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# JINNAH BUSINESS REVIEW

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Development of a Scale

Financial Development and Economic Growth: Panel  
Cross-Country Study

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The Corporate Social-Financial Performance Link:  
Evidence from Pakistan

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# HEPATITIS-C (HCV)-RELATED SOCIAL STIGMA; DEVELOPMENT OF A SCALE

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## ABSTRACT

**In the past two decades, there has been a substantial research on disease related stigma especially the HIV stigma. However, only a few studies address the issue of HCV related social stigma. Through this study a scale was developed to measure HCV related social stigma. The scale was developed using literature review and interview with 26 individuals divided in five different groups. The nineteen item scale developed after this activity was distributed among 221 respondents. Results indicate that the scale shows robust psychometric properties with good alpha value having a four factor solution. The results are discussed with theoretical and practical implications that how this scale will facilitate measurement of HCV related social stigma in future studies.**

## INTRODUCTION

Globally, Hepatitis C (HCV) is ranked among the three most widespread chronic viral infections (McCarron, Main, & Thomas, 1997; Soriano, Barreiro, & Nunez, 2006; Alavian, Adibi, & Zali, 2005) and HCV carriers are ten times higher than people carrying HIV (Global AIDS Epidemics, 2006), which makes HCV a major health problem worldwide (Brown Jr & Gaglio, 2003). Apart from the medical complications associated with the disease like chronic liver cancer, it is also a source of psychological problems which include depression, anxiety (Alter & Seeff, 2000; Golden et al., 2005) discrimination, social separation and stigma (Golden et al., 2006; Brener et al., 2007).

Stigma is an outcome of social process (Weiss et al., 2006) that disgraces individual within a social context (Goffman, 1963) and symbolizes degradation (Pearsall, 1999). Recent years witnessed increased attention of researchers towards HIV stigma (e.g. Fife & Wright, 2000; Fontana & Kronfol, 2004) and its social outcomes (Herek et al., 2002) including devaluation and discrimination by society (Bashir, 2011). Still, limited studies focus HCV related stigma (Paterson et al., 2007), though it is a noteworthy issue that requires attention (Hopwood & Southgate, 2003; Zacks et al., 2006). There is also a dearth of knowledge on HCV stigma in those contexts (e.g. Pakistan), where it has emerged as a biggest threat. Butt (2008) suggested that being a complex social phenomenon, studies must address

the socio cultural factors associated with HCV stigma. Occurrence of HCV is high in several Asian countries (Thanachartwet et al., 2007; Wang et al., 2008), and in majority of underdeveloped countries HCV stigma is not properly understood (Van Rie et al., 2008). If we specifically take the example of Pakistan, Kuo et al., (2006) suggests that very limited studies addressed the issue in this particular context, where prevalence of HCV is alarmingly high.

Another omission in HCV stigma literature is non availability of an instrument that can measure stigma in different social environment with robust psychometric properties across cultures (Van Brakel, 2003), as causes of stigma vary across cultures (Clair et al., 2005). To the best of our knowledge, no standardized instrument is available to measure social stigma associated with HCV. The probable reason for omissions can be attributed to the fact that HCV is probably not a big threat to many developed countries, and in underdeveloped countries like Pakistan, where millions of people have lost their lives because of complications associated with HCV; studies have paid limited attention towards HCV stigma and its measurement through a validated scale. Thus, an important contribution of the present study is its address to this gap under researched area.

## HCV related Social Stigma

An individual can be socially stigmatized on the

basis of some visible or non visible source (Tsui & Gutek, 1999). The visible sources include age, color and race, while non visible sources are religion, occupation and illness (Williams & O'Reilly, 1998). The invisibility of illness creates confusion resulting in social isolation of patients (Cox, 1993). The fear that the disease may transmit to others within a social group (Sandelowski, Lambe, & Barroso, 2004) makes individuals socially worthless (Reidpath, Chan, Gifford, & Allotey, 2005) causing deterioration in their physical and psychological well-being (Major & O'Brien, 2005).

HCV carriers are considered socially irresponsible (Paterson et al., 2007) and they encounter stressful social interactions and isolation (Crocker & Major, 1989). Studies also reveal that social stigma associated with disease also enhances medical complications (Riaz, Ahmad, & Khanam, 2011), as fear of isolation and stigma forces the HCV carriers not to pursue the treatment properly (Madden & Cavalieri, 2007). This fear can be a major reason for wide spread of disease as people avoid the tests of infectious diseases (Kalichman et al. 2005) due to fear of stigmatization (Hopwood, Treloar, & Bryant, 2006). Awareness among masses about transmission of disease can reduce sufferings of patients (Butt, 2008), and they can have support from others regarding better treatment (Jones et al., 2012), which can help in reduction in spread of disease (Corrigan & Penn, 1999).

### **The study context: HCV in Pakistan**

A considerable geographical difference has been noticed in prevalence of HCV globally (Sood et al., 2012). In South America, North America, Europe and Asia, there is considerable unpredictability in HBV and HCV occurrence (Pereira & Levey, 1997; Sulowicz, Radziszewski & Chowanec, 2007). According to Aceijas and Rhodes (2007), HCV occurrence estimation by area varies as follows: 2–100% in Latin America, 8–90% in North America, 25–88% in Australia and New Zealand, and 2–93% in Western Europe, 10–96% in Eastern Europe & Central Asia, 10–100% in South and South–East Asia, 34–93% in East-Asia and Pacific, 5–60% in North Africa and Middle-East.

Prevalence of HCV in Pakistan is alarmingly high, and studies suggest that there are around 10 million HCV patients in Pakistan (Hamid et al., 2004). Similarly, studies on random samples (e.g. Idrees, Lal, Naseem, & Khalid, 2008) confirm that the disease is spreading across country at a threatening rate. HCV has become a problem for every house hold. The mother of one colleague lost her life after struggling for two years against chronic liver cirrhosis caused by

HCV, and so is the case with almost every family in Pakistan. Being a collectivist society (Hosftede, 1980), the disease has a number of social implications along with psychological problems (Qureshi, Khokhar, & Shafqat, 2012). However, the social stigma associated with HCV in specific context of Pakistan has never been studied.

## **RESEARCH METHODOLOGY**

### **Scale Development**

The measurement of stigma has also remained an area of interest in the extant literature. Berger, Ferrans, and Lashley (2001)'s 40 item scale is considered to be the most reliable scale to measure stigma associated with HIV. Similarly, the scales to measure stigma associated with other diseases include perceived stigma for substance abuse (Link, 1987), onchocerciasis (Brieger, Oshiname, & Ososanya, 1998), mental illness (Ritsher, Otilingam, & Grajales 2003), leprosy (Tsutsumi et al., 2004) and epilepsy (Westbrook, Bauman, & Shinnar, 1992; Austin, MacLeod, Dunn, Shen, & Perkins, 2004; Austin & Huberty 1993; Jacoby, Baker, Smith, Dewey, & Chadwick, 1993; Cramer et al., 1999; Tekle-Haimanot et al., 1992; Aziz, Akhtar, & Hasan, 1997).

Van Brakel (2006) suggested that most of these instruments were developed focusing American context except few which focused the regional contexts. Kalichman et al. (2005) developed the multi item scale of HIV/AIDS stigma in South Africa. Moriya, Gir and Hayashida (1994) developed the stigma scale for Brazil, while Nyblade et al. (2005) developed it for Tanzania. However, limited studies attempted to develop a scale stigma associated with HCV (Habib & Adorjany, 2003). These factors signify the need to develop a specific scale to measure social stigma associated with HCV, which seems missing in literature.

For present study, HCV related social stigma was identified through literature review. As per Goffman (1963)'s findings, there are three aspects of stigma, and the items identified mainly relate to these three dimensions of social stigma. Later these items were extensively discussed by five focus groups comprising of twenty six individuals. These individuals included medical doctors treating the HCV carriers, and also with individuals who had an interaction with HCV patient. Based on this discussion, a total of 19 items were included in the scale which were adopted from various sources (e.g. Link, Cullen, Frank, & Wozniak, 1987; Visser, Kershaw, Makin, & Forsyth, 2008; Genberg et al., 2009; Kalichman et. al., 2005). The items responses were taken using a 5 point likert scale

with 1 representing strongly disagree and 5 representing strongly agree.

### Sample

The main criterion for recruitment of sample was that respondents must have some sort of social interaction with HCV patient either as a family member, friend a class fellow or coworker. For this purpose, four universities were visited, along with six banks, three public sector organizations and two hospitals in the cities of Rawalpindi and Islamabad. It was noticed with concern that almost all the people working in these organizations had some sort of social interaction with HCV patients. Most of them also told stories of their dear ones who lost their lives in battle against HCV. This explains the extent to which this disease has spread in Pakistan. However, the questionnaires were distributed only to those respondents who confirmed that they had a routine interaction with HCV patients.

The questionnaires were distributed with the help of HR department in these organizations. The objectives of this study were explained to respondents in detail. Some respondents were unable to comprehend the questionnaire due to low literacy level; hence questions were read aloud in front of them and responses were asked. The data was collected from December 2012 to April 2013. This required frequent visits to these organizations during this time period.

A total of 343 questionnaires were distributed in these organizations, and 233 were received, of which 11 were incomplete; hence, 221 were used for final analysis making response rate as 64% which seemed adequate. The composition of this sample included 59% male and 41% female respondents. As for educational qualification, 30% of respondents had less than school certificate level education, 22% had bachelor degree, while 48% held masters degree. The age composition of respondents indicated that 40 % respondents were between the age of 20 to 30 years; 26 % between 31 to 40 years; 22% between 41 to 50 years and 22% were above 50 years of age.

### RESULTS

For pilot testing initially, the questionnaires were distributed among 63 respondents and a satisfactory alpha reliability value of 0.886 was observed. Data was collected from 221 respondents. The values of corrected items, total correlation and cronbach alpha are shown in Table I, while Table II indicates the items mean and standard deviation values.

**TABLE 1**  
**HCV related stigma scale corrected item - total correlation and cronbach alpha coefficients if items deleted item (n=221)**

Items#	r <sub>It</sub>	α1
1	.539	.881
2	.619	.880
3	.647	.877
4	.863	.870
5	.833	.871
6	.670	.879
7	.301	.903
8	.581	.879
9	.384	.905
10	.361	.894
11	.386	.889
12	.539	.881
13	.619	.880
14	.647	.877
15	.863	.870
16	.833	.871
17	.696	.876
18	.714	.873
19	.842	.873

The results of factor analysis with varimax orthogonal rotation are shown in Table 2. A total of 19 items were analyzed showing the four factor solution.

### DISCUSSION

The basic objective of the present study was to firstly introduce the concept of HCV related social stigma, and then to develop a robust instrument to measure it. There are important insights which this study has added to the extant literature on HCV related social stigma. Since HCV carriers are stigmatized by 'others' around them, it is important to analyze the feelings and perceptions of these individuals to correctly address the issue. Parker and Aggelton (2003), while discussing HIV stigma concluded, that stigma is an important issue and the uninfected individuals have to live and accommodate people with HIV. On the same analogy, this study suggests that through awareness and tolerance to live with HCV carriers and not to discernment them socially, the psychological miseries of HCV carriers can be reduced to some extent, if not totally eradicated.

The scale developed to analyze the social stigma associated with HCV is found to have robust reliability. The four dimensions identified as a result of factor analysis are in line with stigma theory presented through his seminal work by (Goffman, 1963), which is social isolation, negative social perception, fear of contagion and pity attitude. These dimensions indicate the types of social stigma the HCV carriers face on day-to-day basis.

**TABLE 2**  
**HCV related stigma scale five factors, factor loadings and items**

Factor		Loading	Item	
1.Social Isolation	9 items, $\alpha=0.821$ , Eigen value=7.33, 32.22%	0.863	1	HCV carriers should not be trusted
		0.876	2	Although HCV patients may seem all right it is dangerous to forget for a moment that they are HCV carriers.
		0.878	3	I would not like to sit next to someone with HCV in public transport.
		0.594	6	I would not like to have friendship with someone having HCV.
		0.831	7	It is safe for a person with HCV to look after somebody else's children.
		0.876	12	People living with HCV in this community face rejection from their peers.
		0.878	13	People living with HCV in this community face neglect from their family members.
		0.893	15	People with HCV should be allowed to fully participate in social events in this community (R).
		0.842	16	I feel comfortable being seen in public with HCV carrier (R)
2. Negative social Perception	3 items, $\alpha=0.713$ , Eigen value=2.13, 7.33%	0.841	9	I would not employ someone with HCV.
		0.851	5	I think less of someone because they have HCV.
		0.851	11	I feel uncomfortable around people with HCV.
3: Fear of Contagion	3 items, $\alpha=0.761$ , Eigen value=1.13, 3.22%	0.833	19	A person with HCV must have done something wrong and deserves to be punished.
		0.939	8	I feel afraid to be around people with HCV.
		0.604	14	Most people would not buy edibles from a shopkeeper or food seller that they knew had HCV.
4: Pity attitude	3 items, $\alpha=0.87$ , Eigen value=2.12, 5.42%	0.939	17	I am afraid of catching the HCV from an affected person.
		0.632	4	Having HCV is just a matter of bad luck.
		0.844	10	People with HCV deserve as much respect as anyone else.
		0.809	18	I feel sorry for a person with HCV.

Almost each and every Pakistani observes people dying of HCV in their surroundings. Thus, fear associated with this disease is alarmingly high, which itself is a major source of social stigma. People avoid HCV carriers with the unknown fear that they might catch the disease. Lack of awareness plays an important role in this regard as most of the people don't know the exact cause of disease, and this ambiguity results in negative

perception about the disease. In an Asian context, the problem becomes more serious regarding HIV. Bhattacharya (2004) suggested that Aids is considered a dirty disease in South Asia; we observed similar opinion among masses about HCV. People tend to isolate HCV carriers socially, and do not prefer social interaction with them. Earlier studies suggest that lack of awareness and illiteracy further intensify the issue manifold. During



interviews, majority of respondents indicated that they do not prefer to eat with HCV carriers or to interact with them. They considered that HCV spreads using same utensils or normal social interaction like hand shaking and hugging. Some families indicated that they have separated the utensils etc, of patients, although HCV does not spread through this mode.

People generally think it is because of sins or intentional wrong doing by the HCV carrier, and thus he/she deserved this punishment in the form of this disease. Hence, a person who deserves sympathy is subjected to negative perception in social context, making his/her life more miserable. Some people take it as anyone having this disease is not a normal person, and thus they deserve sympathy or which we call petty attitude. This attitude also causes a sort of discrimination with the HCV carriers. People try to show sympathy to them which may hurt their ego. In social gatherings or normal day-to-day life, the HCV carriers are discussed as being unfortunate ones, who deserve special sympathy and consideration; thus, indirectly, the petty attitude can be considered a source of social stigma.

