for intellectual dominance. *Research paper, GSOB.*

Martindale, M. (1990). Sexual harassment in the military: 1988. *Defense Manpower Data Center.*

McKinnon, J. L., Harrison, G. L., Chow, C. W., & Wu, A. (2003). Organizational culture: Association with commitment, job satisfaction, propensity to remain, and information sharing in Taiwan. *International Journal of Business Studies, 11*(1), 25.

Macintosh, G., & Krush, M. (2014). Examining the link between salesperson networking behaviors, job satisfaction, and organizational commitment: Does gender matter?. *Journal of Business Research, 67*(12), 2628-2635.

Morse, N. C. (1953). Satisfactions in the white-collar job. *Uuniversity of Michigan Survey Research Centre.*

Navaie-Waliser, M., Lincoln, P., Karuturi, M., & Reisch, K. (2004). Increasing job satisfaction, quality care, and coordination in home health. *Journal of Nursing Administration, 34*(2), 88-92.

Patterson, M., Warr, P., & West, M. (2004). Organizational climate and company productivity: The role of employee affect and employee level. *Journal of Occupational and Organizational Psychology, 77*(2), 193-216.

Rutherford, B. N., Marshall, G. W., & Park, J. (2014). The moderating effects of gender and inside versus outside sales role in multifaceted job satisfaction. *Journal of Business Research, 67*(9), 1850-1856.

Schneider, K. T., Swan, S., & Fitzgerald, L. F. (1994). Job-related, psychological, and health-related outcomes of sexual harassment. In *Symposium on Sexual Harassment at the Society of Industrial and Organizational Psychology, Nashville, TN.*

Schneider, K. T., Swan, S., & Fitzgerald, L. F. (1997). Job-related and psychological effects of sexual harassment in the workplace: empirical evidence from two organizations. *Journal of Applied Psychology, 82*(3), 401.

Sempane, M. E., Rieger, H., & Roodt, G. (2002). Job satisfaction in relation to organisational culture. *SA Journal of industrial Psychology, 28*(2).

Tang, Y. T. (2006). Transformational leadership, job motivation, and employees' innovational behavior. *Journal of Human Resource Management, 6*(4), 47-66.

Wang, C. W., Ho, R. T., Chan, C. L., & Tse, S. (2015). Exploring personality characteristics of Chinese adolescents with internet-related addictive behaviors: Trait differences for gaming addiction and social networking addiction. *Addictive behaviors, 42*, 32-35.

Williams, N. J., & Glisson, C. (2014). Testing a theory of organizational culture, climate and youth outcomes in child welfare systems: A United States national study. *Child abuse & neglect, 38*(4), 757-767.

Wiltink, S., Nelson, B., Velthorst, E., Wigman, J. T. W., Lin, A., Baksheev, G., & Yung, A. R. (2015). The relationship between personality traits and psychotic like experiences in a large non-clinical adolescent sample. *Personality and individual differences, 73*, 92-97.

Yousef, D. A. (1998). Satisfaction with job security as a predictor of organizational commitment and job performance in a multicultural environment. *International Journal of Manpower, 19*(3), 184-194.

Cognitive Dissonance and Market Liquidation: A Case of Pakistan Stock Exchange (PSE)

*Muhammad Awais

*Dr. Syed Zulfiqar Ali Shah

Abstract

This paper aims to investigate the effect of cognitive dissonance behavior of investors on the stock returns. The study investigates that how such behavior plays a role in the liquidation of Pakistan Stock Exchange (PSE). The simple regression model was used to identify the significant impact of Cognitive dissonance on market returns. This study facilitates the investors and decision makers to make effective and efficient decisions.

Keywords: Cognitive Dissonance, Market Liquidation

Introduction

Most of the time investors in the market don't want to listen to any adverse thought towards their investment decisions, because they just want to take decisions on the basis of their own thoughts. Cognitive dissonance is basically the feeling of discomfort in one's mind, which usually generates when any new information about a specific thing would contradict a person's past beliefs about such notion, or when one holds two different types of conflicting thoughts in one's mind. This concept is based on the "theory of cognitive dissonance" which was initially proposed by Festinger (1957) who states thatan inner drive holds all our attitudes and beliefs in harmony and avoid disharmony. It basically occurs on the basis of biased behavior, which is a very common problem that is usually present in all types of people. At the point when a few speculators hold levered portfolios by taking part in edge getting, rehashed rounds of exchanging can bring about business sector uncertainty (Chowdhry & Nanda, 1998). Any type of biases can be the cause of so many problems and issues in so many different situations or occasions. In the situation of this particular bias, people may feel the tension and face a conflict between two different opinions or thoughts. It usually occurs, when an individual's behaviors conflict with his/her beliefs. By reducing the conflicting beliefs, we can eliminate this bias or problem. This bias is concerned with the relationship among different cognitions. The situation of dissonant arises when cognition oppositely responds to another. It also arises in the situation where decisions have to be made without any sort of R&D. Efficient R&D can increase the probability of return and reduce biased behavior regarding investment (Ho, Tjahjapranata, & Yap, 2006).

*Lecturer, Foundation University Rawalpindi Campus, Pakistan

**Chairman Research, International Islamic University, Islamabad, Pakistan

The market liquidation means the selling of securities at high volume at low or decreasing prices. It is a situation in which a large number of investors leave the market or sell off their securities in that market out of insecurity. It occurs when any company goes bankrupt, creditors of the company are paid by the selling off its assets of that company and the remaining amount of money is given to the shareholders of the company when any type of transaction which offsets a previously established or maintained position and when the company becomes insolvent.

If the person B follows the cognitive element present in the personality of person A, it is known as consonant, and if he does not follow than it is dissonant and from here the problem of a cognitive dissonance arises (Sadaomi, 1968). This is very much true that the presence of cognitive element in the personality of an individual plays a very important role in the market, but these elements can also be beneficial or harmful when individuals are brand conscious. Joel and Michael (1972) ascertained that the behavior of brand conscious and brand loyal people will be very consistent towards their brands and the way they see and evaluate their brand. At the time of reevaluation, the restructuring / refreshing of consumer's beliefs are important and it is also the desire of a consumer in order to be saved from ethical dilemmas.

By the presence of this bias, markets can be liquidated as it can also be very harmful to different types of people like: an individual and group investors, organizations, stock markets, and the most important one are our economic conditions because the stock market usually represents the economy of the country on the basis of the performances of listed well-known companies of the country. People with such types of biases, hold the losing securities for a long period of time and don't want to learn anything for the time being as market changes because they don't want to incorporate any type of information which can contradict with his / her belief.

The objective of this study is to identify as well as analyze the cognitive biases and instability of preferences in the portfolio choices of retail investors, to analyze the individual irrationality and an aggregate outcome, to demonstrate the cognitive consequences of brand loyalty and the repurchasing behavior of investors on the basis of brands, and to analyze the human psychology.

On the basis of this study, we can analyze the factors which affect the condition of market liquidation. It helps the investors to reduce their level of discomfort by using different techniques and eliminate the problem of dissonant in order to invest in an efficient way to achieve the maximum profit's probability. And it also helps us to reduce the liquidation condition of the market and makes the market efficient so that it would be beneficial for the stock market, investors, and organizations as well. It will help us to stabilize the market.

The study will help determine the cognitive limitations and how market liquidates. The findings of the study will enable to identify the limitations of human minds which affect market liquidity. The study of variation and conflicting logic developed in the minds will help find significantly influencing factors.

Literature Review

We have an inner drive to hold all our attitudes and beliefs in harmony and avoid disharmony referred to as "cognitive dissonance theory" by Festinger's (1957). In simple words, a situation in which past beliefs which are developed on the basis of any past experience that contradicts with any new information, then an uncomfortable situation creates in a mind which is known as cognitive dissonance. Joan (1967) talks about the principal role of cognitive dissonance on the basis of the theory of Festinger and finds that the situation of dissonance will motivate people to achieve the situation of the consonant.

In the stock market, the investment climate and investor's financial stability are variables on the basis of which the relationship between investor and the stock market would be stronger or weaker. The rules of the investment make no distinction between the types of the capital (Jon & John, 2002).

The first and foremost source of resistance to change for any cognitive element is the responsiveness of such elements to reality. The main dilemma of the market is that majority of investors are usually unaware of the entity in which they are investing (Welker & Wood, 2011). Brand loyalty plays a very important role in success or failure of the market by evaluating the investment company but purchasing and repurchasing patterns of individuals on the basis of brand loyalty would also play a very important role in market liquidation and its success or failure. Brand value is very much like an onion. It has layers and a core. The core is the user who will stick with you until the very end. The buyer collects, analyzes, interprets, and evaluates the information regarding different alternatives but chooses his/her most preferable alternative which will satisfy their self-interests (Robert, 1969). As of the post-choice dissonance, an investor would prefer to select the investment product which will increase the repurchasing probability.

The existence of dissonance, being psychologically uncomfortable, will motivate the person to try to reduce the dissonance and achieve consonance. When high financial leverage is present, investors instead expect smaller firms to be able to appropriate value from their R&D capital better than the larger firms (Yew, Mira, & Chee, 2006).

Peter (1990) conducted a survey on economics and psychology which helps in generating gains or profits and also helps us in solving problems regarding investments. Psychology was unable to play an efficient role in the position where the probability of bounded rationality is high. Psychologically, the situation will be uncomfortable where the dissonance exists.

The human psychology is also a very important factor for the market but the attitude of individuals is the base of all types of investment.

According to Choi (2006), the fund managers can generate an excessive amount of returns in order to fulfill their transaction cost and other expenses. The situation, where the collaboration of social psychology and public opinion exists; would be the most favorable situation in order to bear fruitful results (Nehemia, 1963).

The positive attitude of individuals towards investment makes the market successful and also helps the market to reduce liquidation but there are so many kinds of individuals in the market who use different kinds of investment strategies in the market. There are really only three types of people: those who make things happen, those who watch things happen, and those who ask, what happened?

Christopher and Judith (1999) identified the effect of sentiment on prices which is bounded by the marginal transactions cost that would be incurred by an arbitrageur attempting to profit by trading against sentiment. There are so many kinds of investors in the market some like investing through mutual funds but some like to make decisions on the basis of analyzing the past and present information about the market (Zheng, 1999). The majority of investors focus on the short-term future performances on the basis of the selection of a variety of products that provide efficient short-term benefits.

The several types of investment decisions play an important role in returns of the stock market but the rationality of market is the base for these types of decisions. One is neither wrong nor right because the person around one disagrees with one's opinions and beliefs. One would be right because one's reasoning and data would be right. Alexander, Vikram, and Rajdeep (2006) conducted a survey on hot markets, IPO pricing, and investor sentiments which isolate that the presence of a class of irrationally exuberant investors coupled with short sale restrictions, lead to long-run under performance.

The investors think and act that on the basis of their personal preference or judgment they can maximize their utility (Mark, 2000). He ascertained that maximally rational, rational, and minimally rational markets and all these types of market conditions are based on the type of investors present in the market because investors make the markets.

Market rationality can be the cause for market efficiency but the individual's irrationality can affect the market in so many ways as well. Whenever irrationality exists in individuals they will often learn from their faults (Ernst & Jean-Robert, 2005). The aggregate effects which exist under the decision of multiple players can be the result of few amount of irrationality of individuals.

Individual's irrationality is an essential item that plays a very important role in market liquidation but the cognitive dissonance bias may affect the thinking, behavior, and decisions of the individuals. Adam (2010) studied in the light of cognitive dissonance theory that when the events of the real world have disconfirmed beliefs then they will create the situation of psychological discomfort. The financial crisis occurs when the rules, regulations, and policies are not clear in the financial sector.

Data and Methodology

We took the primary data with the help of 160 questionnaires from investors at ISE tower, on the basis of which we can identify that how the cognitive dissonance behavior of individuals can be the cause for market liquidation. In this study, the analysis will be based on regression and correlation results.

The standardized regression term is:

$\tilde{Y} = \beta 0 + \beta 1\,(CD) + \varepsilon$ Eq. (1)

Results and Discussions

First, measuring the reliability of this data in order to confirm that either this data is significant for our results or not.

Table 1. *Reliability of variables*

Variables	Reliability
ML	.723**
CD	.562*

Note. *p>.5, **p>.7, ***p>.9

The results of reliability show that the validity of the responses of market liquidation is 72.3% which is very good and acceptable measure, and the validity of the responses of cognitive dissonance is 56.2% which is also the good result but shows little dispersion in the responses of people.