Another important issue which the HCV carriers may face is stigma at workplace. Studies indicate that HIV is a source of workplace stigma in various contexts including Pakistan (Bashir, 2011). Similarly, HCV carriers are less likely to be offered jobs, or at jobs they are less likely to have equal opportunities parallel to a normal employee. So, the social stigma associated with HCV can be seen at homes, at shopping malls, at social gatherings and at workplace.

This study made an important contribution to literature and theory of stigma by developing a scale to measure social stigma associated with HCV. There are not many scales available to comprehensively measure HCV related social stigma with good psychometric properties. It is evident from the initial testing that this scale will help the researchers to correctly assess and measure the stigma. On practical side, studies using this scale will help to identify the miseries being faced by HCV patients, and to propose the remedial measures so that the HCV carriers can lead a normal life like other people. It will help to raise awareness among masses that HCV carriers are normal human beings; the disease is cure able and does not spread with normal social interaction.

In the end, we must acknowledge the limitations of the study. Since the major objective was to develop a test, the test-retest reliability was not explored; this aspect must be addressed by future researchers. Another limitation was sample, HCV is a disease spread across Pakistan, but due to limited resources available, the data could not be collected from many areas of Pakistan. The future studies should try to use a more comprehensive sample to conform psychometric properties of this scale.

## ANNEXURE

### HCV Social Stigma Scale

- 1 HCV carriers should not be trusted
- 2 Although HCV patients may seem all right it is dangerous to forget for a moment that they are HCV carriers.
- 3 I would not like to sit next to someone with HCV in public transport.
- 4 Having HCV is just a matter of bad luck.
- 5 I think less of someone because they have HCV.
- 6 I would not like to have friendship with someone having HCV.
- 7 It is safe for a person with HCV to look after somebody else's children(R).
- 8 I feel afraid to be around people with HCV.
- 9 I would not employ someone with HCV.
- 10 People with HCV deserve as much respect as anyone else.
- 11 I feel uncomfortable around people with HCV.
- 12 People living with HCV in this community face rejection from their peers.
- 13 People living with HCV in this community face neglect from their family members.
- 14 Most people would not buy edibles from a shopkeeper or food seller that they knew had HCV.
- 15 People with HCV should be allowed to fully participate in social events in this community (R).
- 16 I feel comfortable being seen in public with HCV carrier (R).
- 17 I am afraid of catching the HCV from an affected person.
- 18 I feel sorry for a person with HCV.
- 19 A person with HCV must have done something wrong and deserves to be punished.

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# FINANCIAL DEVELOPMENT AND ECONOMIC GROWTH: PANEL CROSS - COUNTRY STUDY

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## ABSTRACT

**This study aimed to examine the effect of financial development (FD) and private credit booms on economic growth. This study used the data of 58 countries (27 DCs and 31 LDCs), from the period 1973 to 2012, by applying the method of Panel Cointegration. This study involved the FD index made of four indicators of banking sector depth, activity, and efficiency indicators. The estimation results showed that LDCs gave more positively significant response to FD than DCs. This is because the LDCs' financial systems are dominantly Bank based or their banking sector is more developed than other institutions and markets. Whereas, the credit boom to private sector (which is taken as indicator of FD) inversely affect the economic growth rate. Such relation can be caused by lack of credit recovery, more defaulting loans, insolvency, and huge public debt, that hence leads to a financial crash like that of 2008 financial crisis.**

## INTRODUCTION

The phenomenon of financial development (FD) can be defined as “the policies, factors, and the institutions that lead to the efficient intermediation and effective financial markets. A strong financial system offers risk diversification and effective capital allocation. The greater the FD, the higher would be the mobilization of savings and its allocation to high return projects and potential investments that further accelerates the process of economic growth.

The pioneers of the development economics accompanied with three Nobel Laureates, who are “Lucas (1988), Robinson (1952), and Miller (1998), stressed a lot to the literature of finance-growth nexus. According to Lucas (1988), “The economists over-stressed the role of financial system in the economic growth”. Similarly, Robinson (1952) argued that “Finance follows where enterprise leads”, which means it is the economic growth which induces incentives and demand for the financial services, and financial system responds to these demands, nothing else. On the other hand, Miller (1998) stated that “Financial markets contribute to growth is a proposition too obvious for serious discussion”. Similarly, argued by Bagehot (1873), Schumpeter (1911), Gurley and Shaw (1955), Goldsmith (1969), McKinnon (1973), finance-growth nexus cannot be ignored while understanding the idea of economic growth.

The focus of the study is on one pole of the financial sector i.e. the financial intermediaries sector of the economies. The reason is to be specific and concise.

The objective of this study is to examine the impact of financial development in the intermediaries sector on economic growth. Moreover, the forecasting signals for occasional financial crisis due to credit booms in advancing credit to private sector would also be examined.”In light of the existing literature on finance-growth nexus, the following will contribute to the existing literature in the following ways:”by examining FD and economic growth, by introducing a newly constructed index of FD; and assessing the forecasting signals for occasional financial crisis which is induced due to high credit growth to private sector.”This study would help the researchers and financial analysts to analyse different financial systems at a given time, and also over the time periods. It can also help them to compare different country's FD with given GDP per capita income.

## LITERATURE REVIEW

We are well aware about the integral debate of today's world among the policy makers and economic think-tanks, especially in the financial sector, that how much the financial sector development is essential in the development of an economy. “There is a lot of literature on different aspects of finance-growth linkages, and they

are agreed on the point that there is a relation between finance and growth. However, they disagree on the direction of the finance-growth relation, such that either FD leads to economic growth or vice versa. Financial sector development leads to economic growth, either by endogenous or exogenous channels in both long-run and short-run paths.”

The empirical literature documents a significant and positive relationship between financial intermediaries' sector development and economic growth, like King and Levine (1993) presented the simultaneous relationship between FD and the growth indicators and sources of growth from the period of 1960 to 1989 across 80 countries. They studied whether the average level of FD is significantly and robustly correlated with faster current and future average rate of real per capita GDP growth, the rate of physical capital accumulation, and the rate of improvement in economic efficiency. They applied both two-stage least square (2SLS) and three-stage least square (3SLS) for using initial values of development and growth determinants.” Their results showed that higher levels of FD are positively associated with faster rates of economic growth, physical capital accumulation, and economic efficiency improvements, as well as for the future time period, both before and after controlling for numerous country and policy characteristics. “Their results found that indicators of FD, like; the size of the formal financial intermediary sector relative to GDP, the importance of banks relative to the central bank, the percentage of credit allocated to private firms, and the ratio of credit issued to private firms to GDP, are highly correlated with growth, the rate of physical capital accumulation, and improvements in the efficiency of capital allocation. They also found that the predetermined components of these FD indicators significantly predict succeeding values of the economic growth indicators.”

In addition to this study, Beck, Levine, and Loayza (1999) took the sample of 74 countries from period of 1960 to 1995. They applied the methods of Generalized Method of Moments (GMM) and cross-sectional Instrumental Variable estimators (by taking legal origins as instrumental variables). Their results argued that financial intermediary development pulls a significant and positive impact on total factor productivity growth, which further fuels, in general, the GDP growth. Moreover, the results were consistent with the Schumpeterian view that the intensity of FD significantly determines the rate of economic growth by affecting the speed of productivity growth and technological change. The same results were given by Khan et al. (2005) in their study, by applying the technique of Autoregressive distributed Lag (ARDL) accompanied with Error Correction model (ECM) and Cointegration technique, from the period of 1971 to 2004 in Pakistan.

The study with same estimation techniques as of Khan, Qayyum, & Sheikh (2005), except Error Correction model (ECM), was taken by Jalil and Ma (2008). They attempted to assess the relationship between FD and economic growth in case of China and Pakistan from the period of 1960-2005. They conducted Bonds testing ARDL Co-integration approach to investigate the existence of long run relationship between FD and economic growth. They used banks deposit liquid liabilities ratio and private credit ratio as indicators for FD. They observed in their results that there exists a strong significant relationship between the FD indicators and economic growth, in both countries.

In Pakistan, they observed that there exists a significant relationship between both FD indicators with economic growth, and that there is significant impact of FD on economic growth. While in case of China, one indicator shows insignificant impact on economic growth. Jalil “and Feridun (2011) examined the same study in China only from the period 1978 to 2006 and applied only ARDL by introducing a financial depth indicator to measure the development of financial sector by using Principal Component Analysis (PCA). They observed that there is a significant positive long-run relationship between FD and economic growth. They also demonstrated that there is one way relationship between FD and economic growth, or FD is interpreted as a long run determinant of economic growth instead, and vice versa.

In the literature of finance-growth nexus, the study of Shan (2006) is different from the previous work, i.e., by taking into account innovation accounting or impulse response function and variance decomposition analysis, to examine the dynamic relationship between FD and economic growth. He took the quarterly time series data for 10 OECD countries accompanied with China from 1985 to 1998 and applied the technique of VAR. Here, he introduced a new proxy of total credit to measure the FD. Furthermore, to assess whether FD leads to economic growth or not, in other words whether FD granger causes economic growth or not.

It was found from his results of Variance Decomposition analysis that FD leads to growth in most of the countries in the sample, but with some considerable differences between Western countries that have more developed financial systems and the Asian countries with less developed financial systems. The results showed that FD is no more than a causal factor and, almost definitely, not the most chief factor. It was cleared that causality might exists, but there might be un-uniform direction. Hence, the statement hypothesis of FD leads to economic growth may not be generally supported by time-series analysis too.

The development literature documented another study of finance-growth nexus which used a different estimation

methodology to solve this issue. Hassan, Sanchez, and Jung-Suk Yu (2011) presented the indication of the role of FD for economic growth, taking into account the low-income, middle-income, and high-income countries. They took the sample of 168 countries from 1980 to 2007. Their study examined the imperative proxy measures of FD, and to what extent they contribute to explaining the economic growth across geographic regions and income groups. They applied both panel regressions for each of the six regions and two high income groups, and also for the overall pooled data by Weighted Least Square (WLS). Their study was aimed to assess the relationship and direction of the FD and economic growth, for this purpose they applied VAR.”

Their results inferred that there is a positive relationship between FD and economic growth in LDCs. It was found that “in the short run, there is a two-way Granger causality between FD and economic growth for most of the regions. However, it is not in Sub-Saharan Africa and East Asia & Pacific countries, where there is a one-way Granger causality that flows from economic growth to FD, being the lowest-income countries. It might be due to the fact that there is high demand of financial services, which leads to FD. It is also seen that trade and government consumption plays a crucial role in determining the economic growth in LDC’s. So, that’s why FD might not be the only motive for the enhancement of economic growth in developing countries.”

The studies based on the cross section and panel data are found to have positive effects of FD on growth, even after accounting for other determinants of growth, as well as for potential biases induced by “simultaneity, omitted variables, and unobserved country-specific effects on the finance-growth nexus. On the other hand, the studies based on the time series data gave contradictory results. Demetriades and Hussein (1996) found the evidence that finance is a leading factor in the process of economic growth.” They further found that for the majority of the countries, causality is bi-directional, while in some cases FD follows economic growth, while “Luintel and Khan (1999) used a sample of 10 LDC’s and concluded that causality between FD and output growth is bi-directional for all countries.

Finally, studies, which look at the structure and sources of company finance, also conclude that the development of the financial sector facilitates the growth of corporate sector (Rajan & Zingalas, 1996).

Since this study is concentrated merely to examine that how financial intermediary’s sector development leads to fuel the economic growth; so, we elucidate the theoretical links that how and by which channels financial intermediaries’ sector development affects economic growth. Since, financial development refers to “the policies, factors, and the institutions that lead

to the efficient intermediation and effective financial markets; however, by FD we don’t mean that it totally eliminates market imperfections, but it helps to reduce the degree of market imperfections by easing the access to information, access to financial services and instruments, reducing comparatively the transaction costs that makes the financial institutions and markets efficient having effective legal and regulatory system, which further leads to the development of financial institutions and markets (having greater risk diversification), and that attracts the potential investors to invest in high-return projects with diversified portfolios, which therefore leads to foster economic development.

### **Positive relationship between Financial Development and Growth**

The basic idea that how the financial system affects the process of economic growth was primarily given by the pioneers of finance-growth nexus i.e. “Bagehot (1873), Schumpeter (1911), Debreu (1959), Arrow (1964) and Patrick (1966), who stated that financial system plays a very vital role in fostering economic growth by enhancing innovative activities and efficient capital allocation, by identifying the best investment opportunities. Furthermore, financial system affects the process of growth positively in a sense that the financial institutions evaluate the potential investors, and then funnel funds from small savers to those potential investors’ investment, further by diversifying the risk associated with innovative activities of those investments efficiently.

Hence, the more the financial institutions perform their function of evaluating, diversifying risk, and crediting efficiently, the more it will accelerate the process of economic growth (King & Levine, 1993). “In other words, better financial system enhances economic growth by stimulating the rate of productivity enhancement.” (Greenwood & Jovanovic, 1990; Levine (1991); Bencivenga & Smith, 1991; Boyd & Smith, 1992; Saint-Paul, 1992; Pagano, 1993).

To assess the impact of FD on economic growth, most of the theoretical framework suggests that “we can better know the relation by examining through the primary functions provided by the financial institutions, and to link it with economic growth process. So, to do so there is one basic primary function performed by the financial institutions to improve and to mitigate the information costs, transaction costs, and other financial frictions, i.e., “To facilitate the resource allocation across space and time efficiently, in an uncertain environment.” (Merton & Bodie, 1995, p.12). To elucidate more, this primary function of the financial institutions, we decomposed this primary function into five primary functions. In particular, the financial systems: “facilitate the trading, hedging,

diversifying, and pooling of risk, allocate resources, scrutinize and monitor managers and exert corporate control, savings mobilization, and facilitate the exchange of goods and services.

The theory demonstrates that there are basically two channels through which these financial functions (sub-function of primary function) may affect the economic growth, (i) Capital allocation and (ii) Technological innovation. Capital allocation channel demonstrates that innovations in the telecommunications, and computing have definitely affected the financial sector, and hence fuels the growth process. Many growth models documented that the functions of the financial institutions have an effect on the process of economic growth, by influencing on the rate of capital formation, which came from the high level of spurred investment, which is the result of huge savings enhanced by the financial intermediaries. However, the class of growth models put immense concentration on the enhancement of technological progress and innovations, and demonstrated that these are the core steps to be taken in order to promote the growth and prosperity in the economy. "These models mainly focused on the invention of new production processes and technologies, which leads to making variety of differentiated, brand, and focused goods for different consumer groups. More precisely, these models revealed that financial institutions via its primary functions alter the growth rate by changing the rate of technological innovation, specifically in the long-run (Romer, 1990; Grossman & Helpman, 1991; Aghion & Howitt, 1992).

Keynes (1930) amplified the importance of financial intermediaries sector on economic growth as: the credit provided by the banks paves the way for productive investments, or capital allocation and the bankers would provide the transport facilities in order that the productive powers of the community can be employed at their full capacity. The FD may affect positively the growth rate by producing better information to the economic agents, and by easing or alleviating the financial frictions that helps in shaping firms' decisions and adopting innovative incentives with better ramifications (Gurley & Shaw, 1955; Patrick, 1966; Greenwood & Jovanovic, 1990; Saint-Paul, 1992; Devereux & Smith, 1994; Obstfeld, 1994).

Pagano (1993) suggested that there are, basically, three channels which can contribute to assess the impact of FD on economic growth. Firstly, through a raise in the proportion of savings that is induced for the purpose of stimulating the investment level. Hence, this process of raising savings, which funnelled to investment, involved that the financial intermediaries absorb some fraction of savings by considering it as the spread between lending rate and borrowing rate in banking sector, while as a reward for services supplied (as commission or fees for brokers

and dealers) in securities market. On the other side, such activities of financial markets are influenced by some factors like, taxation, restrictive regulations, and other Govt. policies, in case of high amount of transactions.

To make it simple, it is pretended that the Quasi-rent earned by the financial intermediaries are almost spent on the private consumption, and the tax revenue earned by the Govt. is entirely to be spent on the public consumption. So, the policy implications hereof are to consume or spent entirely or partly of the earning to stimulate investment, followed by accelerating the process of growth. In sum, the core purpose of FD is to reduce this resource absorption from the savings, or to increase the proportion of saving that is to be funnelled to investment, and hence to foster the economic growth. In addition, this can be done through raising the productivity level of capital by allocating resources to those investment projects whose marginal productivity of capital is high, which leads to accelerate growth via two roles: one is through information role, and second is through risk sharing role.

The information role involves the collection of information for evaluating the alternative investment projects; whereas, the "risk sharing role involves the provision of risk sharing opportunities by the financial intermediaries, which influences the behaviours of the savers to save, and have choices to invest in most productive portfolios (Levine, 1991 & Saint-Paul, 1992). This channel is through stimulating the private savings rate. The theory states that, as the capital markets get mature, it infers that the credit for consumers will be cheaply and readily available on demand. It encourages the households to invest more to have high returns and they might get further insurance against their investment projects, by diversifying their risk associated with the rate of return, and henceforth fosters the growth rate."

The theoretical literature postulates that "financial sector development spurs economic growth. In fact, due to the existence of a well-functioning financial system, which follows the efficiency in the financial sector, leads to a decline in the cost of capital, information costs, transaction costs, monitoring and R&D costs. A well-functioning financial institution fuels the business and investment opportunities, by funneling saving funds to well diversified portfolios, efficient resource allocation, and development of human and physical capital, and technological innovation that paves the way for economic development.

The development of financial sector also concerns about the well managed system of monitoring and mobilization of funneling funds, management performance, and risk taking in the exchange of goods and services (Creane, Goyal Rishi, Mushfiq, & Randa, 2004). The theory postulates that the greater the FD in the economy, the greater would be the financial services and



project returns, and the lower would be the information acquisition costs and risks, and more would be the faith in the forecasting in the financial institutions.

In sum, the function of FD is “producing and processing information about possible investments and allocating capital. These are based on assessments, monitoring individuals and firms, and exerting Cooperative governance after allocating capital, facilitating the trading, diversification, management of risk, mobilizing and pooling savings, and easing the exchange of goods and services and financial instruments.” However, the degree of FD around the World varies in the provision of these key functions. The financial institution that provides these functions efficiently leads to improvement in the allocation of capital. This, hence, accelerates economic growth, by following an expansion of economic opportunities, encourages an entry of new competent, and intends to expel out the less efficient firms from the market, accompanied by better governance and accountability.

### **Negative relationship between Financial Development and Growth**

As financial markets shares endowment risks “(such as health hazards) and the risk associated with the rate of return; hence, individuals may counter these risks via securities markets, if exists. Moreover, by assuming that the securities markets are fulfilling constant relative risk aversion and the individual’s purpose is for precautionary needs, then the individuals will save less against their precautionary demands in the future. Therefore, it leads to a decline in the saving rate and hence the growth rate, due to FD. This decline in the saving rate may at least offset the growth enhancing effects of more productive investments (Pagano, 1993).” The same demonstration has been pointed out by “Devereux and Smith (1991). Moreover, as the FD improves the risk diversification, so lower risk may also ambiguously affect savings in a growth model when it is accompanied with physical capital externalities, thereby retards the process of growth and welfare level (Levine (2003); Levhari & Srinivasan, 1969).

### **Zero relationship between Financial Development and Growth**

The statement of Robinson (1952) that “where enterprise leads, finance follows”, which means that economic growth is not affected by FD, instead economic growth induces incentives for a rise in the demand of financial services and financial system responds to these demands simply. The same view has been pointed out by Lucas (1988). He stated that economists ““badly overstressed”” the importance of the financial system in the

process of growth. In fact, he predicted that the financial services were merely the sideshow for the economic growth process. Robinson (1952) also derived some sceptical views from the Neo-Classical growth models which stressed that financial institutions have a very minor effect on the enhancement of economic growth; rather it is the side-show of the growth process. That is, it affects the level of investment, which is considered to be the prime contributor towards accelerating economic growth.

Similarly, Rajan and Zingales (1998) argued that FD leads to economic growth or a causal factor, but it can be a leading factor in the growth process, nothing else. They also stressed that they cannot simply identify its effects on growth because at the same time the country is passing through various structural transformation processes. This idea was also given by Ram (1999); Kemal, Qayyum, and Hanif (2004).

### **Endogenous relationship of Financial Development with Growth**

The endogenous growth models also takes into account the role of financial sector within the framework of new growth theories, which stresses the role of financial intermediation and development as an endogenous process. These models also stress that both can affect each other simultaneously. “The growth process motivates the economic agents to participate in the financial institutions, and hence enhances facilitating the establishment and promoting the intermediaries sector. On the other side, this promotion of intermediaries sector enhances an efficient allocation of capital towards potential investments, and hence fosters the growth process (Greenwood & Jovanovic, 1990).

Other growth models show that financial intermediaries have some real resources costs (fixed costs) or “resources less than proportional to the volume of funds intermediated. This augments the economy’s capacity to grow, which further increases an incentive for the individual to participate in the financial markets, and henceforth spurs the financial sector endogenously (see Robinson, 1952; Kuznets, 1955; Freidman & Schwartz, 1963; Greenwood & Jovanovic, 1990; Saint-Paul, 1992).

It is of immense interest to document the hypothesis of the research that what we are going to confirm from this study. They are:

*Hypothesis 1. FD leads to fuel the pace of economic growth.*

*Hypothesis 2. There exists a long run relationship between FD and economic growth.*

*Hypothesis 3. Private credit booms after threshold level may also hurt the economy.*

## RESEARCH METHODOLOGY

For this study, real GDP per capita growth rate (proxy for economic growth rate) as dependent variable was employed, and regressed it on FD indicators accompanied with other control variables. The general model specification form is as:

$$Y_{it} = \beta_0 + \beta_1 \Sigma X_{it} + \beta_2 FD_{it} + \varepsilon_{it}$$

Where  $Y_{it}$  shows the real GDP per capita growth rate.  $\Sigma X_{it}$  is a vector that indicates the summation of controlled variables which shows other determinants of growth rate, which include: inflation rate (inf), secondary school enrolment (SSE), population growth rate (pop), real interest rate (RIR), log of life expectancy (life), and trade openness (trade), and  $\beta_1$  is the coefficient parameter for those control variables. Moreover,  $FD_{it}$  shows the FD index, constructed from four measures through the method of Principal Component Analysis (PCA), aimed to achieve a single and meaningful index out of complex and multidimensional elements of FD and to re-express the data with minimum noise and maximum extract to measure the strength of FD. These indicators indicate various characteristics of financial institutions; such indicators are: ratio of broad money to GDP---Financial Depth, which shows how deep the financial intermediaries sector is; private credit to GDP and banks assets to banks and central bank assets ---Financial

Intermediation or activity, which shows saving mobilization and credit allocation role of financial intermediaries or activity of the financial intermediaries sector; interest rate spread---Financial efficiency, which shows efficiency of financial intermediaries in intermediating resources and facilitating financial transactions.

This study used the method of Fully Modified Ordinary Least Square (FMOLS) also suggested by Pedroni (2000), which is a new technique to account for endogeneity (also account for heterogeneity and autocorrelation among the individuals caused by individual effects), and also where there exists a long-run relationship between the main variables i.e. FD and economic growth. This method is advantageous in a sense that it allows researchers to selectively pool long run information and short run dynamics along with fixed effects to be heterogeneous among different members of the panel. In addition, it produces asymptotically unbiased estimators and irritant parameter free standard normal distribution (Pedroni, 1999). The data sample consists of 58 countries across the World, among which 27 are Developed Countries (DCs) and 31 are Developing Countries (LDCs), while the sample period was taken from 1973 to 2012. Most of the data was taken from World Bank's World Development Indicators (WDI). The other sources include Global Financial Development Database (GFDD), and from the studies of Caprio and Klingebiel (2003), Laeven and Valencia (2012), and Čihák, Demirguc-Kunt, Feyen, and Levine (2013), etc.

**TABLE 1**  
**Im, Pesaran, & Shin (1997) Panel Unit Root Tests**

Variable	Developed Countries		Developing Countries	
	Statistic	Prob.	Statistics	Prob.
Currency	-16.7627	0.0000	-11.7190	0.0000
Depth	-19.0252	0.0000	-28.4682	0.0000
FD index	-19.8104	0.0000	-19.8104	0.0000
FDI	-33.9901	0.0000	-33.6364	0.0000
Govt.	-21.5911	0.0000	-28.2424	0.0000
Inf	-6.59208	0.0000	-14.4163	0.0000
Inv.	-27.2098	0.0000	-35.8628	0.0000
Life	-32.7568	0.0000	-4.04862	0.0000
Pop	-21.9070	0.0000	-9.23052	0.0000
Private	-17.8872	0.0000	-20.2110	0.0000
RIR	-30.3088	0.0000	-32.9830	0.0000
Spread	-24.3230	0.0000	-22.0121	0.0000
SSE	-20.3543	0.0000	-17.8760	0.0000
Trade	-25.4879	0.0000	-30.7171	0.0000
Y	-31.5280	0.0000	-39.7123	0.0000

*Null hypothesis: there is unit root (no stationarity)*

*Alternative Hypothesis: there is no unit root (stationarity)*

*Sample: 1973 2012*

*User-Specified lag length:*

**TABLE 2**  
**Pedroni Residual Cointegration Test**

	Developed Countries				Developing Countries			
Alternative hypothesis: Common AR coefficients (within-dimension)								
	Statistic	Prob	Weighted Statistic	Prob	Statistic	Prob	Weighted Statistic	Prob
Panel v-statistic	0.031353	0.4875	-2.244287	0.9876	-0.830864	0.7970	-3.752437	0.9999
Panel rho-statistic	-0.420744	0.3370	0.570547	0.7158	-4.566141	0.0000	-2.171319	0.0150
Panel pp-statistic	-11.58677	0.0000	-11.72420	0.0000	-18.72957	0.0000	-18.03345	0.0000
Panel ADF-statistic	-7.461867	0.0000	-7.992615	0.0000	-8.446791	0.0000	-9.461613	0.0000
Alternative hypothesis: Individual AR coefficients (between-dimension)								
	Statistic	Prob			Statistic	Prob		
Group rho-statistic	2.492585	0.9937			0.025913	0.5103		
Group pp-statistic	-18.46782	0.0000			-26.18743	0.0000		
Group ADF-statistic	-7.460819	0.0000			-9.512586	0.0000		

*Series: Y RIR INF LIFE SSE TRADE FD, Sample: 1973 2012, Null hypothesis: No Cointegration, User-specification lag length: 1, Newey-West automatic bandwidth selection and Bartlett kernel*

*of Private credit to GDP, DC and LDC stands for Developed Countries and Least Developing Countries, respectively., Statistical significance at 1%, 5% and 10% is denoted by\*, \*\* and \*\*\* respectively.*

**TABLE 3**

**The effect of Financial Development on Economic Growth**

Variables	DC's	LDC's	DC's	LDC's
RIR	-0.041	0.050*	-0.092*	-0.020***
Inf	3.829*	-0.139	-0.874*	-0.622**
Pop	-2.042*	-1.084**	-0.951*	-0.769***
Life	101.751**	55.14*	118.83*	18.442**
SSE	2.382***	1.374***	5.247*	3.074**
Trade	17.502*	30.85*	14.118*	7.74*
FD index	0.778*	2.628*		
Inv.	5.788*	2.473*		
FDI	3.19*	4.165*		
Govt.	-6.705	-33.646*		
Banking	-0.901**	-0.731		
Currency	-5.534	-8.85*		
Debt		-3.333*		
Private			17.66*	2.36
Private2			-6.015*	-3.072**
R <sup>2</sup>	0.68	0.762	0.339	0.286

*Dependent variable is real GDP per capita growth rate (Y<sub>(i,t)</sub>), RIR in the real interest rate, Inf is the Inflation rate, Pop is the Population growth rate, Life is the log of life expectancy at birth, SSE is the secondary school enrolment ratio, Trade is the trade openness (exports + imports / GDP), FD index is the aggregate index of financial development, Inv is the domestic investment to GDP, Govt is the Government expenditures to GDP, FDI is the foreign direct investment inflows, Banking and Currency, Debt are the dummy variables of Banking crisis, Currency crisis, and Debt crisis, respectively. Private is the credit to Private sector to GDP, and Private2 is the square*

This study involves the test for stationarity by applying Panel Unit root test of Im, Pesaran, and Shin (1997), to find out whether they the variables are stationary at level, first difference, or lag of the difference. It also involves a test of Panel Cointegration by Pedroni (1997, 1999) to check out the cointegrating vectors in the panel.

**RESULTS AND DISCUSSION**

Before delving into presenting the estimation results of Panel Cointegration, we need to indicate the tests statistics of stationarity tests and Cointegration tests (to check out whether the variables are integrated in the same order or not), and then the regression results.

The test results of Im et al., (1997) states that all the variables are stationary at their first difference. So, the null hypothesis of no stationarity is rejected at 1% significance level, and the alternative hypothesis is accepted. The test statistics of Panel Unit root tests are presented in Table 2 for both DCs and LDCs, where the test results of Pedroni (1997, 1999) postulates appropriate test statistics of the given seven statistics. Most of the test statistics of results states that the null hypothesis of no Cointegration is rejected which is given by the p-value, that is less than 0.05 for most of the test statistics out of seven test statistics in the table (Table 2). Hence, it is concluded that the models have Cointegration which means the variables in the models are cointegrated in the same order (Asteriou & Hall, 2011).