Table 2. *Degree of association between variables*

Variables	Correlation	Sig
CD-ML	.173	.094*

Note. ***P<.01, **p>.01 but p<.05, *p>.05 but p<.1

The results of correlation analysis shows that the dependent variable “market liquidation” is positively correlated with the independent variable “cognitive dissonance” at the value of .173 which is moderately significant at .094, because the value would be highly significant at p<.01, would be significant at p>.01 but p<.05, moderately significant at p>.05 but p<.1, and lower significant at p>.1.

Table 3. *Regression between variables*

R-Square	0.033
Adjusted R-Square	0.031
Standard Error	0.59843
Number of Observations	160
F-stat	3.113
Significance	0.091*

Note. *p<.1, **p<.05, ***p<.01

The value of R^2 which is .033 shows that 3.3% variation in the dependent variable "market liquidation" is due to the variation in the independent variable "cognitive dissonance". F-Statistics are carried out to find out the overall significance of the model used. As the value of F-stat is 3.113 at the significance level of .091 which shows that the model is the moderately fit. The β shows the direction of influence of an independent variable on the dependent variable by some amount.

Table 4. *Regression Results*

Variables	Standardized β	t -stat	sig
Constant		2.546	0.093*
CD	.173	1.960	0.087*

Note. *p<.1, **p<.05, ***p<.01

According to results of ANOVA, the dependent is significant as there are so many other factors which affects the market movements and will ultimately leads to the liquidation phenomenon. The estimated results suggest that if there is 1 unit change in CD, there will be about less than half of the unit (.173) change in ML.

Conclusions

This result will be very helpful for decision makers or investors in order to make the decision at right time in order to get good returns and it should also be beneficial for the returns of the stock market. On the basis of the results of correlation, it is proved that there is a degree of association exists between independent and dependent variables. The results show that market liquidation is positively associated with cognitive dissonance, means that when cognitive dissonance behavior will increase then the chances of market liquidation will also increase.

Future research should be conducted on the basis of mediating variables because this research is just limited to the extent of independent variables.

References

Avery, C., & Chevalier, J. (1999).Identifying Investor Sentiment from Price Paths: The Case of Football Betting. *The Journal of Business, 72*(4), 493-521.

Choi, Y. K. (2006). Relative Portfolio Performance Evaluation and Incentive Structure. *The Journal of Business, 79*(2), 903-921.

Chowdhry, B., & Nanda, V. (1998). Leverage and Market Stability: The Role of Margin Rules and Price Limits. *The Journal of Business, 71*(2), 179-210.

Cohen, J. B., & Houston, M. J. (1972). Cognitive Consequences of Brand Loyalty. *Journal of Marketing Research, 9*(1), 97-99.

Earl, P. E. (1990). Economics and Psychology: A Survey. *The Economic Journal, 100*(402), 718-755.

Egner, R. J. (1967). The Principal's Role: Cognitive Dissonance. *The Elementary School Journal, 67*(5), 276-279.

Erickson, J. D., & Gowdy, J. M. (2002). The Strange Economics of Sustainability. *Bio-Science, 52*(3), 212.

Fehr, E., & Tyran, J. R. (2005). Individual Irrationality and Aggregate Outcomes. *Journal of Economic Perspective, 19*(4), 43–66.

Festinger, L. (1957). A Theory of Cognitive Dissonance. *Stanford, CA: Stanford University Press.*

Hayes, A. F., & Matthes, J. (2009). Computational procedures for probing interactions in OLS and logistic regression: SPSS and SAS implementations. *Behavior Research Methods, 41*, 924-936.

Ho, Y. K., Tjahjapranata, M., & Yap, C. M. (2006). Size, Leverage, Concentration, and R&D Investment in Generating Growth Opportunities. *The Journal of Business, 79*(2), 851-876.

Jordan, N. (1963). Cognitive Balance, Cognitive Organization, and Attitude Change: A CRITIQUE. *Public Opinion Quarterly, 27*(1), 123-137.

Kessler, A. (2010). Cognitive dissonance, the Global Financial Crisis and the discipline of economics. *Real-world economics review, 54.*

Ljungqvist, A., Nanda, N., & Singh, R. (2006). Hot Markets, Investor Sentiment, and IPO Pricing. *The Journal of Business, 79*(4), 1667-1702.

Mittelstaedt, R. (1969). A Dissonance Approach to Repeat Purchasing Behavior. *Journal of Marketing Research, 6*(4), 444-446.

Oshikawa, S. (1968). The Theory of Cognitive Dissonance and Experimental Research. *Journal of Marketing Research, 5*(4), 429-430.

Rubinstein, M. (2000). Rational Markets: Yes or No? The Affirmative Case. *University of California at Berkeley.* Working Paper.

Welker, M., & Wood, D. (2011). Shareholder activism and alienation. *Current Anthropology, 52*(S3).

Zheng, L. (1999). Is Money Smart? A Study of Mutual Fund Investors' Fund Selection Ability. *The Journal of Finance, 54*(3), 901-933.

Equities as an Effective Hedge against Inflation: Empirical Evidence from Pakistan

*Afsar Ali Khan

**Muhammad Awais

***Haussaun A. Syed

*Muhammad Fayaz

Abstract

Inflation stance of world economy has change significantly and many of the investors now believe that there may be further spike in inflation in medium term. Capital markets serve as a medium to help mobiles the funds from one hand to another and aid in production of more goods and services. Due to political instability, spiking inflation and uncertain climate due to war on terrorism and other security issues, financial markets are not being able to get investors' trust resulting in lack of investment. Inflation which is measured by consumer price index (CPI) shows the overall upward movement in prices of goods and services. The rising prices in response to general inflation can protect investors by increasing the value of stocks in the equity market without affecting their real return. Pakistani economy largely remained impervious to the global financial crisis due to lower exposures to international finance faced multifaceted challenges on external and internal fronts mainly campaign against terrorism, unstable law and order situation, lingering energy shortages and non-materialization of external inflows. This work is limited to developed economies and less work has been done in the developing economies. In this way; this study will contribute a valuable insight regarding this relationship in the Pakistani context.

Key Words: Equities, Hedging, Inflation, Investors, Capital Markets, Political Instability

Introduction

Global financial crisis of 2007-2008 affected the confidence of international markets and institutions which in turn retarded the overall balance of payments across the world and economic developments. These crises felt to developing countries at the times when they were already having slower growth in their economies resulting in sluggish process of investments in good and service production and repercussion on process of investment and consumer markets.

*Ph.D Scholar, Department of Management Sciences, National University of Modern Languages (NUML), Islamabad, Pakistan

**Ph.D. Scholar, Iqra University Islamabad Campus, Pakistan

***Masters of Business Economics, Wilfrid Laurier University, Canada

This together with hike in oil and commodity prices led to decline in aggregate demand and raised inflation the world over. Resilience of Pakistani economy has been tested several times by one crisis after another. As Pakistan was experiencing war on terrorism and political instability, the effect was felt severely that in August 2008, Consumer Price Index moved to a record percentage of 25.8.

Additionally, the unprecedented calamity of floods in 2010 and torrential rain in Sind in 2011 contributed further stress on economy. Economic growth showed a decline during some past year. Budget deficit is stimulating a further decline in economic growth and boosting in inflation. According to the Annual Report of State Bank of Pakistan 2011, fiscal position of the FY11 turned the deficit to 6.6% of GDP while the target of deficit was set to be 4% of GDP. An increase of 1% in budget deficit brings 6-7 percent inflation in developing economies, Agha and Khan (2006).

A premium of inflation is added by the investors in real rate of returns when they base their required returns. It affects the attitude of investors in making the decision in a period of inflation, requiring more premiums on the equities, leaving behind the less investment in risky securities and more investments in inflation free securities for example in real assets (Martein 1978). According to Fischer (2011), during the period of higher inflation, investors tend to invest in fixed securities and get risk averse during investment process. Inflation creates uncertainty, decreases the value of money, and ultimately affects investment causing slowdown of economic activity. People tend to purchase stocks, precious metal, foreign currency and other durable assets to hedge against inflation. The theory suggests that stock returns should be positively related to the expected economic activity. The relation between stock returns and inflation suggests that investment in equity markets can act as a good hedge against inflation if the revenue and earnings of a company grow over time. This relationship is consistent with Fisher (1930) theory which asserts that a fully perceived change in inflation would be reflected through a rise in the nominal interest rates. That is, stock returns and inflation move in the same direction, in the long run. But in the late 1970's the relation between inflation are found significantly negative. For example, Schwert (1981) examined a negative relation between inflation and stock market.

The relationship between stock market returns and inflation has been subject to the extensive research especially in developed countries (Gerrit & Yace, 1999). This study also gains popularity among the researchers in the emerging markets after the back to back financial crises which results in high inflation. There are always risks associated with financial investment in any country. Stock market is a place in which there is no exception of risk for any investor. Investors always want to minimize the risk of their investment while gaining profit.

The biggest risk which is associated with the investment is mostly the rise in inflation, which results as the decrease in the purchasing power of any asset. Once the trend of equity market is known to investors it becomes very easy to speculate the market. The aim of this study is to examine the impact of inflation on the stock market returns.

This study is significant for the investor who have fears to invest in the capital markets prevailed by high inflation. This study for the first time analyze the hedging ability of equities sector wise which will give the investors the information that which sector provide hedging against inflation. This study additionally used for the first time return on equity as measure of equity return to check the hedging ability of stocks against inflation. For this purpose this study took a long data period from 1975 to 2010 to examine the relationship between inflation and equity returns.

The purpose of the study is to investigate the hedging ability of common stocks against inflation. For this purpose this study will investigate the relationship between inflation and stock returns by using the market returns and accounting returns as proxies of stocks returns sectors wise.

Literature Review

Fisher's (1930) hypothesis states that expected rate of return is composed of real return plus expected rate of inflation. He indicated that there should be one to one relationship between expected inflation and nominal interest rates. He further stated that the real interest rates are independent from the changes in the expected inflation because the real interest rate is determined by the real factors. This is called Fisher effect or hypotheses. Generalizing this hypotheses to common stocks we can say that increase in inflation will result in the increase in the prices of stocks in the nominal form and has no effect on the stocks real value. Bodie (1976) supported this view and said that common stock are hedged against inflation because they have claim on the real asset therefore any change in the price level will not affect the common stock real returns. This means that earnings will increase with the inflation rate and the real return of equities will remain unchanged in long run. But he found out the negative relation of real return on equities to both unanticipated and anticipated inflation. He concluded that investors must sell short the stocks to protect him against inflation.

These general arguments help the investors to consider a positive relationship between the inflation and stock returns. But empirically evidence is totally mixed and the literature is not reached on any common consciences. The empirical findings of stock market returns and inflation relationship could be divided into three categories.

1) Positive relationship between inflation and stock returns which supports the Generalized Fisher hypotheses. Most of them support the Generalized Fisher hypotheses in long run [for example, (Firth, 1979; Boudoukh & Richardson, 1993; Spyrou, 2004; Rapach, 2002; Horobet & Dumitrescu, 2009; Anari & kolari, 2001; Elsharif, 2010; Adam & Frimpong, 2010; Eita, 2012; Luintal & Pyudyal, 2006; Kakilli et al., 2011; Schotman & Schweitzer, 2000)].

2) Negative relationship between inflation and stock returns which contradicts the Generalized Fisher Hypothesis for example, (Fama & Schwert, 1977; Fama, 1981; Reilly, 1997; Engsted & Tanggaard, 2000; Schwert, 1981; Loannides et al., 2002; Geetha et al., 2011; Wei, 2007; Shanmugam & Misra, 2008; Francis & Tewari, 2011; Amihud,1996)].

3) No relationship found between inflation and stock returns for example (Floros, 2004; Pearce & Roley, 1988; Jung et al., 2007).

Fama and Schwert (1977) conducted a study in this regard to estimate the hedging ability of various assets to the expected and unexpected inflation. They found out that US government bonds and private residential real estate where completely hedge against the expected and unexpected inflation. But they found out that common stocks returns have negative relationship with both expected and unexpected component of the inflation.

Anari and kolari (2001) found that the long run Fisher elasticity of stock prices with regard to goods prices which exceeds from unity range, which confirms the fisher effect. They also found that the response of stock returns to the changes on the prices of goods shows initially negative response but this negative response vanishes and become positive in the long run. Boudoukh & Richardson (1993) found that nominal stock returns and inflation are positively related with each other in the long horizon.

Elsharif (2010) found the results which supports the Generalized Fisher Hypothesis that the real return is independent from the changes in inflation and is positive. Therefore they concluded that the common stocks are hedged against the ravages of inflation in Malaysia.