**TABLE 4A**  
**The Effect of Financial Development on Economic Growth**

Variables	Estimated Regressions					
	(27 - Developed Countries)					
	1	2	3	4	5	6
RIR	-0.097*	-0.096*	-0.108*	-0.043***	-0.098*	-0.117*
Inf	4.103*	4.027*	4.252*	4.248*	4.665*	-1.404*
Pop	-1.011*	-1.031*	-1.250*	-1.116*	-0.748*	
Life	80.830*	79.283*	36.488	25.572	65.516	117.71***
SSE	5.178*	5.337*	3.513	1.913	5.387*	9.585*
Trade	16.490*	16.541*	14.377*	16.896*	12.852*	12.716*
FD (index)	0.390**	0.277**	0.289**	0.271**		
Inv.		0.016				
FDI			0.585*			
Govt.	-19.345*					
Banking					-0.901**	
Currency						-5.670*
R <sup>2</sup>	0.3266	0.3267	0.355	0.401	0.447	0.684

Fully Modified Ordinary Least Square (FMOLS) estimation technique, Dependent variable is real GDP per capita growth rate ( $Y_{(i,t)}$ ), RIR in the real interest rate, Inf is the Inflation rate, Pop is the Population growth rate, Life is the log of life expectancy at birth, SSE is the secondary school enrolment ratio, Trade is the trade openness (exports + imports / GDP), Inv. is the domestic investment to GDP, Govt. is the Government expenditures to GDP, FDI is the foreign direct investment inflows, Banking and Currency are the dummy variables of Banking crisis and Currency crisis, respectively, Statistical significance at 1%, 5% and 10% is denoted by \*, \*\* and \*\*\* respectively.

**TABLE 4B**  
**The Effect of Financial Development on Economic Growth**

Variables	Estimated Regressions							
	(31- Developing Countries)							
	1	2	3	4	5	6	7	8
RIR	-0.030*	-0.022***	-0.053*	-0.027**	-0.031	0.170*	-0.038*	-0.033*
Inf	-0.515	-0.150	-0.111	-0.644***	4.561	4.857*	-0.330	-0.552**
Pop	-0.917**	-0.821***			1.701*	-0.917**	-0.574	-0.899**
Life	14.553	19.412**	17.326***	16.628***	88.97***	306.61*	25.486*	15.92***
Trade	5.908*	3.988**	3.347**	3.865**	3.773**	7.963***	3.650**	3.634**
FD (index)	2.172*	2.508*	1.221**	2.281*	0.534*	55.215*	4.222*	2.908*
Inv.		2.263*						
FDI			1.288*					
Govt.	-3.127**							
Banking				-1.051*				
Currency					3.823*			
Private2						-2.621*		
FD2 (index)								1.790*
R <sup>2</sup>	0.268	0.276	0.326	0.277	0.456	0.582	0.317	0.267

Fully Modified Ordinary Least Square (FMOLS) estimation technique, Dependent variable is real GDP per capita growth rate ( $Y_{(i,t)}$ ), RIR in the real interest rate, Inf is the Inflation rate, Pop is the Population growth rate, Life is the log of life expectancy at birth, Trade is the trade openness (exports + imports / GDP), Private2 represents credit booms to private sector in order to assess a threshold level, FD index is the aggregate index of financial development, FD2 (index) represents square of FD in order to assess a threshold level, Inv. is the domestic investment to GDP, Govt. is the Government expenditures to GDP, FDI is the foreign direct investment inflows, Banking and Currency are the dummy variables of Banking crisis and Currency crisis, respectively, Statistical significance at 1%, 5% and 10% is denoted by \*, \*\* and \*\*\* respectively.

## Estimation Results of Regression Models

After evidencing the existence of Panel Cointegration between the variables, here we explore the estimation results of regressing the effect of FD on economic activities. The regression results show that the index shows a positive and significant relationship with economic growth in most of the models. These results are consistent with the view of Bagehot (1873), Gurley and Shaw (1955). It means that FD fuels the process of economic growth significantly in both groups of countries (see Tables 4A and 4B). These results are also consistent with the results of Jalil and Ma (2008), and Jalil and Feridun (2011).

To examine the effect of investment efficiency on economic growth, we add the variable of the ratio of Domestic Investment to GDP in principal regression. The result gives a positive and significant sign with economic growth, for both groups of countries. It means the more the investment, the more will be capital accumulation, and hence it fuels to accelerate the process of economic growth.

To examine the effects of foreign cash inflows into the domestic financial economic system through financial institutions, we employed the variables of Foreign Direct Investment to GDP. The result gives a positive and significant sign with economic growth, for both groups of countries (see also 4A and 4B). It means that FDI accelerates the process of economic growth by generating more employment opportunities in real sector and financial sector as well, new production techniques, economies of scale, improving living standards, and rising per capita incomes of the population.

To examine the impact of government expenditures on the growth rate, we have employed the variable of Government expenditures to GDP. The results were found with appropriate negative and significant sign with economic growth for both groups, which may be due to the fact that the expenditures are taken place on non-development purposes and luxurious stuffs, which have no returns at all.

One thing that is worth noticing is to examine how much advancing credit to be funnelled to the private sector affects the FD, and hence the economic growth. We can see from the results that when we add both the indicator of credit to private sector to GDP and its square term in the main specification, we have different signs of private sector credit to GDP. On one hand, the variable of credit to private sector to GDP (also an indicator of FD) gives a positive and significant sign with economic growth for DCs. Which means the more the credit to private sector is; the more will be research and development, innovation, technological change, involving in new investment projects, leading to raise the capital accumulation and further accelerating the process of economic growth. However, the results are

different for LDCs which gives insignificant positive sign (see Table 1). The reason can be that the governments of LDCs borrow most of their loans from their domestic banking sector and they are still imposing high reserve requirements and intervening in directing funds to some specific sectors (directed credit), which affects badly the availability of funds to be funnelled to the private sector by the banking institutions.

Whereas, on other hand, if we take the square of credit to private sector to GDP (representing Private credit booms), it gives a negative and significant sign with economic growth for both groups. Which means too much advancing credit to private sector leads to a financial crisis due to non-recovering of the credited loans in appropriate time period and leading to lack of funds to be given to depositors as rewards on their deposits. Furthermore, there will be more possibility of more defaulting loans of the financial institutions, which leads to insolvency of loans of the financial institutions. Another reason is that as we know that the government sector is also borrowing from commercial banks on a large scale and we also know that government sector is the most inefficient sector. So, when the government comes in competition with private sector in credit allocation, the government uses these borrowed funds into non-productive purposes. So, this is why too much credit harms the financial sector, and hence it deters the economic growth process by lowering the pace of capital accumulation.

However, if we take square of the aggregate FD index, it gives positive but insignificant sign with economic growth for DCs (see 4A). It means that more FD in the banking sector is beneficial for the advancement of economic growth, especially in DCs, but the sign is insignificant because they are Securities Market-Based economies; whereas, this sign is significant in case of LDCs in contrast having a Bank-Based financial system, that's why having a significant effect of too much FD (the mix of FD indicators, not the effect of a single one indicator) on economic growth (see Table 4B).

In this study, we have also employed financial crises dummies to examine the impact of financial crises on economic growth. These dummies includes; Banking crisis, Currency crisis, and Debt crisis. The regression results of these dummies gives negatively significant signs with economic growth, i.e., the year having any financial crisis would result in a negative impact on the economic growth (see Tables 4A and 4B). Such relationship prevails for both groups i.e. DCs and LDCs, respectively.

By concluding the estimation results of examining the effect of financial development on economic growth, the results postulates that FD has a positive and significant effect on economic growth for both groups,

i.e., Developed Countries (DCs) and Developing Countries (LDCs), having the desired appropriate signs of control and other affecting variables with economic growth rate. The results are consistent with that of the view of McKinnon (1973) and Goldsmith (1969), which means that FD plays a vital role in fuelling the process of economic growth.

## CONCLUSION

This study explores to examine the impact of financial institutions sector development (FD) on economic growth for both groups of countries, especially in banking sector. Here by FD we mean that “the policies, factors, and the institutions lead to the efficient intermediation and effective financial markets, aiming to reduce market information acquisition costs and transaction costs, and other market imperfections. A strong financial institution offers risk diversification and effective resource allocation. The greater the FD, the higher would be the mobilization of savings and its allocation to high return projects and potential investments that further accelerates the process of growth (McKinnon, 1973, Goldsmith, 1969).”

The empirical results conclude that FD positively and significantly affects the growth process in both groups of countries. The results endorse the view of Bagehot (1873), Gurley and Shaw (1955), Jalil and Ma (2008), and Jalil and Feridun (2011), which means that FD plays a vital role in fuelling the process of economic growth. Similarly, one thing that is of immense interest that how much credit to private sector is to be credited (which shows the activity of credit allocation and intermediation taken as a proxy for FD), is beneficial for FD and further economic growth. So, the estimation results of both groups postulates that the boom in credit to private sector significantly affects negatively, which means it deters the financial sector development, and hence the pace of economic growth.

The results also infer that private credit booms may result in financial crash because of some reasons, such as; liquidity problems, huge public debt, insolvency, more defaulting loans, non-recovering of the credited loans, lack of funds to be given to depositors as rewards on their deposits, in appropriate time period and leading to lack of funds to be given to depositors as rewards on their deposits.

In nut-sum, “the impact of FD on growth may vary depending upon to whom the financial intermediaries are lending: to households, insurance companies, government sector or whether to investment companies. The lending takes place to households and insurance companies may lead to a decline in saving rate; hence, deter the investment level and the growth rate, whereas, if

the lending takes place to investment entities, companies, or to the creation of stock markets, it is more likely to encourage growth. Hence, the theory concludes that the financial system simply contributes to industrialization, hence to accelerate economic activities, or in other words, FD is an immaterial rider to the process of economic growth.”

## POLICY IMPLICATIONS

The study on the role of financial institutions development on economic growth obviously has some policy implications for the policy makers and advisors attached to reforming financial sector policies. The evidences show significant influence of financial intermediary’s sector development on economic growth, especially in Developing Countries (LDCs), because of being having dominantly Bank-Based financial systems or more developed banking sectors. As most of the literature highlights that crises were mostly due to large loses in output and huge public debts, which are resulted from deep banking systems that makes their banking systems more severe and disturbing (Kroszner, Laeven, & Klingebiel, 2007); this study suggests some of crucial policy implications that are expected to exert a significant impact on FD, and further on the pace of economic growth.

Since, we know that the lower the gap between the lending interest rate and deposit interest rate, the higher will be the efficiency in the financial sector, so the policy recommendation here is to lower more the information acquisition and transactions costs along with lowering the spread between lending interest rate and deposit interest rate, in order to achieve more financial efficiency that leads to more FD that further fuels the process of economic growth.

Financial depth affects positively the economic growth through the channel that if the Time and saving deposits are to be intermediated to productive investment projects that reward higher returns, then it will accelerate the process of economic growth. So, here the policy recommendation is to funnel the Time and saving deposits (including in M2) to productive investments, that leads to raise the level of capital accumulation and hence to accelerate the economic growth process.

Avoiding credit booms, here the policy recommendation is to funnel funds to those sectors which use these funds productively and the credit intermediation should have some threshold level up to when the intermediating funds gives beneficial consequences.

Moreover, to nut-sum all the above points, here the policy recommendation is that there should be adequate banking supervision over the intermediation of funds,

introducing reform policies, and credit allocation that are to be allocated to productive investments and ensuring that the bank had a well-diversified loan portfolio.

### LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

Since, any study cannot be perfect and sufficient, it must involve some shortcomings, flaws, limitations, and may depict one side of the story. These limitations may be due to the fact that to be very specific and to the point of interest may not lead him beyond the context. The limitation aspects can be: real and financial sectors, Bank-based or Market-based financial systems, cross-sections, time periods, variables, Socio-Economic aspects, welfare, environmental aspects, legal aspects, and many more. Similarly, this study also has some limitations. As far as this study is concerned, only with analysing the effects of banking sector development on economic growth process, rather than of securities market, or Bond market etc., it exempts some of the features and aspects, like social aspects of the economy and political forces (especially in developing or emerging economies, having a great influence on shaping financial sector policies and the operations of the financial institutions). So, their crucial themes are beyond the scope of this study. In nut sum, in this study we attempted to measure FD on the basis of observed outcomes of FD, but other measures were highly time invariant, like: country's legal, business, and political conditions.

Since any limitation existing in a study leads enough help for conducting research for future prospects; similarly, the limitations of this study also have strong links for conducting future researches in this regards. As the theory stresses that financial development influences the process of economic growth by affecting the main functions of financial institutions, such as: by easing the financial constraints and frictions (i.e. information and transaction costs), thereby to improve allocation of resources, risk management, diversifications, corporate control, governance, and financial exchanges. Since, the empirical literature does not capture the effects of these functions in measuring indicators of FD, so there are more incentives to do work on this perspective in measuring indicators of FD. There is also an incentive for future research to be conducted by taking into account the political, legal, regulatory, cultural, and geographical perspectives which shapes FD.

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# EXAMINING THE RELATIONSHIP BETWEEN SERVICE QUALITY AND CONSUMER REPURCHASE INTENTION WITH MEDIATING ROLE OF GRATITUDE FEELINGS AND MODERATING ROLE OF CORPORATE IMAGE

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## ABSTRACT

**The objective of the study was to examine the relationship between service quality (SQ), with mediating role of gratitude feelings (GF), and moderating role of corporate image (CI) on consumer repurchase intention (CRPI). For empirical analysis data was collected from 157 customers of restaurants of Pakistan. The findings disclosed the significant positive relationship between service and consumer repurchase intentions. The results revealed that customers do not follow their gratitude feelings for revisiting any restaurant, and corporate image also do not increase their interest for repeat purchases.**

## INTRODUCTION

Quality services means delivering companies product and services in such a way that it meets customer's expectations and steering their behavior intention in an accurate way (Zeithaml, Berry, & Parasuraman, 1996). In service industry quality is one of the most important determinants for retaining consumers (Jr, Brady, & Hult, 2000). Management puts best efforts to produce quality services to get the competitive advantage over competitors and to form customer's perception about goods and services. Customer perception is the way they evaluate the quality of the services, which directly influences their post purchase behavior (Tam, 2000). Taylor and Baker (1994) found out that when consumers are served with high quality services, they feel turns level of satisfaction and which leads to repurchase intention.

Repurchase behavior is when a customer intends to re-purchase the product in future. Past studies have shown that quality services, values, and customer's satisfaction play a vital role in producing repurchase intentions (He & Song, 2009). To retain customers for long term, companies improve their services by adding value; customers not only enjoy the added value but also prefer to stay with companies (Kuo, Wu, & Deng, 2009). When companies are wholly responsible for delivering services, and they fail, it directly effects consumers purchase intention negatively. However, if companies provide any valid reasons for their service failure and make sure to improve it in future, it positively effects consumers' decision for future (Grewal, Roggeveen, & Tsiros, 2008). High service quality increases the customer satisfaction which in return

decreases the customer switching behavior, and they want to acquire services again and again (Srivastava & Sharma, 2013)

Service quality and its relation with consumers purchase intention has been tested in several studies before, but the mechanism through which service quality affects consumer repurchase intention is not well defined; especially the role of gratitude feelings has not been tested (Raggio, Walz, Godbole, & Folse, 2014).

Gratitude feelings are feelings of appreciation (emotions) for obtained benefits (Folse & Raggio, 2009). Gratitude is very important for buyer and seller relationships (Raggio et al., 2014). Seller exerts an effort to give his best services to the buyer, which generates gratitude feelings but if the consumer is not relation prone, he/she would consider it an unfair process. (Xia & Kinney, 2014). Gratitude feelings are produced in an individual when that person gets internally happy (Watkins, Woodward, Stone, & Kolts, 2003). People show different reactions to services, and their positive and negative feelings are very important elements in either service success or failure (Soscia, 2007). High level of service quality generates positive perceived value which adds in customer satisfaction and positive opinion about the organization (Hu, Kandampully, & Juwaheer, 2009)

Along with the effort to satisfy customers, another aspect is really important, and that is to retain the customers for longer time period by creating favorable image of the organization in the eyes of the customers (Kandampully & Suhartanto, 2003). When companies deliver high quality services, and consumers make favorable corporate image in mind, they get satisfied and are more likely to

repurchase products and less likely to switch the service firm (Srivastava & Sharma, 2013). Excellent service quality builds a positive image of the corporate, which satisfies customers and attracts people for the product and services (Yu & Ramanathan, 2012). Customers who are served with high quality services are more likely to form a favorable image (Wu H. C., 2013) which helps in building consumers trust (Lu & Lin, 2010) so they attach different levels of feelings from the projected corporate image (Lin & Lu, 2010).

The current study's framework is based on reasoned action plan theory in which consumer's behavioral intention is influenced by his attitude (the way individual perceives quality), and how other people talk about the service provider (corporate image) (Hansen, Jensen, & Solgaard, 2004). This study intends to explain relationships between quality services, gratitude feelings, corporate image and customer repurchase intention.

## LITERATURE REVIEW

### Quality services and consumers repurchase intention

In this competitive era, attracting new and retaining existing customers have become a huge challenge for companies (Zhao, Lu, Zhang, & Chau, 2012). Therefore, to maintain market share, companies have to deliver some kind of value in order to maintain repurchase cycle (Kim, Galliers, Shin, Ryoo, & Kim, 2012) hence companies are seeking new ways to make their customers more satisfied (Kaura, Durga, & Sharma, 2015) and happy in order to retain them for a longer period of time.

One way of retaining customers is to improve the quality of products and services which the company is providing. Quality services means the whole impression consumers perceive from the efforts of any organization (Archana & Subha, 2012). It means companies assess what customers want, and aspire to deliver them accordingly (Olorunniwo, Hsu, & Udo, 2006) because they believe the way consumers perceive quality of services it has a direct impact on their future intention (Lee, Kim, Ko, & Sagas, 2011). This is why, service organizations design different strategies to satisfy customers as organizations know that the satisfied consumers will plan to stay with service providers and spread positive words about it or, if not, they would prefer to switch to other service providers (Athanasopoulos, Gounaris, & Stathakopoulos, 2001).

There are so many aspects of improving service quality, but the tangible aspect of quality services is very important to convince customers to buy products (Al Khatib & Aldehayyat, 2011). Tangible means facilities, i.e., comfortable environment, refreshment and service provider treatment (Han, Ham, Yang, & Baek, 2012) along with other features. In hotel industry three dimensions

of quality services are reliability, assurance and empathy which are positively associated with customers' behavioral intention (Ahamed & Mohideen, 2015). Similarly, for online shopping, the website quality is an important key for customer satisfaction and purchase behavior (Shin, Chung, Oh, & Lee, 2013) which suggest that high levels of services positively motivate consumers for future purchases (Kuo & Tang, 2013).

*Hypothesis 1. Quality services have a significant positive impact on consumer repurchases intention.*

### Gratitude feelings as a mediator between service quality and consumer repurchase intention

Gratitude feelings are intrinsic emotions (Algoe, Fredrickson, & Gable, 2013) which means positive and negative emotions that describe consumers feelings about any product and services (Laros & Steenkamp, 2005). Gratitude is a mechanism for building relationships (Algoe, Gable, & Maisel, 2010). When consumers purchase anything it either generates pride or guilt for the transaction (Antonetti & Maklan, 2014). If companies meet customers' expectations, it generates a sense of appreciation, that satisfies customers and ultimately lead to higher sales from the repurchase cycle (Yee, Yeung, & Cheng, 2011); but if companies fail in delivering what customers want, they are more likely to switch to some other source (Malik, Ghafoor, & Iqbal, 2012).

Consumers buying decision is effected by different factors such as the information which buyers get from different people, service quality provided by service provider, and his own feelings and personality (Arslan & Zaman, 2014). Emotions effect consumer's behavior differently in different situations, especially cognitive approach helps in building consumption behavior (Watson & Spence, 2007). Similarly, Gratitude feelings have a considerable impact on individual's satisfaction (Lavy & Ovadia, 2011), which means, people with high gratitude feelings are more happy and fulfilled as compare to people with less gratitude feelings (Chan, 2010). In other words, grateful people are more likely to make purchases again and again from the company, and they tend to spread positive words. Customers trust companies for what they offer (Poolthong & Mandhachitara, 2009) and value their efforts. Hence, Companies struggle hard to meet the customer's expectations and to generate their positive behavior about the company. Since customer's favorable behavior means willingness to purchase products again and to spread positive words for obtained product and services (Lai & Chen, 2011), that is why companies provide excellent services to their customers

to ensure their future revisits (Dlacic, Arslanagic, Maglajlic, Markovic, & Raspor, 2013).

In restaurants settings consumers express their gratitude to service provider by giving tips. It could be a significant tip or a small tip. The amount of tip depends on service provided (Lynn & McCall, 2000). Different companies design different marketing strategies such as delivering gifts (free lunch, tickets, special sales offer) to their existing and potential customers to generate gratitude feelings, and consumers express their gratitude in the form of purchasing from companies in future as well (Bodur & Grohmann, 2005). A result of a study in a wine industry indicated that people who receive special attention and warmth at wineries, they develop some unobvious emotions such as gratitude feelings, which significantly affect consumers to reciprocate their feelings by purchasing wine (Kolyesnikova & Dodd, 2009; N., H., & A, 2006)

*Hypothesis 2. Gratitude feelings mediate the relationship between service quality and customers repurchase intention.*

**Corporate image as a moderator between service quality and consumer repurchase intention**

Corporate image is very important to remain in the market and to capture the maximum market share. It also describes how much customers can rely on a company. Buyer’s information about any brand or product influences his decision for purchase (Wang & Yang, 2010). Customers get attracted towards brand which is providing two benefits; one is good appearance and the other is functionality of the brand (Sondoh Jr., Omar, Wahid, Ismail, & Harun, 2007). Appearance of a brand such as logo design, color, style, facilities and physical environment all this association helps in developing brand image (Alexandris, Douka, Papadopoulos, & Kaltsatou, 2008).

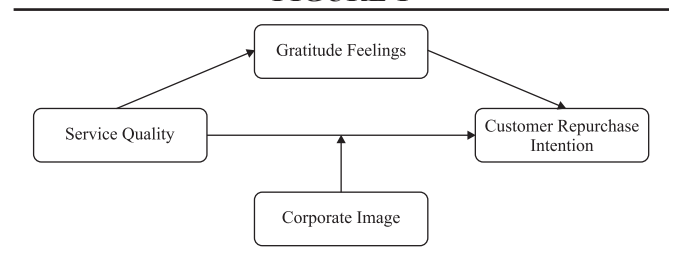
Companies take a lot of steps to build corporate image (Javalgi, Traylor, Gross, & Lampman, 1994) because it not only makes consumers perception but also affect their buying attitude (Wu, Liao, & Tsai, 2012). However, a brand with great look and feel projects a well established corporate image (Martenson, 2007) and stays in consumers mind. Consumers give high preferences to the well recognized brands (Chi, Yeh, & Yang, 2009) because of the trust for products quality (Chiang & Jang 2007) and the experiences they already had with them.

Corporate brand image influences consumers mind for company’s product and services (Berens, Riel, & Bruggen, 2005); it also determines customer’s loyalty in terms of staying with the company for a long time period

(Cretu & Brodie, 2007). In case of a good experience, image of the company gets stronger in the eyes of consumers and vice versa. This is why good quality services have a direct impact on corporate image, (Lai, Griffin, & Babin, 2009). Similarly, to increase customers’ revisits, companies need not only to focus on customers’ satisfaction, but also on creating the favorable image (Ryu, Han, & Kim, 2008). Shukla’s (2011) study on luxury products showed that brand image influences customer purchase behavior because consumers want to establish a superior image in front of others. Wu C. C. (2011) study on hospitals showed that positive hospital image not only satisfy patients but also force them to revisit. High quality services provided by the positively established name resists customer from switching brand (Nguyen & LeBlanc, 1998)

*Hypothesis 3. Corporate image moderates the relationship in such a manner that it strengthens the relationship between service quality and consumers purchase intention.*

**FRAMEWORK  
FIGURE 1**



**RESEARCH METHODOLOGY**

This was a co relational study and the primary data was collected through a tested and validated questionnaire. Data for “service quality” was collected using an instrument adapted from Pamies (2012). Responses for “gratitude feelings” and “customer purchase intention” were collected using an instrument adapted from Palmatier, Jarvis, Bechkoff, and Kardes (2009). “Corporate image” data were collected using an instrument adapted from Chen & Chen (2014). Unit of analysis was the customers of restaurants of Rawalpindi and Islamabad. The questionnaire was based on five points likert scale with 1 “strongly disagrees” to 5 “strongly agree”. There were 21 questions for the “service quality” with Cronbach Alpha of “.919”. Three questions for “Gratitude feelings” and 10 questions for “corporate image” were incorporated with Cronbach Alpha of “.775” and “.899” respectively. There were only 3 items for “consumer repurchase intention” with cronbach Alpha of “.667”.

Questionnaires were distributed among customers

of different restaurants through convenient and snowball sampling technique. The purpose of this research was explained at the top of the survey sheet and the participation of customers in the survey was totally subjected to customer's convenience. A total of 300 questioners were floated, of which 150 were shared online to different visitors of restaurants (57 responses), the rest of 150 were floated off-line at various places to students, employees and self employed people (100 responses). Overall 157 responses were received.

**TABLE 1**  
**Demographics**

Demographics	Range	Frequencies	Percentage
Gender	Male	94	59.9
	Female	63	40.1
Age	20-30	103	65.6
	31-40	37	23.6
	41-50	15	9.6
	50 above	2	1.3
Education	Below Bachelors	35	22.3
	Bachelors	74	47.1
	Masters	43	27.4
	PhD	5	3.2
Income	15000-25000	66	42.0
	26000-35000	36	22.9
	36000-45000	26	16.6
	More than 45000	29	18.5

*N=157*

The demographic table shows that 59.9 % respondents were male and 40.1 % respondents were female. The maximum respondents were between 20-30 years whom were 65.6 % and rests of all were above 30 years. Bachelor's degree holders were 47.1%, 27.4% Master degrees and 3.2% were having PhD degrees. The majority of respondents (42%) were from income level of PKR 15,000-25,000 while 18.5% belonged to income level more than PKR 45,000.

**RESULTS**

Table 2 represents means, standard deviation and correlations among variables. Correlation table shows that all the variables were significantly correlated that ranges from 0.523 to 0.81 with no multicollinearity issues. All correlation values are significant at  $P < 0.01$ . Service quality is significantly associated with Gratitude feelings ( $p < 0.01$ ,  $r = 0.758^{**}$ ) which shows that if quality services are provided to customers, they are more likely

to be grateful to the restaurant.

**TABLE 2**

Variables	Means	S.D	1	2	3	4
1 Service quality	3.71	.641	1			
2 Gratitude feelings	3.67	.861	.758**	1		
3 Corporate image	3.71	.767	.817**	.734**	1	
4 Consumer repurchase intention	3.71	.840	.589**	.523**	.705**	1

\*\* *Correlation is significant at  $p < 0.01$  level (2-tailed)*

Corporate image and service quality is strongly linked with each other ( $P < 0.01$ ,  $r = 0.817^{**}$ ) which is a clear indication that quality services influence restaurant image in the eyes of customers.

There is also a significant correlation between quality services and consumers repurchase intention ( $P < 0.01$ ,  $r = 0.589^{**}$ ). This means that a high quality service compels consumers to revisit the restaurants in future. Similarly Gratitude feelings have a strong relationship with corporate image and consumers repurchase intention ( $p < 0.01$ ,  $r = 0.734^{**}$  and  $r = 0.523^{**}$ ) respectively.

**Regression Analysis**

For the purpose of regression analysis, Barron and Kenny method was used. A step wise analysis was performed to test the predictions. We entered gender, age, education and income as control variables.

**Service quality and consumer repurchase intention**

For hypothesis  $H_1$ , we tested the regression analysis of service quality with consumer repurchase intention. Result has shown a significant relation between both Variables with ( $\beta = .767$ ) and ( $R^2 = .351$ ) at significance level ( $p < .000$ ). Hence, hypothesis  $H_1$  is accepted.

**Gratitude Feelings**

The hypothesis about Gratitude feelings predicted that, it mediates the relationship between service quality and consumer repurchase intention. To test this hypothesis, we performed regression analysis of variable service quality and Gratitude feelings with consumer repurchase intention. To run this test, we first entered control variables. In next step we controlled gratitude feelings and in last step we entered independent variable.

**TABLE 3**  
**Mediation Analysis**

Predictors	$\beta$	R <sup>2</sup>	$\Delta R^2$
Step 1			
Control variables		.012	
Step 2			
Gratitude feelings	.511	.277	.265
Step 3			
Quality services		.363	.086

*Significance level  $p < .000$ ,  $N = 157$*

The results showed that a gratitude feelings partially mediates the relationship between the service quality and consumer repurchase intention with ( $R^2 = .363$ ) at significance level ( $p < .000$ ) and which disconfirms the  $H_2$ .

### Corporate image

Hypothesis  $H_3$  was, corporate image moderates the relationship between service quality and consumers repurchase intention in such a manner that it strengthens the relationship. To test this prediction, regression analysis of independent variable "service quality" was carried out with moderating variable "corporate image". All control variables were used in first step. In next step, we entered service quality and corporate image to see its impact on consumer repurchase intention. Then, in third step, interaction term was used.

**TABLE 4**  
**Moderation Analysis**

Predictors	$\beta$	R <sup>2</sup>	$\Delta R^2$
Step 1			
Control variables		.012	
Step 2			
Service quality	.040	.500	.488
Corporate image	.748		
Step 3			
Service quality x corporate image	-.031	.501	.001

*Significance level  $p = 0.682$*

The interaction term result was insignificant as change in R is .001 at P is 0.682, which is higher than significance level  $p < 0.05$ . The result of regression analysis also disconfirms this relationship of variables.