Reilly (1997) used the dividend discount model to investigate that common stock are hedged against inflation or not. He found the negative relationship of inflation with the implied growth rate and concludes that common stocks are poor inflation hedge.

Engsted and Tanggaard (2000) they analyzed the relationship between the expected inflation, expected stocks and bond returns at both short and long horizons. They came with the result that the relationship among inflation and expected returns at all horizons are quite weak.

Schwert (1981) analyzed the reaction of stock market to the newly announced inflation. He found out that the reaction of the stock prices to the announcement of unanticipated inflation in the consumer price index was negative but this reaction was small in size.

Shanmugam and Misra (2008) investigate this relation in the Indian economy for the period of 1980 to 2004. They found the negative relationship between the stock returns and inflation and this negative inflation-stock return relation occurs as a result of unexpected element of the inflation. Francis and Tewari (2011) they examine that whether the Fisher effect They found out that in long run there exists a negative relationship between the inflation and equity returns in the

Ghana stock market. In long run however there are several studies which confirm the positive relationship between the inflation and stock returns and confirm the hedging ability of the equities.

Anari and kolari (2001) investigate the positive association of inflation and stock returns i-e Fisher effect by taking stock prices and the prices of goods data of the six industrial countries. They found that the long run Fisher elasticity of stock prices with regard to goods prices which exceeds from unity range, which confirms the fisher effect.

Boudoukh and Richardson (1993) analyzed the data of both US and UK form the period of 1820 to 1988. They conclude that nominal stock returns and inflation are positively related with each other in the long horizon.

Elsharif (2010) investigate the relationship between the inflation, money supply and real returns for Malaysian stock market. The results of all these models support the Generalized Fisher Hypothesis that the real return is independent from the changes in inflation and is positive. Firth (1979) investigates the relationship between common stock returns and inflation by using UK data. He tested the basic Fisher hypothesis in UK and found some support in favor of Fisher hypothesis.

Akmal (2007) examines the relationship between the stock returns and inflation in the Pakistani scenario and found the results supporting that the equities are hedged against inflation over long run, but he also found that equities are not hedged against inflation in short run. Shahbaz and Islam (2010) also found the result supporting the positive relationship between inflation and stock returns both in long and short run.

The most of the above mentioned studies examines the Fisher hypothesis but they describe only the nature of relationship and do not explain the causes of the negative relationship between inflation and stock returns which remain a puzzle. Although there are several explanation of this negative relationship emerged later. Feldstein (1985) proposed an explanation of this negative relationship. He argued that inflation increases the earnings of the firms in nominal form but on the other hand it also increases the tax burden on the firms, which reduces its after tax real returns and leads to low returns which results in decrease in value of firms equity. Fama (1981) empirically examined this inverse relationship between inflation and stock returns and said that it is due to proxy hypothesis.

Proxy hypothesis holds that the inverse relationship between equity returns and inflation is due to positive relationship between future economic growth and equity returns and an inverse relationship between inflation and future economic growth. Taking this point of view, inflation could be the proxy for economic growth and the negative relationship between equity returns and inflation are therefore should be interpret with care. Yeh and Chen (2009) explained the Fama proxy hypothesis and argued that the purpose of the revised correlation is that when there is negative relationship between inflation and real activity and positive relationship between stock return and real activity, in such situation the negative relationship between stock returns and inflation holds. They also commented that the flow of this relationship is not direct. On the other hand Ram and Spancer (1983) reject the Fama (1981) proxy hypothesis which suggests the inverse relationship among inflation and real economic activity. They found strong empirical evidence which supports the Phillips curve analysis which states that there is positive association among inflation and real economic activity. The another hypothesis known as Reserve Causality Hypothesis is presented by Geske and Roll (1983) which explain the negative relationship between inflation and stock returns. They point out that the fiscal and monitory linkages explain the negative relationship among inflation and stock returns. This hypothesis states that the decrease in real activity not only reduces the stock returns but it also decreases the government revenues and it raises the fiscal deficit. To cover that deficits government through its central bank may borrow or issue new currency, which cause inflation. Thus due to monitory and fiscal linkages associated with inflation and stock return this negative relationship persists between them. According to money-illusion hypothesis presented by Modigliani and Cohn (1979) to explain this negative relationship between unexpected inflation and stock returns. They argued that unexpected inflation increases the nominal interest rates if the investors used these higher nominal interest rates to discount the future earnings and ignored the positive effect of inflation on the nominal earnings, their result will be incorrect and this behavioral error will undervalue the stocks.

Gordon and Hachman (1979) by using traditional present value model they gave suggestion about the conditions which leads towards the positive relationship between inflation and stock returns and also the suggestions which leads towards the negative relationship between inflation and equity returns. Campbell and Shiller (1988) confirmed the presence of two trends; it was also confirmed by the studies conducted by the Schotman and Schweitzer (2000) and Basse (2009). They argued that the positive and negative association between inflation and stock returns is due to two reasons; one trend which leads toward positive relationship is that inflation magnifies the revenues of the companies in nominal form, which increases the expected future dividend which in response affect the stock prices positively.

The other trend which leads to the negative effect of inflation to stock returns is that with increase in inflation the discount rate also increases via the Fisher effect which results in low stock prices due to which the negative relationship between inflation and equity returns are observed. These two alternative trends are known as earning channel and discount rate channel (Sharp, 2002).

Theory suggested that the eearning channel keep safe the investors from the ravages of inflation because the corporate earnings increase with increase in inflation. But Fons and Osterberg

(1986) argued that typically firms are not been able to match the decrease in profit with the decrease in expenses in a disinflationary environment. Sharp (2002) noted that inflation has negative effect on stock prices, the reason is that inflation decreases the growth of expected real earnings and raise the required real return or we can say that the inflation affect the stock returns negatively by lowering the potential of future earnings of corporate sector through the effect on its real growth, and by raise in discount rate. So we can clearly note that the equities are effectively hedged against inflation if there is a positive relationship between corporate earnings and inflation.

Research Methodology

This study explored the relationship between inflation, real growth rate, interest rate and corporate earnings to check the hedging ability of equities against inflation. This study used the annual data from 1975 to2008. By taking the macroeconomics prospective our focus was not on the Return on equity and stock prices of individual firms but we took the aggregate Return on equity (ROE) and Stock Index (SI) of non-financial sectors. Population of this study includes all the non-financial sectors listed on the Karachi Stock Exchange. We selected only five sectors from 1975 to 2008.

There are number of tests to check the relationship between the time series variables. The most widely used methods include fully Ordinary Least Square method, Engle and Granger (1987) test, maximum likelihood base Johansen (1988, 1991) and Johansen- Juselius (1990) tests. In this study we used Unit root test, Descriptive statistics, and Correlation and Auto regressive (AR) model to find out the impact of inflation on equities.

Let's assume that Y is a dependent variable and X is an explanatory variable. Then the linear regression model will be

$E(Yt) = \alpha + \beta Xt$………………….. (3.1)

In above equation E(Yt) is the expected value of “Yt” for a given value of “Xt”, and “α and β” are the unknown population parameters. The t in the subscript shows that the data is time series data. The actual value of the dependent variable Yt will not always equal to its expected value of E(Yt) because there are several other factors that can affect its actual behavior. Therefore we write

$Yt = E(Yt) + \mu t$ ………………… (3.2) Or

$Yt = \alpha + \beta Xt + \mu t$ …………….. (3.3)

In order to examine the impact of inflation, real growth rate and interest rate on the stock index and return on equity of the non- financial sectors listed on KSE. For this purpose we use econometric model by assuming the stock market index and ROE as dependent variables and inflation, real growth rate and interest rate as explanatory variables. These models are:

Model 1

$LSIt = \alpha + \beta 1\ LINFt + \beta 2\ RGRt + \beta 3\ IRt + \beta 4\ Dtex + \beta 5Dcmi + \beta 6Dcem + \beta 7Dfp + \beta 8Dsug + \mu t$…………… (3.4)

Model 2

$ROEt = \alpha + \beta 1\ LINFt + \beta 2\ RGRt + \beta 3\ IRt + \beta 4\ Dtex + \beta 5Dcmi + \beta 6Dcem + \beta 7Dfp + \beta 8Dsug + \mu t$… ………………. (3.5)

Where:

LSIt = log of state bank general index of share price at time t.

ROEt = return on equity at time t.

INFt = log of Consumer price index (CPI) at time t.

RGRt = Real GDP growth rate at time t.

IRt = Interest rate at time t.

Dtex = Dummy of textile sector.

Dcmi = Dummy of chemical sector.

Dcem = Dummy of cement sector.

Dfp = Dummy of fuel and power sector.

Dsug = Dummy of sugar sector.

α = Constant.

β = Coefficient.

μt = Error term.

Equities as an Effective Hedge against Inflation: Empirical Evidence from Pakistan

Empirical Results

This chapter discusses the empirical result of this study.

Descriptive Statistics

Table 1. *Descriptive Statistics*

Variable	Mean	Median	Maximum	Minimum	Std. Dev.
LnSI	5.2461	5.2481	6.8941	4.2087	0.5777
ROE	6.2492	7.9752	31.3527	-48.236	12.8340
LnINF	3.6515	3.6308	4.93934	2.3844	0.7487
RGR	5.3588	5.5500	9.00000	1.7000	1.9309
IR	8.7929	7.8550	14.9600	3.4300	3.5279

Table 1 shows the descriptive statistics of the variables. The average stock prices are 5.24 and the volatility in the stock prices are 0.57, which shows that the stock prices are less volatile. The average return on equity is 6.24 and the volatility from the average is 12.83. This shows that return on equity is more volatile. The average inflation during the period is 3.65 and the volatility in the inflation from its average is 0.74. This shows that inflation is less volatile. The Real Growth rate is 1.93 shows less volatility from its average as compare to the interest rate, return on equity and exchange rate having volatility of 3.52, 19.99 and 12.83 respectively. The average broad money shows less volatility of 1.34 from its mean.

Unit Root test

The Table 2 shows the result of the unit root test in order to determine the order of integration between the time series data. For this purpose ADF- Test and Phillips-Perron Tests are conducted to determine the order of integration between the time series data.

Table 2. *Unit Root test*

Variables	ADF-Level	PP-level
SI	-5.8652	-5.4980
ROE	-7.0420	-7.1230
LINF	-3.6231	-3.6729
RGR	-9.8755	-10.0340
IR	-3.8709	-3.6934
LM2	-3.8096	-3.8737
ER	-3.0832	-3.2110
1% Critic Value	-3.46921	-3.4692
5% Critic Value	-2.87851	-2.8785
10% Critic Value	-2.5759	-2.5759

The results of the unit root test clearly shows that all series are stationary at level by testing on both ADF-Test and Phillips – Perron test. The ADF and Phillip-Perron test statistic values of all series are greater than the critical values at 5% level. Therefore it can be easily said that the series are integrated of order zero I (0).

Correlation Matrix

Table 3. *Correlation Matrix of SI*

Variable	SI	LINF	RGR	IR	LM2	ER
LnSI	1					
LnINF	0.3173	1				
RGR	0.3231	-0.0476	1			
IR	0.0463	0.2788	-0.3163	1		

Table 3 shows the result of correlation matrix of stock index with three independent variables LINF, RGR, IR. The result shows that all variables are positively correlated with the dependent variable SI.

Table 4. *Correlation Matrix of ROE*

Variables	ROE	LINF	RGR	IR	LM2	ER
ROE	1					
LINF	-0.1018	1				
RGR	0.2488	-0.0476	1			
IR	-0.222	0.2788	-0.3163	1		

Table 4 shows the results of correlation between ROE and LINF, RGR and IR. The result shows that LINF, IR are negatively correlated with ROE and only the RGR is positively correlated with ROE.

Regression Analysis

Table 5. *Regression Analyses of Stock Price*

Dependent variable: Stock Index

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.81062	0.244136	15.60861	0.0000
LINF	0.242377	0.051914	4.668848	0.0000
RGR	0.108028	0.020377	5.301352	0.0000
IR	0.011946	0.0116	1.029756	0.3047
DTEX	-0.44798	0.117573	-3.81024	0.0002
DCMI	0.055964	0.117573	0.475996	0.6347
DF_P	-0.03273	0.117573	-0.27834	0.7811
DSUG	-0.24277	0.117573	-2.06485	0.0405
R-squared	0.3250			
Adjusted R-squared	0.2958			
F-statistic	11.1438			
Prob(F-statistic)	0.0000			
Durbin-Watson stat	0.8221			

Table 5 shows the results of the SI with the independent variables inflation, RGR and interest rate. The results show that the value of Durbin- Watson is 0.82 which is less than 1.60 indicates that the problem of auto correlation exists in the data.