### DISCUSSION

In a competitive era where consumers have multiple options to meet a single need, retaining customers for a

long time has become a real time challenge. In this study, relationship between quality services, gratitude feelings, corporate image and consumer repurchase intentions have been tested in Pakistani restaurants context. Three hypotheses were developed; based on extensive literature review. The results have shown that, provision of quality services is an eventual solution for companies for their survival.

The current study initially tested the first hypothesis; quality services show a significant relationship with consumers repurchases intention. The results are aligned with previous studies, and it has been learnt that if quality services such as facilities, comfortable environment and other recreational activities are provided to consumers they will repurchase it in future (Wu, Liao, & Tsai, 2012). Similarly another study revealed that managers gauge consumers' needs and wants, and they try to deliver them accordingly and attract consumers for a longer time period (Olorunniwo et al., 2006).

Contrary to previous studies, i.e., gratitude feelings have a positive impact on consumers repurchase intention; there are many possible reasons for disconfirmation of the prediction. Firstly, respondents might have not experienced any extra effort in Pakistani restaurants scenario and they might be comparing it with some internationally recognized brands which led their expectations high. Other possibility could be that, in Pakistan, public is least educated about their rights. In particular, people have no or very little understanding of consumers rights. If they are being misguided and cheated or sometimes consumers are being overly compensated with benefits, they are unable to differentiate that they are being treated differently, and they don't develop sense of recognition and appreciation. The other possibility could be respondent's biasness. Pakistan is an under developed country, and the research culture is developing slowly; people at times don't show interest in the research activities and do not mark their true perceptions on the instrument. Hence there is also a possibility of biasness from the respondent.

The final hypothesis about corporate image was also rejected. The World Bank's Poverty Head Count Analysis 2014 revealed that poverty line is two dollar per day and according to this standard 60.19% people are living under poverty line. This means people are unable to earn PKR 200 per day for their food and other basic needs. A very less percentage of people fall under middle class and almost 62% percent people are living in rural areas, and living simple lives. So, people have other worries to earn bread for their living than getting fascinated by projected corporate image. Along with this, a huge number of people are living in backward areas where there is no concept of dining out because of restricted culture. Even the establish corporate image of restaurants do not work for urban areas because people prefer family gatherings over

restaurants because of collectivist culture and religious environment.

### IMPLICATION

The study has practical implication for restaurants managers. Managers should design training programs for employees. They should train their employees in such a manner, where they can serve the customers effectively. Training should include how to deal customers, and how effectively they can deliver their service on time to generate gratitude feelings in customers. Along with this, interior look and extra services like internet or recreational facilities should be given to consumers to make them permanent customers.

Customers reward to companies which are putting special effort for them. Managers should design schemes such as wishing birthdays to its customers or share some presents and birthday card to make them feel special. May be a restaurant sends a free dinner voucher to its customers on wedding anniversary to make them feel how much they care about their customers' special events. This whole effort could lead to customer's happiness and ultimately benefit the business in long term.

### LIMITATIONS AND FUTURE RESEARCH

The present study has some limitation and acknowledgement of these limitations gives new direction for research. First, we have used a convenience sampling technique for gathering data of customers of Rawalpindi and Islamabad. To obtain more detailed understanding, future researches must expand the geographic limitation to the whole country. Secondly, data was collected only once, to see a more accurate result it can be gathered in different time lags. If respondents are educated, the importance of this research work and given benefits for sharing their true perceptions would result in a bias free study. Finally, this study is limited to Pakistani restaurants contexts; this conceptual model can be replicated in other industries to test the relationship.

### CONCLUSION

Developing economies are highly dependent on small businesses, and restaurant industry is one among them. Restaurants have gone beyond the scope of nationalities and are being operated globally. This tense competitive environment makes survival extremely difficult. Marketers are striving to create and retain their customers. They are using numerous means to create an image in the minds of customers and to remain in the top choices. Pakistani restaurants are also facing difficulties in creating a good corporate image in the minds of its

customers. They have succeeded in establishing customer repurchase intention through delivering quality services, also it was identified that gratitude feelings were lesser quantum contributors to service quality and repurchase intentions.

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# ARE INVESTMENT AND FINANCING DECISIONS REALLY INDEPENDENT? EVIDENCE FROM CHEMICAL SECTOR OF PAKISTAN

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## ABSTRACT

**The study aimed at exploring the impact of financial leverage on investment decision to identify the contradictions in theories like Fisher Separation Theorem (1930), MM Irrelevance Theory (1958), and Theory of Investment (1969). A sample of 30 chemical sector companies was taken. Panel regression was applied to check the impact of financial leverage, liquidity, cash flows, profitability, firm size and growth on firm investment decision. Results revealed that financial leverage had a significant negative effect on investment decision, while liquidity, profitability, cash flows and firm size had a positive significant effect on firm investment. The findings imply that investment decision should not be treated separately by finance managers and investors as excessive level of leverage has a drastic effect on investment opportunities.**

## INTRODUCTION

In today's volatile and uncertain environment, investment decision has a strategic importance for the companies as it paves the way for their future growth and long-term success (Kannadhasan & Aramvalathan, 2011). Our corporate sector has a key role in economic growth, as it brings new avenues for investment opportunities. Challenges of global competition exert pressure upon companies to invest heavily in new technologies, infrastructure, product development, product management and meet development needs. However, investment requires acquiring and utilization of funds from appropriate sources. Therefore, companies either use internal funds or go for external financing by issuing shares or debt. Efficient utilization of funds has an integral role for managing growth and enhancing firm value. In this regard, leverage or debt is now considered inevitable for both firms and countries for maximizing return especially in developing countries (Kannadhasan, 2014). Nevertheless, it requires understanding of various investment and capital structure theories to decide upon appropriate mix of debt and equity.

It has been a long debate whether investment and financing decisions are independent or not. For example, Irving Fisher postulated the famous Fisher Separation Theorem in 1930; he was of the view that investment value does not rely upon choice of debt or equity. Therefore, the shareholders should motivate and influence the

managers to make right choice of investment options to maximize net present value of projects. Based on this notion, Modigliani and Miller (1958) presented Capital Structure Irrelevance Theory; they argued that value of firm remains unchanged whatever mix of debt or equity is used. However, Modigliani and Miller in 1963 refined their irrelevance theory and argued that corporate taxes may affect firm value by providing tax shield on interest payments in imperfect market. James (1969) gave the Theory of Investment that declares that investment and financing are separate decisions. However, Trade-off Theory of capital structure holds that leverage has both advantages and disadvantages. Debt provides benefit of tax shield to a certain optimal level, and its excessive use leads to higher cost of bankruptcy. In business, companies use leverage and try to create wealth for shareholders, but if it does not, interest cost and the credit risk of non-payment destroy value for shareholders. The relationship between funding and investment has been the central issue in the study of corporate finance.

Empirical research shows that there is a strong association between leverage and investment decision as opposed to above-mentioned theories. Several studies have documented negative relationship between leverage and firm investment decision (e.g., Aivazian et al., 2005; Odit & Chittoo, 2008; Singhania & Seth, 2010; Sajid et al., 2015). These findings indicate that there is a problem in the applicability of the above stated theories. So, it is necessary to explore whether the contradiction between

these theories and empirical literature is acceptable or not. The main supposition of MM Irrelevance Theory, Fisher Separation Theorem and Theory of Investment is that all such decisions are taken in perfect capital market. However, in reality, this notion of fully efficient market does not hold true in contemporary business world, especially emerging economies like Pakistan. Therefore, it requires an empirical investigation to test such theories in our financial environment.

This study examines the impact of financial leverage on investment decision in chemical and pharmaceutical sectors. These sectors are closely related to each other and are a growing part of the economy. Other variables such as liquidity, profitability, cash flows, firm size and growth, that may have a substantial influence on the relation between investment and financing decision have been controlled as these factors are also considered by the companies while making investment decision. For example, availability of cash flows have a positive effect on increasing the investment level. Similarly, profitable firms have more funds to avail investment opportunities. The findings of our research are applicable for managers, shareholders, other investors, financial institutions and regulatory authorities, as excessive and opportunistic use of leverage may negatively affect investment decision, and may have adverse effect on long-term growth and survival of the company.

The remaining paper is organized as follows. In the second section, empirical literature has been discussed pertaining to determinants of investments. The third section elaborates the methodology, research design and analytical approach of this research. Results have been elaborated in the fourth section. Lastly, conclusion has been drawn and policy recommendations have been given.

## REVIEW OF LITERATURE

The capital structure is determined by the benefits of swapping debt to the cost of debt (Harris & Raviv, 1991). Modigliani and Miller (1958) claimed that the investment policy of a company should be based solely on the factors that would increase profitability, cash flow, or net worth of a company. Many pragmatic literature challenged Modigliani and Miller irrelevance theorem. The irrelevance proposition by Modigliani and Miller is valid only if the underlying assumptions of perfect market analysis are met. For example, Stulz (1990) argued that debt payments could reduce free cash flows, thereby reducing funds available for investment in profitable opportunities. The dealings among managers, shareholders and debt holders could generate conflict because of agency problems, which might lead to underinvestment or overinvestment incentives.

Myers (1977) investigated the difficulties that businesses can face for obtaining financing to carry on positive net present value (NPV) of projects, if they are highly leveraged. Therefore, leverage may lead to liquidity problems and could affect the ability of the company to maintain growth. In this situation, the debt overhung problem reduces firm investment. However, Fama and French (1988) disagreed with this notion, arguing that more profitable firms tend to have lower levels of debt.

Leverage may create both underinvestment and overinvestment problem (Myers, 1977; Odit & Chittoo, 2008). Underinvestment theory states that high leverage has a negative effect on investment as high-levered firms face financial difficulty to maintain growth by carrying on positive NPV projects than low-levered firms. Therefore, such firms use their earnings and liquid funds to service debt, and excessive leverage put unnecessary pressure to curtail investment. Thus, underinvestment is based on liquidity theory that leverage may lead to technical insolvency problem.

Another explanation for negative relation between leverage and investment is based on overinvestment theory. Overinvestment theory revolves around agency problem that extra debt create conflict between managers, shareholders and lenders (Myers & Majluf, 1984). Managers may go beyond limit of positive NPV projects, and may invest the funds in poor projects leading to asset substitution problem. Therefore, leverage acts as controlling mechanism to reduce unnecessary investment. Empirical evidence is also available about the possible effect of leverage on investment.

## Financial Leverage and Firm Investment

Several studies have evidenced negative relation between financial leverage and investment, for example, McConnell (1995) and Singhania and Seth (2010) found the negative effect of financial leverage on investment. Harris and Raviv (1990) found the same results. They argued that managers and shareholders cannot agree on business decisions. Managers tend to prefer the company to continue operations even if the liquidation is preferred. Moreover, funds generated from leverage could be used for making working capital investment (Amidu, 2007). However, Aivazian et al. (2005) argued that financial leverage does not always lead to underinvestment problem; managers could make overinvestment to meet their ambitious plans and increase their short-term gains. Franklin and Mouthusamy (2011) found significant positive relationship between debt and investment for high growth firms. Therefore, we expect either positive or negative relation between leverage and investment.

*Hypothesis 1. There is significant effect of leverage on firm's investment.*

### **Profitability and Firm Investment**

Other factors that could have potential effect on firm investment were also taken. Profitability is one of those important factors that could significantly affect firm investment. For example, Myers and Majluf (1984) held that successful companies do not have an over-reliance on external financing because they rely on internal reserves. Therefore, companies use more internal funds for making investment. Lang, Ofek, and Stulz (1996) argued that leverage reduces profitability; therefore, they do not carry positive NPV projects because more debt increases opportunity cost of borrowing funds. Stulz (1990) found positive relation between profitability and firm's investment. Singhania and Seth (2010) also reported positive relation between profitability of company and leverage used by firms. Therefore, we expect that profitable companies are in a better position to make more investment as they prefer internal funds according to Pecking Order theory.

*Hypothesis 2. There is a significant positive effect of profitability on firm's investment.*

### **Firm Size and Firm Investment**

Firm size is the second factor that can have a positive effect on firm's investment. Larger firms have more resources according to Resource-Based View; these firms can easily obtain funds from the financial market (Myers & Turnbull, 1977). Abir (2010) found a positive relationship between firm size and leverage ratio; it implies that larger firms are in better position to take more debt. Larger firms also make more production and achieve economies of scale, these firms obtain higher returns by making more investment (Lawrence, Diewert, & Fox, 2004). Ju and Ou-Yang (2006) documented positive effect of firm's size on firm's investment. Similar results were also supported by Amidu (2007). Based on this discussion, positive relation is expected between firm's size and investment.

*Hypothesis 3. There is a significant positive effect of firm's size on firm's investment.*

### **Cash Flows and Firm Investment**

Cash flows also play an important role in firm's investment. Availability of cash flows provide more opportunities for investment. Investment is more sensitive to cash flows. Higher level of cash flows provides

more opportunities for firms to make investment. For instance, Joseph (2002) explained that cash flows have a positive relation with investment in UK. Franklin and Mouthsamy (2011) suggested that cash flows play a positive role in identifying investment decisions. Hyde (2007) also concluded that sudden change in the value of cash flows could affect the firm's value and investment in the eyes of stake holders.

*Hypothesis 4. There is a significant positive effect of cash flows on firm's investment.*

### **Liquidity and Firm's Investment**

Liquidity also affects firm's investment. Singhania and Seth (2010) investigated a positive correlation between liquidity of the firm and firm's investment. Higher liquidity makes firms attractive for investors and they make more investment. Similarly, Guney, Ozkan. A, and Ozkan. N (2007) also found positive relation between liquidity and firm investment. On the other hand, Harris and Raviv (1990) found negative relation between liquidity and financial leverage. It means that lower liquidity cause firms to involve in more debt for making investment in the company. Sajid et al. (2015) evidenced a positive effect of liquidity, cash flows and profitability on firm's investment. Based on these results, we expect positive effect of liquidity on firm's investment.

*Hypothesis 5. There is a significant positive effect of liquidity on firm investment.*

### **Growth and Firm Investment**

Tobin's Q is usually taken as proxy for firm's growth. High-growth firms tend to reduce information asymmetry and provide better aspects for obtaining funds as compared to low-growth firms. Low-growth firms are considered to have lower cash flows and availability of funds. These firms having low Q find financial constraint in obtaining funds for investment (Aivazian et al., 2005; McConnell & Servaes, 1990). Amidu (2007) and Singhania and Seth (2010) determined the negative affect on firm's investment. Odit and Chittoo (2008) and Jiming, Chengqin, and Zhaohua (2010) also found a negative effect of firm's growth on firm's investment.