In order to check the auto correlation in the data we will use Brush- Godfrey serial correlation LM-Test.

Table 6. *Detection of Auto-correlation*

Breush -Godfrey Serial Correlation LM Test:

F-statistic	61.55560	Prob. F(2,160)	0.0000
Obs*R-squared	73.92468	Prob. Chi-Square(2)	0.0000

The result of the Brush- Godfrey serial correlation LM-Test confirms the presence of the autocorrelation in the data, because the value of Prob.Chi- Square is highly significant as the value of $P < 0.05$.

In order to remove the autocorrelation from the data we will use the auto regression model.

Table 7. *Autoregressive Model of Stock Price*

Dependent variable: Stock Index

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.594744	0.51466	6.9847	0.0000
LINF	0.623657	0.087694	7.111778	0.0000
RGR	0.006185	0.011917	0.519001	0.6045
IR	-0.04172	0.024155	-1.72714	0.0861
DTEX	-0.68661	0.453125	-1.51527	0.1317
DCMI	-0.1421	0.300812	-0.47239	0.6373
DF_P	-0.28513	0.369592	-0.77146	0.4416
DSUG	-0.38048	0.40251	-0.94526	0.346
AR(1)	0.837535	0.055609	15.06127	0.0000
R-squared	0.6939			
Adjusted R-squared	0.6786			
F-statistic	45.3357			
Prob(F-statistic)	0.0000			
Durbin-Watson stat	1.7629			

Table 7 shows the result after removing the autocorrelation from the data. The result shows that LINF has positive significant relationship with the stock index. This suggests that with the increase in inflation the SI of the selected sectors will also increases. The coefficient of LINF 0.62

means LINF positively affect SI that is with one unit increase in LINF the SI of selected sectors will also increase by 0.62 keeping all other variables consistent. RGR has the insignificant positive in relation with the SI because the probability value of RGR is P< 0.05. The interest rate (IR) has the negative significant in relation with the SI at the 10% confidence level. The coefficient of IR is -0.04 which shows that one unit increase in IR will decrease the SI by 0.04. Means that increase in interest rate decrease the stock index because investors move their investment from equity market to the bond market and vice versa. The dummy variables of all sectors have the P> 0.05, which means that the effect of all sectors is same on the dependent variable SI. The AR (1) is significant at 5% confidence interval which shows that there is no autocorrelation exists in the data which is also confirmed by the Durbin- Watson value which is 1.76. The value of R-Square is 0.69 which means that the independent explain 69% of the dependent variable. The value Prob (F-statistics) is zero shows that the model is good fit.

Table 8. *Regression Analyses of Return on Equity*

Dependent variable: ROE

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	8.045695	5.29311	1.520032	0.1305
LINF	-0.86726	1.125542	-0.77053	0.4421
RGR	1.293763	0.441802	2.928374	0.0039
IR	-0.50732	0.251507	-2.01711	0.0453
DTEX	-6.7738	2.549104	-2.65732	0.0087
DCMI	10.89422	2.549104	4.273744	0.0000
DF_P	4.660564	2.549104	1.828315	0.0693
DSUG	-1.10843	2.549104	-0.43483	0.6643
R-squared	0.3157			
Adjusted R-squared	0.2861			
F-statistic	10.6773			
Prob(F-statistic)	0.0000			
Durbin-Watson stat	1.1573			

Table 8 shows that Durbin- Watson stat value is 1.15 which is less than 1.60 shows that the problem of autocorrelation is present in the data.

TO check the presence of autocorrelation in the data we will Brush- Godfrey serial correlation LM- Test.

Table 9. *Detection of Auto-correlation*
Breusch-Godfrey Serial Correlation LM Test:

F-statistic	17.70481	Prob. F(2,160)	0.0000
Obs*R-squared	30.80521	Prob. Chi-Square(2)	0.0000

Table 9 shows the Breush-Godfrey Serial Correlation LM Test indicates the presence of autocorrelation in the data. The value of Prob Chi- Square is highly significant as the P< 0.05.

In order to remove autocorrelation we employ the auto regression model.

Table 10. *Autoregressive Model of Return on Equity*

Dependent variable: ROE

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	7.811327	6.82757	1.144086	0.2543
LINF	-0.54216	1.568294	-0.3457	0.7300
RGR	0.953713	0.393816	2.421724	0.0166
IR	-0.57324	0.353947	-1.61958	0.1073
DTEX	-5.50465	4.060957	-1.35551	0.1772
DCMI	13.29632	3.978821	3.341774	0.0010
DF_P	6.692753	4.054317	1.650772	0.1007
DSUG	-0.48137	4.03244	-0.11938	0.9051
AR(1)	0.433474	0.072569	5.973311	0.000
R-squared	0.4407			
Adjusted R-squared	0.4128			
F-statistic	15.7626			
Prob(F-statistic)	0.0000			
Durbin-Watson stat	1.9218			

Table 10 shows the results after applying the auto regression model. After removing the autocorrelation LINF remains insignificant negative in relation with ROE. It means that inflation has no effect on the ROE. RGR is significant and positive in relation with ROE. This means that one unit increase in RGR will bring 0.95 increases in the ROE. The result real growth rate indicates that ROE increases with increase in the RGR. The results also show that the ROE is negatively affected by IR as its value is significant at 10% confidence interval. The dummy variables of the all sectors under investigation have insignificant at 5% confidence interval except the dummy of chemical sector which shows that all sectors have not same effect on the dependent variable ROE. The value of R- square is 0.44, which shows that independent variables explain 44% of variation in the dependent variable. The value of Prob (F-statistics) is zero which shows that model is good fit. The value of Durbin- Watson stat is 1.92 which shows that data is free from autocorrelation.

Conclusion & Recommendation

This study explores the relationship among equity returns and inflation for non-financial sectors in Pakistan by using Autoregressive (AR) model in order to find out that equities are hedged against inflation or not. Inflation hedging have several definitions (a) the stocks are hedge against inflation if the nominal rate of return on equities increases with increase in inflation or the possibility of negative real rate of return must be reduced, (b) According to other definition that the real return must be independent of inflation.

The result of the study shows that inflation has positive and significant relationship with the stock prices, which shows that increase in inflation results as increase in stock prices. This supports our hypothesis that with increase in inflation stock prices and equity returns also increase in nominal form which helps the management to stabilize the real earnings. On the other hand real growth rate has positive but insignificant relationship with the stock index. This show that the stock index is not affected by the change in real growth rate. Interest rate shows negative and significant relationship with stock index at 10% confidence level, this negative relationship of interest rate with stock index shows that when interest rate increases the investors move their investment from equity market to bond market in search of high returns. The results of all dummy variables show that the relationship of all sectors same with the dependent variable. The relationship of inflation with ROE is negative but insignificant, which shows that inflation has no impact on ROE. The real growth rate has positive and significant relationship with ROE. This shows that ROE only increases with increase in RGR because with increase in output of company the company after tax profit also increases. Interest rate has negative and significant relationship with ROE at 10% confidence interval. The dummy variable of all sectors shows same relationship with dependent variable ROE except the chemical sector.

The overall result of this study concludes that the equities are hedged against inflation by using stock index. By using ROE as dependent variable results confirms that inflation has no effect on the ROE which shows that it is independent from changes in inflation. However, ROE is influenced by RGR; this result is in accordance with the first definition of inflation hedging described by the Bodie (1976) that real return must be independent of inflation. By using stock index as dependent variables the results shows that inflation and stock index move in same direction means that with increase in inflation stock index also increase. This result is in accordance with the second definition of inflation hedging described by Bodie (1976), that the stocks are hedge against inflation if the nominal rate of return on equities increases with increase in inflation or the possibility of negative real rate of return must be reduced.

Limitation of the study and future research direction

This research study investigates the relationship between inflation and corporate earnings in the context of hedging ability of stock against inflation. This study analyzes for the first time this relationship sectors wise. Beside the fact that this study gives important contribution to the existing literature but there are some limitation which will be used for future research study. These limitations are:

1. The study uses only yearly data, it should also be checked on the monthly data, because inflation rate announced every month.
2. This study checked the hedging ability of the stock between different non-financial sectors of Pakistan, it should also be checked to in developed and developing countries.
3. There are three measures of inflation in Pakistan, named consumer price index, whole price index and sensitivity price index. They differ from each other with respect to it calculation and date of announcement. Therefore it should be check whether by using other proxies the hedging ability of equities remains same or not.
4. This study only checks the hedging ability of stock against inflation. It is also recommended that researcher also check the hedging ability of other investment opportunities like investment in gold, oil and commodities which are also considered as inflation hedged. This will give more option to investors for safe investment.

References

Agha, A. I., & Khan, M. S. (2006). An empirical analysis of fiscal imbalances and inflation in Pakistan. *SBP research Bulletin, 2*(2), 343-362.

Akmal, M. S. (2007). Stock returns and inflation: An ARDL econometric investigation utilizing Pakistani data. *Pakistan economic and social review*, 89-105.

Anari, A., & Kolari, J. (2001). Stock prices and inflation. *The Journal of Financial Research, 4*, 587-602 , 17.

Basse, T., Friedrich, M., & Bea, E. V. (2009). REITs and the financial crisis: Empirical evidence from the US. *International Journal of Business and Management, 4*(11), P3.

Bodie, Z. (1976). Common Stocks as a Hedge Against Inflation. *The Journal of Finance, 31*(2).

Boudoukh, J., & Richardson, M. (1993). Stock Returns and Inflation: A Long-Horizon Perspective. *The American Economic Review, 83*(5), 1346-1355.

Campbell, J. Y., & Shiller, R. J. (1988). The dividend-price ratio and expectations of future dividends and discount factors. *Review of financial studies, 1*(3), 195-228.

Elshareif, E. E. (2010). Stock prices and inflation in Malaysian equity markets. *Khartoum University Journal of Management Studies, 3*(2).

Engsted, T., & Tanggaard, C. (2002).The relation between asset returns and inflation at short and long horizons. *Journal of International Financial Markets, Institutions and Money, 12*(2), 101-118.

Fama, E. F. (1981). Stock returns, real activity, inflation, and money. *The American Economic Review, 71*(4), 545-565.

Fama, E. F., & Schwert, G. W. (1977). Asset returns and inflation. *Journal of financial economics, 5*(2), 115-146.

Feldstein, M. S. (1981). Inflation, capital taxation, and monetary policy.

Firth, M. (1979). The Relationship Between Stock Market Returns and Rates of Inflation. *The Journal of Finance, 34*(3), 743-749.

Fisher, I. (1930). The Theory of Interest Rate, *New York, 43*.

Fons, J. S., & Osterberg, W. P. (1986). Disinflation, equity valuation, and investor rationality. *Federal Reserve Bank of Cleveland Economic Review, 22*, 2-10.

Francis, T., & Tewari, D. D. (2011). Stock returns and inflation: An autoregressive distributed lag (ARDL) econometric investigation on Ghana. *African Journal of Business Management, 5*(26), 10550-10556.

Geske, R., & Roll, R. (1983). The fiscal and monetary linkage between stock returns and inflation. *The Journal of Finance, 38*(1), 1-33.

Gordon, M. J., & Hochman, S. (1978). The impact of inflation on share yields and holding period returns. *Inflation and Capital Markets*, 33-41.

Modigliani, F., & Cohn, R. A. (1979). Inflation, rational valuation and the market. *Financial Analysts Journal*, 24-44.

Reilly, F. K. (1997). The impact of inflation on ROE, growth and stock prices. *Financial Services Review, 6*(1), 1-17.

Schotman, P. C., & Schweitzer, M. (2000). Horizon sensitivity of the inflation hedge of stocks. *Journal of Empirical Finance, 7*(15), 301–315.

Schwert, G. W. (1981). Using financial data to measure effects of regulation. *Journal of law and Economics, 24*(1), 121-158.

Shahbaz, M., & Islam, F. (2010). Stocks as hedge against inflation in Pakistan: Evidence from ARDL approach.

Shanmugam, K., & Misra, B. S. (2008). Stock Returns-Inflation Relation in India. *Financial Research Reivew, 15*.

Sharpe, S. A. (2002). Reexamining stock valuation and inflation: The implications of analysts' earnings forecasts. *Review of Economics and Statistics, 84*(4), 632-648.

Impact of Islamic Scholars as Celebrity Endorser on emotional attitude towards brand

*Numair Ahmed Sulehri

**Hina Fayyaz

*Sana Iqbal

**Ummul Baneen

Abstract

The Purpose of the research paper is to investigate the effect of Islamic Scholars as celebrity endorser on customer emotional attitude towards brand. Two Islamic celebrities were taken for study namely Sch1 (Junaid Jamshed) and Sch2 (Dr. Amir Liaquat). Data was collected from 100 respondents via questionnaires, incorporating Celebrity endorsement and emotional attitude towards brand. Celebrity endorsement covered three dimensions namely attractiveness, expertise and trustworthiness. Correlation and regression analysis was then employed to examine the relationship, association and effect of the variables on each other. In order to study comparative analysis t-Test was employed. Results indicated a strong, positive and significant association between attractiveness, expertise and trustworthiness on emotional attitude towards brand. Regression results specified that attractiveness, expertise and trustworthiness affect emotional attitude towards brand positively and significantly. The t-Test results indicated that attractiveness and trustworthiness level was significantly different in two celebrities -high level in case of Sch1.Research has yet not examined celebrity endorsement and its effect on emotional attitude towards the brand from the perspective of Islamic scholars as celebrity endorsers. The current study is the first of this type as per our knowledge. Managers can effectively utilize the research findings of the current study as in today's modern world brand is a critical asset of the company. The present research proves that celebrity endorsement is an effective and efficient tool. On the basis of the research findings it can be argued that celebrity endorser should be one who is considered to be credible on the basis of attractiveness, expertise and trustworthiness.

Key words: Celebrity endorsement, attractiveness, Expertise, trustworthiness and emotional attitude towards brand.

Introduction

Every fifth advertisement uses celebrity to endorse products. Among marketers celebrity endorsement is a popular strategy to promote products and services to customers (Halonen-Knight &Hurmerinta, 2010).

*Assistant Professor, Foundation University Rawalpindi Campus (FURC), Pakistan

**Lecturer, Foundation University Rawalpindi Campus (FURC), Pakistan

Seno and Lukas (2007) had studied extensive use of celebrity endorsement of product in marketing decision making is not an accident. Research has established the fact that celebrities are more active than other types of endorsers. Endorsers with solid creditability source factors i.e., expertise, reliability, and charismacan significantly influence consumer purchase intentions (Ohanian, 1991).

Research regarding the use of Islamic scholars as celebrity endorser and its effect on emotional attitude towards the brand has hardly been carried out. The current research is intended to highlight the perspective that is as to how far the Islamic celebrities' endorsement influences the customers' intention to purchase the brand recommended because using celebrities as endorsers can help marketers to create fashionable advertisements, and inspire a positive effect. Celebrities are casted in advertisements globally and they perform as a spokesperson to promote products (Kambitsis, Harahousou, Theodorakis, & Chatzibeis, 2002). In this study Celebrity endorsement will be studied from three dimensions namely Trustworthiness, Expertise and attractiveness.

Theoretical Frame work

Celebrity endorser makes advertisement credible (Jagdish, Agrawal & Wagner,1995). Cronley, Kardes, Goddard, and Houghton (1999) stated that customers have positive approach towards the brand and celebrity even they are familiar with the fact that endorser has earned money while promoting the product. According to Arnold, Cooper and Roberson (1995) "attitudes reflect a person's tendency to feel, think or behave in a positive or negative manner towards the object of the attitude".

Previously Till, Stanley and Priluck (2008) had seen that, celebrity endorsement leads to positive approach towards the endorsed brand as it can affect both perceived quality and distinctiveness of the brand (Dean, 1999).

There are two renowned generic models, namely celebrity endorsements source credibility model by Hovland, Jenis, and Kelley (1953) and source attractiveness model by McGuire (1985). The credibility basis is used frequently to cause the marketer's positive attributes that influence the recipient's response to a message (Ohanian,1991). Many researchers have suggested, that in source credibility model, the value of a message in play depends upon perceived level of trustworthiness and expertise of an endorser (Erdogan, 1999; Ohanian, 1991; Solomon, Bamossy, & Askegaard, 1999; Dholakia & Sternthal, 1977)

The source credibility has two dimensions namely expertise and trustworthiness (Hovland, Janis, & Kelley, 1953). The expertise are "the extent to which a communicator is perceived to be a source of valid assertions" and displays understanding, experience and expertise (Shank, 2004). Celebrity expertise should be in line with the nature of the product (Till & Busler, 1998). Trustworthiness refers to the level of assurance, in the marketer's objective, to communicate the claims they find most convincing. It includes honesty, reliability and acceptability by the receiver (Hovland et al., 1953).

When the celebrity is supposed to be more trustworthy, the message will be more effective and it will lead to the persuasion of the receiver (Ohanian, 1990). Based on the above analysis the following are the deduced hypotheses:

> **H1:** Trustworthiness will have positive and significant effect on emotional attitude towards brand.
>
> **H2:** Expertise will have positive and significant effect on emotional attitude towards brand.

The Source Attractiveness Model

The Source Attractiveness Model (McGuire, 1985) asserts that an individual's receiving of a message originates from his/her resemblance to, familiarity with, and liking of the endorser that is relaying the message. According to Ohanian (1990) in order to examine the effectiveness of the endorser the most important factors are observed Expertise, Trustworthiness, and attractiveness. Therefore the following hypothesis is deduced from the literature.

> **H3:** Attractiveness has positive and significant effect on emotional attitude towards brand.

The current research compares two Islamic celebrities in Pakistan, for the purpose two known brands are analyzed, First, “Lays Potato Chips” endorsed by JunaidJamshed, Islamic scholar (Sch1) during the controversy against “Lays” for using ingredients falling under the category of haraam, these ingredients were propagated not to be fit for Muslim consumption. Second was Meezan Oil and Ghee endorsed by Dr. Amir LiaqatHussain (Sch2), anotherIslamic scholar of Pakistan, who hosts Islamic talk shows and morning programs. Over the period of time both scholars had made their image as the people near to the Islamic Faith and people follow their coaching.

To meet the requirements of a comparative study a sample of 50 respondents each for both the scholars was taken. Comparison of the two scholars was made on the basis of the test variables namely attractiveness, expertise and trustworthiness for which t-Test was conducted. The hypotheses developed for comparative analysis are as under:

> **H4:** There is no significance difference between the attractiveness levels of both Celebrity endorsers.
>
> **H5:** There is no significance difference between the Expertise levels of both Celebrity endorsers.

H6: There is no significance difference between the Trustworthiness levels of both Celebrity endorsers.

Methodology

Keeping the nature of the research in view the study design was developed using convenience sample of 100 students, because the nature of study is exploratory. The data was collected by using Questionnaire adapted from Ohanian (1990). The Celebrity Endorsement construct comprises of 13 items. Celebrity endorserment has three sub-dimensions including attractiveness, expertise and trustworthiness.

Attractiveness dimension was measured using three items; Expertise measured using 5 items and Trustworthiness measured using 5 items. The responses were measured using 7-point likert scale and the remaining three measurements were measured using seven levels, semantic differential scale. Emotional Attitude towards Brand was developed by Sweeney and Soutar (2001) was used based on 7 point likert scale, whereas Emotional Attitude toward brand was measured through adopted to develop by Braunstein-Minkove, Zhang and Trail (2011).

The adapted questionnaire was pretested to check the reliability of the two. The average Cronbach alpha being equal to .83 was taken as satisfactory; hence the tool was finalized and used for data collection. Correlation is observed significant at the 0.01 level (2-tailed) and at the 0.05 level (2-tailed).

Research Results Study 1; Sch1 as celebrity Endorser

The results showed that attractiveness is correlated with emotional attitude towards brand ($r = .59$) significant at .01 level. Expertise is related with emotional attitude towards brand show correlation ($r = .57$) significant at .01 level. Trustworthiness is correlated with emotional attitude towards brand ($r = .74$) significant at .01 level.

Regression Analysis forSch 1

Linear regression was performed to test hypotheses 1, 2 & 3.Control variables were excluded from regression analysis. The regression analysis supports hypothesis 1 ($\beta = .591$, $p < .000$), so hypothesis 1 is accepted according to statistical criteria. The regression results confirms hypothesis 2 ($\beta = .57$, $p < .000$); hence hypothesis 2 is also accepted. The regression test results also confirm hypothesis 3 ($\beta = .74$, $p < .00$); thus hypothesis 3 is also accepted.

Research Results for Sch 2: Sch2 as Celebrity Endorser

The results of study 2 showed that Attractiveness is correlated with emotional attitude towards brand ($r = .58$) significant at .01 level .Expertise is related with emotional attitude towards brand show correlation ($r =.76$) significant at .01 level). Trustworthiness is correlated with emotional attitude towards brand($r = .78$) significant at .01 level. Correlation is observed significant at the 0.01 level (2-tailed) and the 0.05 level (2-tailed).

The results of study 2 showed that Attractiveness is correlated with emotional attitude towards brand($r = .58$) significant at .01 level .Expertise is related with emotional attitude towards brand show correlation ($r = .76$) significant at .01 level). Trustworthiness is correlated with emotional attitude towards brand ($r = .78$) significant at .01 level.

Regression Analysis

Linear regression was performed to test Hypothesis 1, 2 & 3 in the entire regression test there were no control variables.

The regression analysis supports Hypothesis 1 ($\beta = .58$, $p < .000$), so hypothesis 1 stands Valid.

The regression result confirms Hypothesis 2 ($\beta = .76$, $p < .000$).Hypothesis 2 is also accepted.

The regression test results also confirms Hypothesis 3 ($\beta = .78$, $p < .00$); Thus Hypothesis 3 stands Valid.

t-Test Analysis Attractiveness Test Variable

Referring to H4 we hypothesized that there exist no significance difference between attractiveness level of the celebrities but reference table 5 the results indicated that There exist a significant difference in the scores for attractiveness level of celebrity endorser Sch1 (M=5.6, SD=.38) and attractiveness level of Sch2 (M=4.0, SD=1.2) conditions; $t= 9.0$ $p = .000$.Thus rejecting hypothesis 4.

Table 1. *t-Test Analysis Expertise Test Variable*

Celebrity Endorser		Mean	SD	t	Sig (2-tailed)
Expertise	Sch1	4.7	.30	1.8	.072
	Sch2	4.4	1.12	1.8	.075

With reference to H5 it was hypothesized that there exist no significance difference between the expertise levels of both celebrities. The test results reference Table 6 suggests that there exist no significant difference in the scores for expertise of Sch1 (M=4.7, SD=.30) and expertise of Sch2 (M=4.4, SD=1.1) conditions; $t= 1.8$ $p = .07$. Thus hypothesis 5 is accepted.

Table 2. *t-Test Analysis Trustworthiness Test Variable*

Celebrity Endorser		Mean	SD	t	Sig (2-tailed)
Trustworthiness	Sch1	5.3	.42	7.3	.000
	Sch2	4.2	1.0	7.3	.000

Referring to H6, we hypothesized that there exist no significance difference between the trust-worthiness level of both celebrities but reference Table 7 show the results which indicated that there exist a significant difference in the scores for trust-worthiness level of celebrity endorser Sch1 (M=5.3, SD=.42) and trust-worthiness level of Sch2. (M=4.2, SD=1.0) conditions; t= 7.3, p=.000. Thus hypothesis 6 fails to stand valid.

Discussion, Implications and Conclusion

The first hypothesis (H1) stands valid in the current study that celebrity endorsement from the perspective of people attractiveness, positively and significantly affects emotional attitude towards brand. The second hypothesis (H2) also accepted in both study 1 and study 2 referring expertise of celebrity endorser absolutely and significantly affects emotional approach towards brand. The third hypothesis H3 states that, trustworthiness of celebrity endorser significantly and positively affects emotional attitude towards brand.

The current study expands the body of knowledge in the area of source credibility, and it is among few investigations on Islamic celebrity endorser effectiveness with credibility level. Hovland, Janis and Kelly (1953) suggested that as per source credibility theory, a person's propensity to recognize evidence depends on the perceived credibility of the source that is communicating. This research proves that endorser credibility from the perspective of attractiveness, expertise and trustworthiness certainly and significantly effects emotional approach towards the brand in both studies. Furthermore the result of the present study suggests that the endorser credibility influences and improves brand credibility.

While discussing comparative study results it was hypothesized that there is no significance difference between the attractiveness, expertise and trustworthiness level of both the celebrities. The group variable were both the celebrities namely Sch1and Sch2. The t-test results indicates that attractiveness and trustworthiness level are significantly differ in case of Islamic celebrity case of Sch1. Whereas, there was no significant variance between the level of expertise for both celebrities according to the survey.