*Hypothesis 5. There is a significant negative effect of firm's growth on firm's investment.*

Based on the literature review, we can say that there are a few studies which explain the application of The Separation Theorem of Fisher (1930) and Irrelevance

Theory (1958) in our corporate sector. Most of the studies have been conducted to check the impact of financial leverage on profitability, dividend policy and assets pricing (El-Wahid & Su'ad Husnan, 2011; Asif, Rasool, & Kamal, 2011).

## METHODOLOGY

The research has been done to check the effect of financial leverage on investment decision of 30 companies taken from Chemical sector listed in Pakistani stock market. There are two types of companies in this sector; chemical and pharmaceutical. Data has been taken from their annual reports, stock exchange and Securities and Exchange Commission of Pakistan from 2001 to 2013. The following econometric model has been applied and tailored from the study of Aivazin, Ge and Qiu (2005).

$$\Delta K_{it} = \beta_0 + \beta_1 LEV_{i,t-1} + \beta_2 CF_{i,t-1} + \beta_3 LIQ_{i,t-1} + \beta_4 PRF_{i,t-1} + \beta_5 SIZ_{i,t-1} + \beta_6 GTH_{i,t-1} + \mu_{i,t-1} \quad (1)$$

The variables, their respective proxies and expected relations are described as follows:-

$\Delta K_{it}$  represents change in the value of net fixed assets of the firm  $i$  during the time  $t$ ,  $CF_{i,t-1}$  cash flows of firm  $i$  at time  $t-1$ ,  $LEV_{i,t-1}$  leverage of firm  $i$  at time  $t-1$ ,  $LIQ_{i,t-1}$  liquidity of firm  $i$  at time  $t$ ,  $PRF_{i,t-1}$  profitability of firm  $i$  at time  $t-1$ ,  $SIZ_{i,t-1}$  size of firm  $i$  at time  $t-1$ ,  $GTH_{i,t-1}$  it is Tobin's Q of firm  $i$  at time  $t-1$ ,  $\mu_{i,t-1}$  error term of firm  $i$  at time  $t-1$ .

The leverage has been measured using the ratio of total liabilities to book value of assets (Lang et al., 1996). The negative sign is expected between leverage and investment (Aviazian et al., 2005; Odit & Chittoo, 2008). Liquidity is defined as current assets to current liabilities. The higher the liquidity, the higher would be the amount spent on investment; positive relation is expected between liquidity and firm investment (Franklin & Mouthsamy, 2011). Profitability has been measured using return on assets ratio. Profitable firms have more funds for making investment and therefore positive relation is expected (Wiwattanakantang, 1999; Singhania & Seth, 2010). Growth has been measured using the formula of Tobin's Q by Wiles (1994) as market value of equity + liabilities divided by book value of assets. The negative relation is expected between Tobin's Q and firm investment (Jiming et al., 2010). Cash flows are natural logarithm of net profit before tax plus depreciation and extraordinary items. Higher level of cash flows induces more investment by firms (Joseph, 2002; Franklin & Mouthsamy, 2011). Size is taken as natural logarithm of net sales. Marsh (1982) found that larger companies make more investment.

Panel regression has been applied to analyze the

effect of leverage on firm's investment. Firstly common and fixed effect models have been compared on the basis of Redundant F Test (LM Test). Since the F-value was found significant (F-value= 9.96;  $p < 0.01$ ), so fixed effect model was selected. Later on, Hausman test was applied to compare the results of fixed and random effect model. Our final model was fixed effect model since chi-square value of Hausman test was found significant (chi-square value = 57.3;  $p < 0.01$ ). We also checked the problem of autocorrelation and heteroskedasticity, and found insignificant results.

## RESULTS AND DISCUSSION

The results are given in the form of descriptive statistics, correlation matrix and regression table. Table 1 reports descriptive measures of all variables. For example, the average value of leverage of companies in chemical sector is 31 percent approximately. An empirical research about international comparison of capital structures of firms concludes that developing countries have a relatively high leverage ratio (Odit & Chittoo, 2008).

**TABLE 1**  
**Descriptive Statistics**

VARIABLES	Mean	Max	Min	SD
Investment	6.061	10.416	2.493	1.817
Leverage	0.318	3.833	0.001	0.340
Liquidity	8.180	83.475	0.023	52.192
Profitability	-0.038	0.881	-19.228	1.369
Cash flows	5.297	14.336	-1.204	2.099
Firm Size	7.059	11.387	1.322	2.090
Growth	3.235	61.706	0.036	7.874

*SD= Standard Deviation*

The leverage ratio in Pakistan is less than the medium value of developing countries and above the medium value for developed countries. On the average, the companies in this sector are showing losses. Liquidity position of such companies seems to be very high.

Table 2 depicts significant negative relation between financial leverage and firm investment ( $p < 0.05$ ). These results are in accordance with Odit and Chittoo (2008); it implies that higher level of debt may lead to decrease in investment. On the other hand, positive association has been found between liquidity and investment ( $p < 0.05$ ); the higher liquidity ratio ensures availability of funds for firm's investment as lack of liquid assets may create problem of technical insolvency.

**TABLE 2**  
**Correlation Matrix**

	INV	LEV	LIQ	PRF	CF	SIZ	GTH
INV	1						
LEV	-0.140*	1					
LIQ	0.048*	-0.110	1				
PRF	0.320**	-0.040	0.004	1			
CF	0.360**	-0.010	0.007	0.620*	1		
SIZ	0.825**	-0.010	-0.05	-0.388*	-0.429**	1	
GTH	-0.070	-0.110	-0.024	0.026	0.009	-0.010	1

\* $p < 0.10$ ; \*\* $p < 0.05$

Therefore, firms in chemical sector wants to maintain their liquidity position to carry on investments. Moreover, cash flows, profitability and firm size have a positive significant relation with firm investment ( $p < 0.01$ ). Cash flows also play a vital role to determine the growth opportunities. Larger firms also make more investment as compared to smaller firms.

**TABLE 3**  
**Fixed Effect Model**

Variable	Coefficient	SE	t-Stat	Prob.
Constant	3.518	0.551	6.391	0.000
Leverage	-0.492	0.166	-2.960	0.003
Liquidity	0.003	0.001	2.608	0.005
Profitability	1.289	0.360	3.583	0.000
Cash flows	0.177	0.057	3.108	0.002
Firm size	0.275	0.089	3.077	0.002
Growth	-0.008	0.009	-0.927	0.355
R-Squared	0.846			
Adjusted R-Squared	0.823			
F-Statistic	63.883			
Prob. (F-Statistic)	0.000			
Hausman Test	57.3***			
	(0.000)			

Table 3 reports the results of panel regression in case of fixed effect model, that is, our final model based on the significant value of Redundant F test and Hausman test as reported in methodology section. The model explains 84.6 percent variation in dependent variable. It has a very good prediction and explanatory power. Moreover, F-value is significant which implies that model is overall a good fit and can be used for generalization. The leverage has negative significant effect ( $\beta = -0.492$ ;  $p < 0.01$ ) on investment decision; it indicates that 1 unit increase in leverage leads to 0.492

unit decrease in investment. Results are similar with previous studies (e.g., Aviazian et al., 2005; Odit & Chittoo, 2008; Singhanian & Seth, 2010). The liquidity positively influences firm's investment ( $\beta = 0.003$ ;  $p < 0.01$ ). However, the magnitude of this effect is not so strong as compared to other variables of the study. Results confirm to those of Franklin and Mouthsamy (2011).

Profitability also exerts positive effect on firm's investment ( $\beta = 1.289$ ;  $p < 0.01$ ); it shows that profitable firms make more investment in chemical sector as profitability brings more internal funds. The similar findings were given by Odit and Chittoo (2008) and Bao (2010). Cash availability also brings more opportunities for investment, and larger firms make more investment. Singhanian and Seth (2010), Jiming et al. (2010) and Jahanzaib and Yameen (2006) reported the same type of results.

## CONCLUSION

This study creates the links of finance theory with empirical analysis of companies in Pakistan. In earliest work by Stutz (1988, 1990), Myers (1977) and McConnell (1995), it was proposed that financial leverage could have either positive or negative effect on firm's investment decision due to overinvestment or underinvestment hypotheses respectively. However, our study supports underinvestment hypothesis that leverage puts negative pressure on financial managers to reduce investment due to agency problem as they do not find personal benefits in such investments. We have found negative effect of financial leverage on investment and confirm to those of previous studies (Aivazian et al., 2005; Jahanzaib & Naeem, 2015; Odit & Chittoo, 2008). The results contradict with Irrelevance theory, Fisher Separation Theorem and Theory of Investment that consider investment as an independent decision. However, financial markets are not as efficient as they are considered to be in real world.

Liquidity, cash flows, firm size and profitability have positive effect on investment. These factors should also be considered by managers while making investment

decisions. The firms keep higher level of liquidity in chemical sector for contingency purpose and to avoid technical insolvency problem. Cash flows affect investment decision and considered to be cheaper source of internal financing due to capital market imperfection. It supports Pecking Order Theory. Similarly, larger firms make more investment than smaller firms, and higher level of profitability brings higher level of investment as it results in cheaper funds.

There could be several possible reasons that may be attributed to negative relation between leverage and investment. Firstly, capital markets are not mature in developing countries, so companies rely upon cash flows and profitability for making more investment. There are many problems that need to be solved, like the blocking of financing channels, unclear property rights, insufficient legal system, etc. Secondly, companies may use leverage for making investment in working capital. Thirdly, in the lending decision, banks may usually prefer state owned firms to others. Because of the government guidance, banks may have strong incentive to provide a loan to state owned firms. Lastly, managers may under invest and do not take positive NPV projects when they observe that benefits from such investment would flow out to lenders due to financial leverage.

### Policy Implications and Recommendations

Our findings have determined an important role of capital structure for investment decision. This research study has implications for managers, investors, shareholders and regulatory authorities to consider these findings while making policy decision. Managers should make appropriate use of available funds for the long-term growth and survival. Board of directors should motivate the managers to reduce asset substitution or underinvestment problem by linking their performance to certain incentive. They could also impose penalties for taking wrong investment decision in case of over-investment hypothesis.

### Direction for Future Research

This research could be extended by taking more industries and variables relating to corporate governance, ownership structure, and other financial variables. The firms could be divided into higher growth and lower growth firms to find out differences in investment patterns. There could be a possibility of non-linear effect of debt on firm's investment, which has not been yet tested in Pakistan. The future research could also be undertaken to find out whether overinvestment or underinvestment theory holds in our corporate sector, and in which industries.

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# **PASSIVE LEADERSHIP AND ITS OUTCOMES IN PUBLIC SECTOR ORGANIZATIONS; MEDIATING ROLE OF WORKPLACE INCIVILITY**

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## **ABSTRACT**

**The objective of the study was to examine the relationship between passive leadership and its outcomes in public sector organizations, with mediating role of workplace incivility. Data was collected from 245 government sector employees of Pakistan. SPSS was used to analyze data. Mediation analysis was carried out as per Preacher and Hayes (2008) bootstrapping method. Results indicate that both burnout and interpersonal conflict are not the direct outcomes of passive leadership; however, work place incivility is fully mediating the relationship between passive leadership and its outcomes that includes burnout and interpersonal conflict.**

## **INTRODUCTION**

The extant literature on leadership mainly focuses on its positive affects while the negative type of leadership has generally been ignored by researchers (Goldman, 2006). Positive aspect of leadership like transformational leadership (Krishnan & Arora, 2008; Gooty, Gavin, Johnson, Frazier & Snow, 2009) transactional leadership (Jung & Avolio, 2000) authentic leadership (Avolio & Gardner, 2005) and charismatic leadership (Shamir, House & Arthur, 1993) have extensively been studied. The negativity associated with leadership needs further clarification.

Passive leadership is considered a type of leadership which comprises of management by exception and laissez faire leadership (Bass & Avolio, 2004). This is considered as a destructive type of leadership, causing more stress for employees (Chenevert, Vandenberghe, Doucet, & Ayed, 2013), burnout (Hetland, Sandal, & Johnsen, 2007), interpersonal conflict (Doucet, Poitras, & Chenevert, 2009), bullying, abuse, deviant behavior, counterproductive behavior, corruption, undermining, and theft (Einarsen, Aasland, & Skogstad, 2007).

Passive leadership can result in various negative organizational outcomes; however, the mechanism through which these outcomes are related is generally missing in literature. This study proposes the mediating mechanism of workplace incivility for the above mentioned outcomes to be related to passive leadership. Work place incivility include actions such as using undignified language, making disguised threats, gossiping, ignoring the request of co-worker, sending naming emails or otherwise signifying disrespect for others in the workplace (Andersson &

Pearson, 1999).

Social exchange theory (Gouldner, 1960; Homans, 1958; Thibault & Kelley, 1959) has supported to explain this mediating mechanism. Social exchange in the organization exists in the form of psychological contract. The perceived expectations on part of the employees include a supportive and caring behavior by the leader (Eisenberger, Huntington, Hutchison, & Sowa, 1986). When leader is passive, we believe it constitutes breach of psychological contract and as per social exchange theory, employees engage in workplace incivility which, in turn, results in burnout and interpersonal conflict.

Apart from above literature gap, one finds that there are very few empirical studies of leadership in public sector organizations (Wart, 2003). Organizations across the public sector are facing enormous challenges due to their ineffective leadership (Alimo & Alban, 2004). Leadership in public sector organizations is considerably different in requisites of market forces and exposure to legislation, legislatures, and civil service rules (Hooijberg & Choi, 2001). Furthermore, public organizations show less tolerance for mistakes of leaders, foibles, and structural challenges, their skepticism and uncertainty have grown (Yankelovich, 1991).

As competition among organizations has intensified in the new global economy, even among public sector organizations, the range of skills necessary for leaders has grown (Bass, 1985). Therefore, leadership is critical to organizational outcomes in the public sector (Moynihan & Ingraham, 2004). However, we find almost no study about negative type of leadership in public sector organizations. This omission is serious as public sector organizations, especially in underdeveloped countries, are criticized for

negative behaviors of leaders.

Another omission in extant literature seems to be the limited focus of the studies in public sector organizations of developing countries. This study not only addresses the issue of passive leadership in the less researched context, but is probably among a very few studies of its kind which is focusing public sector organizations of Pakistan. There are around many public sector employees in Pakistan. So, our study has addressed the issue of public sector employees of this region.

## REVIEW OF LITERATURE

### Passive Leadership and Burnout

“Burnout is a metaphor that is commonly used to describe a state of mental weariness” (Schaufeli & Bakker, 2004). It occurs in response to the chronic emotional strain in individuals who deal extensively with other human beings, especially when these individuals are having problems of their own (Maslach & Jackson, 1981). Maslach, Schaufeli, and Leiter (2001) described burnout as a syndrome that consist of three elements; namely, emotional exhaustion, depersonalization and professional accomplishment having harmful and damaging effects on both the employee and its organization.