Lays brand went through a big controversy as it was claimed that lays had some haram ingredients, so it should not be consumed in Islamic Republic of Pakistan. The organization effectively handled the situation by proving it to be halal through a source that is considered to be credible in terms of attractiveness, expertise and trustworthiness. The results suggested that the choice of Sch1, as an Islamic celebrity, was the right one for communicating the brand perspective of the product. The personal credibility was transformed into brand credibility by advertising with Sch1. It highlights the perspective that right celebrity selection is also the key for communicating the right message.

Decision-making Implications

The managers can successfully utilize the research findings of the current study as in today's modern world brand is a critical asset of the company. The existing research proves that celebrity endorsement is an effective and efficient tool. On the basis of the research findings it can be argued that celebrity endorser has to be credible according to social acceptability, his expertise and trust-worthiness.

The current study reveals that local celebrities operating in local culture can be effective and successful in influencing brand credibility.

The research findings provide a direction for new multinationals seeking entry into new markets by proving the importance of local celebrity as a source of influencing local opinion. The competitive marketing strategies can be effectively handled by using local frame of reference of advertising. Further multinationals will be able to gain cost effectiveness by utilizing local/national celebrities rather than expensive global celebrities as results of current studies demonstrate that local celebrities are effective.

The present research also proves that celebrity endorsement can be effective when the advertisement is simple, clean and without irrelevant elements referring Islamic celebrity Sch1advertisement during the controversial phase of lays.

Limitations of Current Study and Future Guidelines

The current study, being only specific, has limitations. This research were mainly related to the generalize ability of the findings. The study undertakes only male celebrities. The generalizability of the study can be enhanced by increasing the sample size and product range.

Current study takes selective information on the effect to the consumer. The psychological effect of the consumer can be widened by incorporating more segments of consumers from other cultures. Different consumer judges endorsers differently on the basis of attractiveness level with divergent weighting. More detail segments of consumers may be a good way to avoid the selective information receiving effect in psychological aspect.

Longitudinal research design can be adopted for other products which use same celebrity for longer period of time to endorse the products.

References

Arnold, J., & Silvester, J. (2005). Work psychology: Understanding human behavior in the workplace. *Pearson Education*.

Braunstein-Minkove, J. R., Zhang, J. J., & Trail, G. T. (2011). Athlete endorser effectiveness: model development and analysis. *Sport, Business, and Management: An International Journal, 1*, 93 – 114.

Cialdini, R. B., Petty, R. E., & Cacioppo, J. T. (1981). Attitude and attitude change. *Annual review of psychology, 32*(1), 357-404.

Cronley, M. L., Kardes, F. R., Goddard, P., & Houghton, D. C. (1999). Endorsing products for the money: The role of the correspondence bias in celebrity advertising. *Advances in Consumer Research, 26*(1), 627-631.

Dean, D. H. (1999). Brand endorsement, popularity, and event sponsorship as advertising cues affecting consumer pre-purchase attitudes. *Journal of Advertising, 28*(3), 1-12.

Dholakia, R., & Sternthal, B. (1977).Highly credible source: Persuasive facilitator or persuasiveliabilities?. *Journal of Consumer Research, 3*, 223-232.

Halonen-Knight, E., & Hurmerinta, L. (2010). Who endorses whom? Meanings transfer in celebrity endorsement. *Journal of Product & Brand Management, 19*(6), 452 – 460.

Hovland, C. I., Janis, L. I., & Kelley, H. H. (1953). Communication and Persuasion. *New Haven, CT: Yale University Press*.

Jagdesh, A., & Agrawal, J., & Kamakura, W.A. (1995). The Economic worth of celebrity endorser: An event Study Analysis. *Journal Of Marketing, 56*(3), 56-62.

Kambitsis, C., Harahousou, Y., Theodorakis, N., and Chatzibeis, G. (2002) Sports Advertising in Print Media: The Case of 2000 Olympic Games. Corporate Communications. *An International Journal, 7*(3), 155-161.

McGuire, W. J. (1969). The nature of attitudes and attitude change. *The handbook of social psychology, 3*(2), 136-314.

Ohanian, R. (1990). Construction and validation of a scale to measure celebrity endorsers' perceived expertise, trustworthiness, and attractiveness. *Journal of Advertising, 19*(3), 39-52.

Ohanian, R. (1991). The impact of celebrity spokespersons perceived image on consumers intention to purchase. *Journal of Advertising Research, 31*(1), 46-52.

Solomon, M. R., Bamossy, G., & Askegaard, S. (1999). Consumer behaviour: a European perspective. *Harlow: Financial Times Prentice Hall*.

Shank, M. D. (2004). Sports marketing: A strategic perspective. *Upper Saddle River, NJ: Prentice Hall Inc*.

Seno, D. & Lukas, B. A. (2007). The equity effect of product endorsement by celebrities. *European Journal of Marketing, 41*(2), 121-134.

Sweeney, J. C., & Soutar, G. N. (2001). Consumer perceived value: The development of a multiple item scale. *Journal of retailing, 77*(2), 203-220.

Till, B. D., & Busler, M. (1998). Matching product with attractiveness versus expertise. *Journal of consumer marketing, 15*(6), 576-586.

Till, B. D., Stanley, S. M., & Priluck, R. (2008): Classical conditioning and celebrity endorsers: An examination of belongingness and resistance to extinction. *Psychology & Marketing, 25*(2), 179-196.

An Empirical Insight into Investment and Impact of Corporate Governance on Under-Investment and Over-Investment phenomenon of Pakistan manufacturing Firms

*Sundus Masood

**Nida Aman

***Naeem Ullah

Abstract

In the developing countries such as Pakistan corporate governance is still considered as an emerging idea. Our research focuses on the impact of corporate governance on firms' overinvestment and underinvestment decisions. For this we have taken a sample of 29 firms from years 2011-2013. This data has been extracted from sector leaders listed in Karachi stock exchange and also from the annual reports of these firms. The empirical investigation was conducted through investment equation, descriptive statistics and also by Hausman test to check the validity of hypothesis. This study reveals that corporate governance has a negative yet insignificant impact on over and under investment. The negative sign indicates that corporate governance indeed does control firms' under and over investment decisions. However, we believe that this insignificance is because the quality of corporate governance is not as fulfilling as we expected it to be.

Key Words: Investment, Corporate Governance, Stock Exchange

Introduction

The goal of every company is to maximize the wealth of their shareholders and to increase their company's profitability. This can only be done by investing their wealth at the right place at the right time and availing all the right investment opportunities.According to Caballero (1997), countries and firms are usually judged by their investments, as investment provides hope for future prosperity. However the shareholders and company's investors are usually faced by the problem of which investing opportunity to avail and which to pass. Making this decision is a very crucial step for the owners as they also have to act on shareholders' behalf. As said by Bartlett (2015) if directors start gambling with shareholder's money or if directors' fiduciary duties become reckless he can lead his firm to financial distress. These crashing firms can lead to serious consequences such as financial crisis.

*MBA (Finance), Foundation University Rawalpindi Campus (FURC), Pakistan

**Lecturer, Bahria University Islamabad, Pakistan

**Assistant Professor, Foundation University Rawalpindi Campus (FURC), Pakistan

As stated by Jensen (1993) it is an important task to understand how system works and how they are affected by control force such as legal political and the capital markets etc.

Another problem arising from wrong investment is of underinvestment and overinvestment. Both of these have been reported to have a negative impact on firm's progress.In underinvestment the firm forgoes the opportunities with positive net present value hence decreasing value of firms' assets (Mayers, 1987). Whereas overinvestment occurs when a firm invests too much, even in those securities that would not gain much profit.

According to Azeem (2013), after the financial frauds of huge corporate industries like "Enron" etc the Sarbanes Oxley act came into existence in 2002 to monitor the financial activities in the firms and to put an end to deception and fraudulent activities. In Pakistan SECP (Security and exchange commission of Pakistan) and state bank of Pakistan are responsible for monitoring the corporate sector of Pakistan. In Pakistan however corporate governance is at its initial stage and has a long road of development to go and the quality is not yet up to the mark as compared with the rest of the world but still steps are being taken to improve it.

Thus to safeguard the rights of shareholders and to avoid such disturbing situations corporate governance came into existence. In line with Weigand (2000), the objective of corporate governance is to align shareholders' interests with the interest of managers hired to run the firm. Furthermore according to Salama (2013) good or poor corporate governance can fluctuate (positively or negatively) the financial conditions in global diversification. Good governance is usually associated with firm's efficiency. The companies throughout the world are taking proper steps to improve their corporate governance because investors know that a firm following particular set of rules is bound to make careful decisions and would shield their rights. Also according to Zagorchev (2015) good governance mitigates excessive risk taking and increases performance of financial institutions.

As reported by Fuli (2014), director's and officer's insurance effects corporate investment decisions, especially in terms of overinvestment and good governance can help reduce this problem. In another study by Chang (2015), firms with weak corporate governance can maximize the wealth of shareholders by increasing adjustment speed towards target leverage through product market competition.

Based on the above discussion our study is twofold, firstly we will study the factors that impact the investment discussions of the firms and secondly we will augment our study to see whether corporate governance practices in Pakistan has any impact on over and under investment practice of the firm.

Literature Review

As investment is the first step in wealth maximization so it should be done with thorough planning, getting started at the wrong point of market can have an adverse effect on company's performance. In financial terms investment is to engage a person's or firms' funds in such a way so that we can derive income from it. This generated income can then be distributed among shareholders or can be used in production of goods and services that can be beneficial for the firm. According to Modigliani (1958), the two main aims of investment are profit maximization and increasing market value. Investment has been seen to have relation with different variables.A study by Lewellen (2014), suggests that cashflow and investment are quite strongly linked specifically for those firms that have a tendency to acquire external funds, also for unconstrained firm there was found a major realtion between investment and cashflow and for constrained firms the realtion was somewhat limited. Similarly investment also involves availing the right growth opportunity, for that we have Tobin's Q. When a firm avails the right investment opportunities its profit growth will maximize which in turn will cause the business confidence to rise, this will ultimately give us high tobin's Q ratio.

Different investments have varying degree of risk and return. Investment may be external or internal. According to Modigliani (1961), market value is not affected by firm's financial structure, thus maximizing shareholders' claims are not affected by firm's internal liquidity, dividend payments and debt leverage. But then Fazzari (1988), came up with the idea that internal financing is less costly than issuance of new shares in the market but it can also cause complications such as agency problems and asymmetric information hence firm's investment and financing decisions are interdependent because they believed that internal funds have a cost advantage over external funds such as debt etc. However the decisions of owners play an important role in determining firms' investment behavior and efficiency (Chen, 2014).

Basically there are two types of managers, one who over-invest and the others who under invest. Both the extremes (under investment and overinvestment) have a bad influence on firms' performance. According to Brealy (2008), overinvestment happens when owners invest in projects that have negative NPV while under investment occurs when firms let positive NPV go. In case of overinvestment the owners take risks by investing too much of firm's budget in investments that might not be beneficial for shareholders. In other words firms with large cash holdings tend to invest more. Whereas in under investment, owners prefer a quiet life and sit out on the investment opportunities that they may come across, such managers are risk avoiders.

There are certain studies e.g. Ningyue (2010), that say that there is a negative relation between overinvestment and firm's performance. If a firm has large cash flow reserves it might invest it in external market which are always risky as compared to internally generated cash flow.

According to a study by Nam (1998), when firms do not generate sufficient cash flow they tend to cut investments below the optimal level because of expensive external financing which results in under investment. Also external financing is subjected to market risks such as exchange rates, interest rates and price fluctuations.

Both of these situations give rise to agency problems. An agency relationship is defined as one in which one or more persons (the principal) engage another person (the agent) to perform some service on their behalf which involves delegating some decision making authority to the agent (Jensen, 1976; Rose, 1973). Coherent to Fama (2009), agency problems arise because such contracts are in unwritten form and are not properly enforced; also agency costs include cost of monitoring and bonding contracts between agents and their conflicting interests. As stated by Eisenhard (1989), agency theory deals with conflict of interest that arises between the principal (shareholders) and agents (owners). The principal is usually unaware where his money is being invested by the agent and whether his money is invested appropriately or not. According to Jensen (1976), management can abuse its decision making power by overinvesting in profitable and over risky projects that could result in loss for shareholders. It would have been possible that shareholders would not have preferred to invest in such risky investments. Likewise in case of under investment the managers would avoid risks but maybe the shareholders would have wanted them to take risks. Such difference in opinion can give rise to agency problems between owners and shareholders. Similarly the objective of shareholder is high return on investment while the manager on the other hand might have other goals such as making their company influential and powerful. In this case managers have access to all the inside information whereas outside shareholders are dispersed and become relatively powerless (Javed, 2007).

To mitigate this problem corporate governance came into existence. According to Makki (2013), the main purpose of corporate governance is to acquire competitive advantage in the market, as this competitive edge would help in optimal decision making and would improve operational efficiency. Corporate governance deals with agency problems caused by the separation of control and ownership and represent a set of mechanisms for direction and control of firms (Jensen 1976; Committee, 1992; Vishny, 1997). Good governance helps in availing the right investment opportunity and also helps in monitoring the rights of shareholders. Elbadry (2010), says from the prospective of shareholders theory, corporate governance are the ways in which people interested in the well being of firm e.g. the shareholders try to ensure that managers and other insiders adopt those mechanisms that safeguard the interests of not just shareholders but also creditors, employees, customers, suppliers and so on. Corporate governance ensures best performance and its timely implementation can help in managing risks and maximizing wealth of shareholder and improve efficiency of investments made. According to a study by Bohren (2006), good governance mechanisms improve efficiency of capital allocation within firms. A study by Jiraporn (2015), states that firms having good governance form corporate strategies that are less risky, whereas if managers are left to their own devices they take excessive risks.

Effective governance reduces the degree of risk taking significantly. It also states that some factors like board, ownership and compensation have larger effects than other factors in corporate governance.

Since good corporate governance plays an important role in enhancing the performance of companies so in emerging countries like Pakistan it reduces chances of financial crisis (Javed, 2007). Our study is based on seeing the impact of corporate governance within Pakistan and how over investment and under investment influence firms' decisions.

The corporate index contains information that helps in measuring the level of corporate governance. As measured by Mussa (2015), corporate index is composed of corporate governance information in annual report, the content of corporate governance statement, board of companies, remuneration of board members, risk management, audit, remuneration and nomination committee characteristics.

From annual report mainly information is extracted about board size, as said by Sheikh (2011), board size instructs and supervises the top management. Secondly board meetings, as Biao (2003), proposed that firms that conduct periodic meetings face fewer management earning issues. Thirdly we see the CEO duality; CEO duality occurs when chief executive officer and chairman is the same person in the firm, however it is suggested that both positions should not be held by the same person. According to Yermack (1996), firms with separate CEO and chairman have more market importance. Other measures include number of executive and non-executive directors and number of shares held by directors and institutions.

To compete with world's renowned companies, Pakistan has developed the Securities and Exchange Commission of Pakistan (SECP) to ensure that corporate governance is being implemented in every firm within Pakistan to safeguard the rights of minority shareholders. As said by La Porta (2000), corporate governance ensures a legal protection to the investors as strong protection of investors is a great demonstration of secure property rights. It requires every firm to disclose their board size and every minute details regarding the board activities and the firm's progress along with its financial statements so that the minority shareholders get the real picture of what is happening in the firm.

Methodology

In order to estimate our variables we will collect data of the firms that are listed on Karachi Stock Exchange (KSE). The following criteria will be strictly observed for the inclusion or exclusion of the firm.

a) The firm has to be listed in the Karachi Stock Exchange for the entire estimation period.

b) The data for different variables should be available throughout the estimation period.

c) Based on these two criteria, we short listed a total of 29 firms to be included in our final estimation.

These firms are listed on KSE-100 index and thus are the sector leaders that give us insight of how the corporate governance play role sector wise. Also these 29 companies represent all sectors currently represented in KSE 100 index and our sample is robust as it represents all the sectors.

The data is collected from years 2009-2013. Years 2010 and 2011 have also been included for the estimation of lags of different variables. Thus our final estimation period after adjusting for lag is from 2011-2013. This gives us a total of 87 firm year observation for different variables used in the study.

Investment Equation

In order to study the impact of Tobin's Q and internal cash holdings on investment we will estimate the following panel data regression model as per methodology of Fazzari et al (1988)

$$(INV)I,t=\alpha 0+\beta 1(T.Q)I,t-1+\beta 2(C.F)I,t-1+\beta 3(size)I,t-1+(lev)I,t-1+\mu i,t$$

Where, T.Q represents Tobin's Q which tells the growth opportunities and is measured by total market value of firm to total asset value of the firm.

Cash flow indicates the inflow and outflow of cash in a company. It is measured by subtracting taxes from EBIT and then adding depreciation to it. The total assets are then taken with lag and divided with the answer.

Size is calculated by taking the log of total assets.

Leverage represents the amount of debt used to finance the assets of the firm. It is calculated by dividing the noncurrent liabilities with total assets of the firm.

In our research we will be treating size and leverage as control variables which mean we will be overlooking these variables and will primarily be focused on dependent and independent variables.

During the first step we will estimate this regression equation. The residuals of this equation will serve as proxy for unexplained investment.

This unexplained investment will be converted to percentiles whereby 1 and 2 percentiles will represent underinvestment and 4 and 5 will represent over investment. These overinvestment and underinvestment firms will be regressed with corporate governance index that has been constructed by taking the proxies of board size, board meetings, CEO duality, number of executive directors, number of non-executive directors, number of shares held by directors and number of shares held by institutional investors.

The following regression equation will be estimated to check the hypothesis of the impact of corporate governance on investment both in the wake of overinvestment and underinvestment conditions.

$(RINV)I,t = \alpha o + \beta 1(C.G\ index)I,t +$ year effects $+ \mu i,t$

A negative significant coefficient of corporate governance index will imply that adherence to corporate governance index checks the practices of overinvestment and underinvestment conducted by the manager.

Resultas and Discussion

Table 1. *Represents the descriptive statistics of variable used in analysis*

Variable	Obs	Mean	Std.Dev.	Min	Max
Winv	87	0.063455	0.094602	-0.10697	0.487833
Wtq	87	0.957022	1.031117	0.040948	4.692039
Wwcft	87	0.119544	0.116866	-0.02749	0.306174
Csize	87	17.24276	1.023396	15.10775	19.63951
Wlev	87	0.270245	0.199799	0	0.648711
Cindex	87	16.88816	10.48567	1.064282	44.18575

Investment has a mean of 6% while growth opportunity has mean of 95% that represents the lack of growth opportunities of firm in Pakistan. However firms' internal cash holdings are 11.9% on average. From the descriptive statistics one can infer that small mean of investment is due to lack of growth opportunities of the firm.

Correlation Matrix

Table 2. *Represents the correlation matrix for variab les used in investment equation*

Correlation Matrix					
	Winv	wtq	Wwcft	csize	Wlev
Winv	1				
Wtq	0.281	1			
Wwcft	0.1637	0.6382	1		
Csize	-0.0097	0.0208	0.0004	1	
Wlev	0.2807	-0.1676	-0.2414	0.1029	1

It can be seen from the table that no correlation and regression among independent variables is free from the effects of multi co linearity.

Cash flow and Tobin's Q has correlation coefficient of 0.63 and thus cash flow has significant coefficient with Tobin's Q but other independent variables do not have significant correlation.

Since Tobin's Q is widely used in literature as trusted proxy for growth opportunities, as per Gujrati (2003) correlation multi co linearity is a problem though is a problem but the coefficients obtained are unbiased, however their robustness is affected.

Table 3. *Represents the correlation matrix of variables used in the equation*

correlation residuals		
	Residual	cindex
residual	1	
Cindex	-0.0157	1

Corporate governance has insignificant correlation with investment residuals but however negative sign indicates that they have negative relationship.

Thus it is a partial support of our hypothesis that corporate governance has inverse relationship with under investment and overinvestment.

Results of Investment Equation

Table 4 represents the results of investment equation using common effect, fixed effect and random effect panel regression models.

Table 4. *Investment Equation Results*

Common Effect Model: Dep. Variable=Investment				
Winv	Coef.	Std.Err.	T	P>|t|
Wtq	0.02822	0.011823	2.39	0.019
Wwcft	0.042098	0.105933	0.4	0.692
Csize	-0.00482	0.009222	-0.52	0.603
Wlev	0.165813	0.048666	3.41	0.001
_cons	0.06974	0.158616	0.44	0.661
Fixed Effect Model:Dep. Variable= Investment				
	Coef.	Std.Err.	T	P>|t|
Tq	0.065111	0.047358	1.37	0.175
Cft	-0.01732	0.163764	-0.11	0.916
Csize	0.009179	0.064991	0.14	0.888
Lev	0.370241	0.206715	1.79	0.079
_cons	-0.25511	1.119256	-0.23	0.821
Random Effect Model:Dep. Variable= Investment				
	Coef.	Std.Err.	Z	P>|z|
Tq	0.029683	0.012534	2.37	0.018
Cft	0.025978	0.108248	0.24	0.81
Size	-0.00469	0.010036	-0.47	0.641
Lev	0.168758	0.052702	3.2	0.001
_cons	0.067131	0.172644	0.39	0.697

Common effect model has statistically a positive coefficient for Tobin's Q (p value 0.019 less than 0.05, t value=2.39) while positive insignificant coefficient for cash flows. In fixed effect model both Tobin's Q and cash flow has insignificant coefficient while in random effect model Tobin's Q has positive significant coefficient(p value 0.018 less than 0.05, z value =2.37) while cash flow has positive insignificant coefficient.

The results of fixed effect model and random effect model are in conflict with each other thus we will conduct Hausman test to decide between fixed and random effect model.

Hausman Test

The Hausman test was conducted under following hypothesis.

H1: Fixed effect model results are accepted

Ho: Random effect model results are accepted

The p value of 0.58 indicates that random effect model should be accepted.

Random effect model results indicate that Tobin's Q has significant impact on investment thus despite of large cash holdings the firms did not invest much, as indicated in descriptive statistics during 2011-2013.

The cash flow has positive insignificant coefficient as per finding of Fazzari et al (1988). In their research they were of the opinion that financially unconstrained firms do not rely on their internal cash holdings for their investment, mainly due to the reason that they have fewer information asymmetries. Since our firms are those that are present on KSE 100 index and are sector leaders throughout the sample period they can easily raise external finances at lower cost and thus do not have to rely on their internal cash holdings. A positive significant coefficient of leverage (p value 0.001 less than 0.05, z value 3.20) indicates that these highly financial unconstrained firms mostly rely on debt to conduct their investment activities.

An Empirical Insight into Investment and Impact of Corporate Governance on Under-Investment and Over-Investment phenomenon of Pakistan manufacturing Firms

Over Investment & Corporate Governance

Dependent variable= Residuals

Table 5. *Represents the results of corp orate governance on over investment firms*

Common effect model Dependent variable residuals				
residual	Coef.	Std.Err	T	P>|t|
Cindex	-0.00109	0.001311	-0.83	0.414
_cons	0.086661	0.028489	3.04	0.005
fixed effect model: dependent residual				
residual	Coef.	Std.Err	T	P>|t|
Cindex	0.038705	0.02544	1.52	0.15
_cons	-0.63336	0.460565	-1.38	0.191
Random effect model: dependent residual				
residual	Coef.	Std.Err	Z	P>|z|
Cindex	-0.00122	0.001595	-0.77	0.443
_cons	0.090245	0.033827	2.67	0.008

The common effect model implies that corporate governance in Pakistan does not have significant impact on over investment. This result is further validated by results of fixed and random effect models. However, the sign of the coefficient in all three regression is negative which indicates that adherence to corporate governance discourages over investment. This is in conformity with the results found out by fizzari were also of the opinion that corporate governance discourages overinvestment. However in Pakistan though the coefficient sign is negative but is not significant. The reason is that the corporate governance practices are not of that quality so that it can impact the firm's investment decisions.

Under investment and Corporate Governance

Table 6. *Represents the results of corporate governance on under investment firms*

Common effect model				
residual	Coef.	Std.Err.	T	P>|t|
Cindex	-0.00027	0.000624	-0.43	0.669
_cons	-0.05777	0.011287	-5.12	0
Fixed effect model				
residual	Coef.	Std.Err.	T	P>|t|
Cindex	-0.0008	0.001801	-0.44	0.664
_cons	-0.04932	0.029099	-1.7	0.112
Random effect model				
residual	Coef.	Std.Err.	Z	P>|z|
Cindex	-0.00021	0.000643	-0.33	0.74
_cons	-0.05829	0.012114	-4.81	0

As it can be seen from our results the common effect model's result indicates that although our results are insignificant, the negative sign implies that if corporate governance would have been properly being implemented in Pakistani firms it would have had a negative impact on under investment and would have prevented it. Similarly fixed effect and random effect are also showing negative but insignificant impact on under investment which testifies that if the quality of corporate governance was up to the mark in Pakistani firms it would have had a negative impact on under investment. Hence the negative sign of all the three models authenticate the adverse impact of corporate governance on under investment.

Conclusion

The study aims at understanding investment in Pakistan in the light of Fizzari et al. (1988) study. Further we augmented the study to see whether corporate governance can act as a safety valve to control over and under investment in the context of Pakistani firms. The investment equation proved that growth opportunities play a pivotal role in the investment decision of the firms. Since our firms were KSE 100 index firms and were unconstrained, the cash flow had an insignificant coefficient and we found that investment projects are mostly funded by unconstrained firms through debt because they face fewer financial asymmetries and can raise funds at a cheaper rate than other constrained firms. For corporate governance we obtained the residuals from investment equation's pooled regression. The firms in the lower quintiles of residuals were termed as under investment firms and vice versa. We found that corporate governance in Pakistan has no impact on under investment of the firms. However the coefficients had a negative sign that indicated that if the quality of corporate governance is improved it may check the practices of under investment in Pakistani firms. Further in case of over investment we found a negative but insignificant coefficient for corporate governance that indicated that corporate governance practices in Pakistan have no impact to check overinvestment of manufacturing firms. The reason of insignificant coefficient is due to the fact that corporate governance practices have been adopted by the firms to satisfy legal requirements. That is why the quality of corporate governance is not up to the mark in Pakistani firms and hence this is the reason that corporate governance practices are unable to play a significant role in checking over and under investment practices.

References

Abdelsalam, O., & El-Masry, A. (2008). The impact of board independence and ownership structure on the timeliness of corporate internet reporting of Irish-listed companies. *Managerial Finance, 34*(12), 907-918.

Azeem, M., Hassan, M., & Kouser, R. (2013). Impact of Quality Corporate Governance on Firm Performance: A Ten Year Perspective. *Pakistan Journal of Commerce and Social Sciences, 7*(3), 656-670.

Bartlett, R. P. (2015). Shareholder wealth maximization as means to an end. *Seattle University Law Review , 8*(2), 55.

Bøhren, Ø., Cooper, I., & Priestley, R. (2007, March). Corporate governance and real investment decisions. In *EFA 2007 Ljubljana Meetings Paper*.

Brealy, M. (2008). Principles of corporate finance. *Mc Graw Hill/Irwin*, 329-333.

Caballero, R. J. (1997). Aggregate Investment. *National Bereau of Economic Research*, 4-70.

Chang, Y. K., Chen, Y. L., Chou, R. K., & Huang, T. H. (2015). Corporate governance, product market competition and dynamic capital structure. *International Review of Economics & Finance, 38*, 44-55.

Chen, R. (2014). Do state and foreign ownership effect efficiency? *Journal of corpoarte finance*, 1-10.

Committee, C. (1992). Report of the committee on the financial aspects of corporate governance.

Eisenhardt, K. M. (1989). Agency theory: An assesment and Review. *Academy of management review*, 57-74.

Elbadry, A. (2010). Corporate governance and asymmetric. *Verlag Dr. Muller GmbH & Co.*, 284-308.

Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *The Journal of Law & Economics, 26*(2), 301-325.

Fazzari, S. M., Hubbard, R. G., Petersen, B. C., Blinder, A. S., & Poterba, J. M. (1988). Financing constraints and corporate investment. *Brookings papers on economic activity, 1988*(1), 141-206.

Javed, A. Y., & Iqbal, R. (1961). The Relationship between Corporate Governance Indicators and Firm Value: A Case Study of Karachi Stock Exchange. *Working Papers & Research Reports,* 2007-14.

Jensen, M. C. (1993). The modern industrial revolution, exit, and the failure of internal control systems. *the Journal of Finance, 48*(3), 831-880.

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of financial economics, 3*(4), 305-360.

Jiraporn, P., Chatjuthamard, P., Tong, S., & Kim, Y. S. (2015). Does corporate governance influence corporate risk-taking? Evidence from the Institutional Shareholders Services (ISS). *Finance Research Letters, 13*, 105-112.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., &Vishny, R. (2000). Investor protection and corporate governance. *Journal of financial economics, 58*(1), 3-27.

Lewellen, K. L. (2014). Investment and cashflow: new evidence. *Journal of financial and Quantitative Ananlysis*, 1-40.

Li, K. F., & Liao, Y. P. (2014). Directors' and officers' liability insurance and investment efficiency: Evidence from Taiwan. *Pacific-Basin Finance Journal,29*, 18-34.

Liu, N., & Bredin, D. (2010). Institutional Investors, Over-investment and Corporate Performance. *University College Dublin*.

Makki, M., & Lodhi, S. A. (2013). Impact of Corporate Governance on Financial Performance. *Pakistan Journal of Social Sciences (PJSS), 33*(2), 265-280.

Mayers, D., & Smith Jr, C. W. (1987).Corporate insurance and the underinvestment problem. *Journal of Risk and Insurance*, 45-54.

Modigliani, M. H. (1961). Dividend policy, Growth and the valuation of shares. *Journal of business*, 33-411.

Modigliani, F., & Miller, M. H. (1958).The cost of capital, corporation finance and the theory of investment. *The American economic review, 48*(3), 261-297.

Mussa, H., Musová, Z., & Debnárová, L. (2015). Responsibility in the Corporate Governance Framework and Financial Decision Making Process. *Procedia Economics and Finance, 23*, 1023-1029.

Nam, G. D. (1998). The underinvestment problem and corporate derivatives use. *Financial management*, 53-69.

Ross, S. A. (1973). The economic theory of agency: The principal's problem. *The American Economic Review, 63*(2), 134-139.

Salama, F. M., & Putnam, K. (2013). The Impact of Corporate Governance on the Financial Outcomes of Global Diversification. *The International Journal of Accounting, 48*(3), 364-389.

Vishny, A. S. (1997). A survey of corporate governance. *the journal of finance*, 737-783.

Weigand, E. L. (2000). Does the governed corporation perform better? Governance structure and corporate performance in Germany. *European finance review*, 2-27.

Xie, B., Davidson, W. N., & DaDalt, P. J. (2003). Earnings management and corporate governance: the role of the board and the audit committee. *Journal of corporate finance, 9*(3), 295-316.

Yermack, D. (1996). Higher market valuation of companies with a small board of directors. *Journal of financial economics*, 185-211.

Zagorchev, A., & Gao, L. (2015). Corporate governance and performance of financial institutions. *Journal of Economics and Business, 82*, 17-41.

Instruction for Authors

There is no standard fixed length for articles, but an 8 – 20 A4 pages, with 12-fonts and 1.15-line space article would suffice. This page limit includes all parts of the paper: title, abstract, body, bibliography, appendices and tables.

Title should be a brief, not more than fourteen words it should be written in Times New Roman Font Size 14 Bold and centered.

All papers are to be submitted as a single MS WORD file, formatted for 8.5" x 11" paper.

Manuscripts should be composed according to APA (American Psychological Association) 6th edition format.

FUJBE accepts manuscripts via e-mail. The manuscript should be prepared using a recent version of Microsoft Word and should utilize standard fonts and symbols.

The submitted manuscripts should be written in English, (American or British usage is accepted, and however it should not be a mixture of both). Manuscripts should be free from grammatical errors.

Use headings sparingly and logically. Do not use more than three levels of headings.

Manuscripts should be prepared according to the following style rules (deviations from these rules can cause publication delays)

A. Content, Length, and Formatting

It is the author's responsibility to make the submitted paper clear, related, and thought-provoking, before submission and consideration by referees. This requires:

Abstract

An abstract not exceeding 200 words comprising the following is required in the following format:

Author's name (s) and affiliation

a) Email address

b) Title and abstract content

The abstract should be clearly written and readily comprehensible. It should provide a concise summary of the objectives, methodology (including the species studied), key results, and major conclusions of the study. It should be written in complete sentences, without subheadings.

Provide maximum 7 key words of the manuscript

Introduction

The Introduction should provide a clear statement of the problem, the relevant literature on the subject should be cited. Methods and procedures used in the research should be described in detail. Results should be clearly described and should provide a comprehensive picture of results. Previously published findings should be written in the present tense. Detailed interpretation of data should not be included. In discussion section findings should be interpreted in view of the present study results and results of past researches in that area. Conclusions should be given at the end of article. Discussion section should describe briefly the major findings. It should describe the validity of observation and other published work dealing with the same type of findings.

Full paper

a) A4 size paper

b) Margins must be 1.25 inch on all sides

c) Font size 12 Times New Roman (body text)

d) Title, subtitles, abstract and references single spaced; body text 1.15 - line spaced

e) Referencing, graphics & tables will be considered in the total page count.

Tables and Figures

a) Tables must be submitted in Microsoft Word table format, and should be created using Times New Roman text, 10 point size. APA-style provided elsewhere must be preferred.

b) Figures must be clearly produced in black and white. All text included in figures should be Times New Roman (10 point minimum).

c) Each table and figure should fit on a single page. Tables and figures may be oriented horizontally (landscape) or vertically (portrait) within the allotted space.

d) Each table and figure should be identified with a table or figure number and a descriptive title.

e) For data not generated by the author(s), the source of the data should be given (in short form) below the table or figure and listed in full in the references.

Footnotes and References

a. Footnote material should be incorporated into the text whenever possible. If footnotes are necessary, the note number should be typed in the text and super scripted. The notes should be collected at the end of the text as endnotes.

b. References should be (a) integrated into the text in short form and (b) collected together at the end of the article. APA format needs to be followed

For works with three or more authors, list the first author followed by “et al.” as shown above. For multiple citations, alphabetize citations by first author's last name.

The author(s) should make sure that there is a strict one-to-one correspondence between the in-text citations (including citations in footnotes, tables, and figures) and the list of references in the References.

Copyright Transfer

a) Submission of a paper will be held to imply that it contains original unpublished work and is not being submitted for publication elsewhere

b) Submission of a paper also implies that, upon acceptance of an article by the journal, the author(s) will transfer copyright of the article to the publisher. The transfer will ensure the widest possible distribution of material.

Miscellaneous

a. Use the American terms such as billion (one billion = 1,000,000,000; one trillion = 1,000,000,000,000), rather than lakhs and crores.

b. Spell out all numbers from one to ninety-nine, unless:

   i. the number contains a decimal point, e.g., “6.2” and “ 0.12”

   ii. the number precedes a percent sign or a unit of measure, e.g., “47%” and “16µm”

c. A short abstract of the paper should always be included with the submission.

d. Each author is entitled to one copy of the issue in which his or her article appears.

Note:

Editor reserves the right to amend, abridge or otherwise alter the contents of the paper to make it suitable for publication. However every endeavor will be made not to affect the spirit or effectiveness of the paper.

Call for Papers

Dear Researchers,

This is to inform you that we are currently accepting original research articles for evaluation and publication in our December, 2016 volume 1 No. 2. We would like to invite you to contribute your Research Paper for publication in "Foundation University Journal of Business & Economics (FUJBE)". Papers published in "FUJBE" will receive very high publicity and acquire very high reputation. The scopes of the journal include: Accounting, Finance, Human Resource Management, International Business, Marketing, Organizational Behavior, Strategic Management, Services, Economics and other areas related to businesses.

The Journal accepts article submissions by e-mail: fujbe@fui.edu.pk

Graduate Research Center

Thanks to passionate zeal of Maj. Gen. Khadim Hussain, HI (M) (Retd) Rector Foundation University Islamabad who helped materializing the seemingly abstract mission to "inspire creative inquiry and research" by establishing a Graduate Research Center (GRC). The establishment of GRC is to create an enabling environment proactive in nature to let the seasoned and amateur researchers to jointly address the development issues of social and industrial life in a collaborative manner. The GRC is to provide a platform to the students and faculty of the university to make use of the infrastructure, discuss innovative research ideas, seek help in commercialization, utilize the facilities and avenues for research publications, become member of the research groups and seek expert advice on designing a project proposal, data collection tools and analysis.

Readers and Contributors of the Foundation University Journal of Business and Economics are invited to utilize the avenues in promotion of scientific research activity for collaborative research activity for the benefit of nation and humanity at large. The Editorial Board thankfully acknowledges the contribution of GRC in the publication of its first issue.

Dr. M. Iqbal Saif
Associate Dean/Chairman GRC

FOUNDATION UNIVERSITY ISLAMABAD

Defence Avenue, Phase-I, DHA,
Islamabad, Pakistan
Phone: +92-51-5788446, 5788450, 5788378
Fax: +92-51-5788633

FOUNDATION UNIVERSITY RAWALPINDI CAMPUS

1-New Lalazar, Rawalpindi, Pakistan
Phone: +92-51-5151437, 5151438
Fax: +92-51-5151433