Previous research suggests some of the antecedents of burnout, like intrinsic motivation, role ambiguity, role conflict (Low, Cravens, Grant & Moncrief, 2001), job-focused emotional labor, employee focused emotional labor (Brotheridge & Grandey, 2002), low self-esteem, feelings of inadequacy, obsessive worry, passivity, social anxiety, and withdrawal from others (McCranie & Brandsma, 1988). One other factor is the behavior of the leader, which is a key determinant of burnout that has progressively gotten attention from the scientific society (Bass, 1991; Gilbreath & Benson, 2004). In particular, there exists considerable research which suggests that passive leadership is positively associated with burnout (Kanste, Miettunen, & Kyngas, 2007; Lee & Ashforth, 1996; Schaufeli & Enzmann, 1998; Sosik & Godshalk, 2000; Gill, Flaschner & Shachar, 2006; Malloy & Penprase, 2010; Corrigan, Diwan, Campion, & Rashid, 2002).

Passive leaders represent a non-transactional kind of leadership style in which necessary decisions are not made, actions are delayed, leadership responsibilities are ignored, and authority is unused; a leader displaying this form of non-leadership is perceived as not caring at all about others' issues (Hamidifar, 2010). Passive or avoidance leadership suggests a disconnected and detached style of leadership; those adopting this style are prone to display the symptoms of burnout (Eid,

Johnsen, Bartone, & Nissestad, 2008). The innate aspect of passive leadership is unsuccessful in clarifying expectations (Avolio & Bass, 1995); thus, it is rational to hypothesize that:

*Hypothesis 1. Passive leadership is positively related to burnout.*

### Mediating role of Workplace Incivility between Passive Leadership and Burnout

Incivility involves rudeness, impoliteness and disregard for others, breach of norm for respect and esteem in interpersonal relationships (Brown & Levinson, 1987; Morris, 1996). Examples of incivility in the workplace entails responding the call with a "yeah", avoiding to say thanks or please, use of voice responses to screen calls, leave a half mug of tea behind to avoid having to brew the next pot, to stand over the chair of fellow beings that are engaged in a telephone talk, dropping trash on the ground or floor and leave it for the maintenance person to clean up, and talking loudly on the phone about personal matters (Martin, 1996), sarcasm, disparaging and pained tones and remarks, aggressive stares, and the “silent treatment.” (Andersson & Pearson, 1999).

Some of the precursors of workplace incivility in existing research includes affective states, workplace adaptation (Reio & Ghosh, 2009), influence (power of job/boss), lack of assertiveness, personality, and response to anger (Bartlett, Bartlett & Reio, 2008). Organizations must identify the underlying antecedents that lead to a rise in incivility in order to reduce its occurrence (Roberts, Scherer & Bowyer, 2011). Leadership style exhibited by managers represents an important factor that may impact workplace incivility. In the absence of a proactive leader, workplaces may become too informal and lack clear norms to help shape appropriate behavior (Andersson & Pearson, 1999). For this reason, incivility, especially, will likely to occur in workplaces with passive managers (Harold & Holtz, 2014).

The harmful effects of workplace incivility have been extensively tested by practitioners (e.g., Moyer, 2008; Yeung & Griffin, 2008). A number of studies recognized that incivility is related to harmful individual outcomes that encompass job dissatisfaction, career, mental and physical health issues, lack of organizational commitment, job withdrawal, absenteeism, low morale, and stress (Thomas & Lankau, 2009). Cortina, Magley, Williams, and Langhout (2001) found that uncivil behaviors on daily basis and routine hassles induce stress that spoils an individual's well-being over time. Uncivil behavior effects on individual's mood and psychological well-being (Pearson, Andersson & Wegner, 2001). Miller, Reesor, McCarrey, and Leikin (1995) found

that workplace violence or incivility affects self-perception of a person, potentially resulting in feelings of powerlessness and burnout.

Based on above arguments, we hypothesize that:

*Hypothesis 2. Workplace incivility mediates the relationship between passive leadership and burnout.*

**Passive Leadership and Interpersonal Conflict**

Conflict is inherent and inbuilt in all social life. It occurs when an individual or a group feels negatively affected by another individual or group (Wall & Callister 1995). Conflict has been identified as intrapersonal or interpersonal. Rahim, Garrett, and Buntzman (1992) characterized interpersonal conflict as “incompatibilities, disagreements, or differences between two or more persons”. Interestingly, it is noted that interpersonal conflict is related to many commonly cited issues in organizations (Friedman, Tidd, Currall, & Tsai, 2000; Berki & Hartwick, 2001; Oetzel & Ting-Toomey, 2003; Ting-Toomey & Takai, 2006).

Prior studies have identified some of the sources of interpersonal conflict that includes a demanding boss, inconsistency between word and deed, and in-group favoritism (Leung, 2008). Generally, “conflict arises by escalating spirals of manipulation, threat and coercion, avoidance spirals, retaliation, inflexibility and rigidity, a competitive pattern of dominance and subordination, and demeaning and degrading verbal and nonverbal communication” (Greeff & de Bruyne, 2000, p. 322). One of the main sources of interpersonal conflict are leaders who “refuse to take sides in a dispute, are disorganized in dealing with priorities, and talk about getting down to work, but never really do” (Bass, 2008, p. 143), and leaders who avoid conflict by suppressing discussions and dissenting opinions are not valued; this avoiding behavior will facilitate conflict culture (Gelfand, Leslie, Keller & Dreu, 2012).

A lack of adequate leadership create frustration and stress within the workgroup, which may also result in interpersonal stress and rising conflict levels (Einarsen, 1999). Kelloway Sivanathan, Francis and Barling, (2005) stated that destructive leadership behaviors are sources of workplace stress, which may lead to destructive in-group behaviors, such as isolating and excluding coworkers. . When the superior has give up his responsibilities, result would be the higher level of conflicts between coworkers and other employees (Bass & Stogdill, 1990).

Hence, the notion that destructive leadership may be a precursor of interpersonal conflicts among coworkers seems reasonable.

From the above literature one can say that

*Hypothesis 3. Passive leadership is positively related to interpersonal conflict*

**Mediating role of Workplace Incivility between Passive Leadership and Interpersonal Conflict**

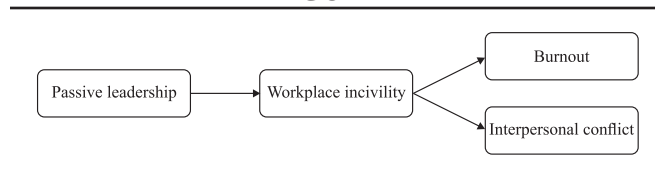
Incivility is a serious and prevalent workplace problem (Pearson et al., 2001; Pearson & Porath, 2004, 2005). It includes answering the telephone in an impolite manner, talking negatively about another employee, and sending a rude e-mail to a coworker, showing negative gestures, etc. (Blau & Andersson, 2005; Martin & Hine, 2005).

In the recent years most of the researchers have focused on consequences of incivility (Cortina et al., 2001; Estes & Wang, 2008; Lim & Teo, 2009; Pearson, Andersson, & Porath, 2000). Andersson and Pearson (1999) argued that incivility rise or spirals as coworkers reciprocate uncivil behavior from fellows by responding with more intense forms of incivility like aggression. The initiative for such spirals is the violation and disobedience of a social norm of civility or respect, in which an employee perceives himself to be interpersonally mistreated by another employee. Therefore, low intensity aggression in the workplace can lead to an upward spiral, resulting in increased aggression and more purposeful efforts to harm one another (Pearson & Porath, 2005). Interpersonal conflict is an organizational stressor involving incompatibility between employees (Spector & Jex, 1998). Thus, we suggest that workplace incivility can lead toward interpersonal conflict.

Above literature indicates that

*Hypothesis 4. Workplace incivility mediates the relationship between passive leadership and interpersonal conflict.*

**FRAMEWORK  
FIGURE 1**



**RESEARCH METHODOLOGY**

For this study, the primary data was obtained from public sector employees in Pakistan. A total of 400 questionnaires were distributed to different departments of Government sector. The employees were given an orientation of the

study, and were told that it was for scientific research purpose only; thus, ensured them of their anonymity and confidentiality. A 5-point Likert scale anchored by “strongly disagree” (1) to “strongly agree” (5) was used in cases of passive leadership, burnout and interpersonal conflict, while in the case of workplace incivility, a 5-point likert scale anchored by “Almost never” (1) to “Almost always”(5) was used. The questionnaires were personally given to the management, and they are requested to get these filled by their employees. The respondents were given adequate time to reply and responses were collected back at their convenient time. All participants had three weeks to fill these questionnaires and give them back. The questionnaires received were 284 (response rate = 71.2%), but of those questionnaires, some were not usable. After omitting those questionnaires, we were left with 245 valid questionnaires, making the response rate as 61.25%.

## Measures

Eight items for passive leadership (employee reported) was used from the passive management-by-exception and laissez-faire subscales of the Multi-factor Leadership Questionnaire (MLQ) (Bass & Avolio, 1997). It was used to measure the extent to which employees considered their leaders to exhibit passive behavior in the organizations. Sample items include: your leader, “Takes no action”, “Avoids deciding”, “Delays responding”. The internal consistency scale for this sample was 0.836. This reliability is consistent with earlier studies in which they reported it as .80 to .90 range for this scale (e.g., Avolio, Bass, & Jung, 1999; Druskat, 1994; Frooman, Mendelson, & Murphy, 2012).

Moreover, a seven items scale of workplace incivility was adapted from a scale developed by Cortina et al. (2001). It measures the frequency of the coworkers and their colleagues to get involved in the uncivil behavior. Some of the examples from this scale includes: your coworkers “Addressed you in unprofessional terms, either publicly or privately,” “Put you down or was condescending to you in some way” and “Ignored or excluded you from professional camaraderie.” Initially coefficient alpha of this sample was 0.590, then after removing two items, internal reliability consistency became 0.705, which is consistent with previous estimates in the range of .70 to .95 (e.g., Chen, Ferris, Kwan, Yan, Zhou, & Hong, 2013; Cortina et al., 2001; Ferguson, 2012).

Furthermore, burnout was adapted from a measure developed by Demerouti, Mostert, and Bakker (2010). It was used to measure the level of exhaustion that employees tolerate at their workplace. Examples include “During my work, I often feel emotionally drained”, “There are the days when I feel tired before I arrive at work”. This instrument included eight items; four of them were reverse based. Coefficient alpha of this sample was .923.

Additionally, five items from interpersonal conflict were adopted from Doucet et al. (2008), and were used to measure the conflict level of employees. Items included statements like “There are often differences in opinion regarding what should be done”, “There are many conflicts relating to work ideas”. The internal consistency reliability estimate was .803.

## RESULTS

### Correlation Analysis

According to the table below (Table 1), the relationship between passive leadership and workplace incivility is significant ( $r = .239^{**}$ ,  $p < .05$ ), passive leadership and burnout is negatively correlated and insignificant ( $r = -.032$ ), passive leadership and interpersonal conflict is also not significant ( $r = .038$ ,  $p < 0.01$ ), workplace incivility and interpersonal conflict is negatively correlated and significant, burnout and interpersonal conflict are positively and significantly correlated, and burnout and workplace incivility are significantly correlated.

**TABLE 1**  
**Mean, Standard Deviation and Correlation**

Variable	Mean	S.d.	1	2	3	4
1 Passive leadership	2.9597	.428	1			
2 Workplace incivility	2.6196	.711	.239**	1		
3 Burnout	3.0628	.627	-.032	0.00	1	
4 Interpersonal conflict	3.3069	.629	.038	-.123*	.273**	1

\* $p < 0.05$ , \*\* $p < 0.01$

**TABLE 2**  
**Result of Regression Analysis**

Predictors	DV Burnout			DV Interpersonal conflict		
	$\beta$	R <sup>2</sup>	$\Delta R^2$	$\beta$	R <sup>2</sup>	$\Delta R^2$
Passive leadership						
Step 1						
Control Variable		.021			.021	
Step 2						
Passive leadership	-.050	.022	.001	.062	.023	.002

\* $p < .10$ ; \*\* $p < .05$ ; \*\*\* $p < .01$

### Regression Analysis

According to Table 2, the direct relationship of

passive leadership with burnout ( $\beta = -.050, p = 0.248$ ) and interpersonal conflict ( $\beta = -.062, p = 0.553$ ) is not significant; thus, rejecting hypothesis 1 and 3.

**Mediation Analysis**

After running regression tests, we used a simple process model: Model 4 (Hayes, 2013) specifying passive leadership as a predictor, workplace incivility as a mediator, and burnout and interpersonal conflict as outcome variables. Gender, tenure and qualification were entered as control variables. A bootstrapping method was used. Bootstrap method shows confidence intervals for estimating mediation analysis. Upper and lower limits of confidence interval constitutes a range that indicates an indirect effect if it does not overlap with zero. The 95% confidence interval shows that the result will hold true 95% of the time.

**Mediation analysis in case of Burnout**

According to the table below (Table 3), the total effect of passive leadership and burnout is insignificant, while passive leadership is positively and significantly associated with workplace incivility. Similarly, workplace incivility is positively associated with burnout. Further, the direct affect of passive leadership on burnout in the presence of workplace incivility is insignificant. Bootstrapped estimates (calculated across 5000 samples) suggests that passive leadership has a significant indirect effect on burnout (95% CI [-0.1869, -0.0553]) through workplace incivility.

**Mediation Analysis in case of Interpersonal Conflict**

According to the table below (Table 4), passive leadership is positively and significantly associated with workplace incivility. Similarly, workplace incivility

is positively associated with interpersonal conflict. Moreover, the direct effect of passive leadership on interpersonal conflict in the presence of workplace incivility is insignificant. Total effect of passive leadership and interpersonal conflict is insignificant. Bootstrapped estimates (calculated across 5000 samples) suggests that passive leadership has a significant indirect effect on interpersonal conflict (95% CI [-0.2, -0.1]) through workplace incivility.

**DISCUSSION**

The main objective of the current study was to find out the role of passive leadership in determining the interpersonal conflict and burnout. Interestingly, the direct impact of passive leadership on burnout was not established in results. This is not consistent with previous studies that show the association between destructive leadership and burnout (Malloy & Penprase, 2010; Corrigan et al. 2002). Similarly, passive leadership has no direct impact on interpersonal conflict as well, that are also inconsistent with prior studies (e.g., Einarsen, 1999). However, passive leadership affects these outcomes if workplace incivility plays a mediating role.

The apparent reason due to which passive leadership does not affect burnout and interpersonal conflict in public sector organizations can be explained in terms of life cycle theory which implies that when employees are unable and unwilling to do or to take responsibility for their job or task (Hersey & Blanchard, 1969), then they are not concerned about what type of leadership behavior leaders are exhibiting, whether passive or active. As it is evident from the literature that public sector employees are considered to be ineffective, unable and unwilling (Kamoche, 1997), therefore, they don't care much about passive style of leader, and hence are not affected directly in terms of burnout and conflict with coworkers.

**TABLE 3**  
**Mediation Analysis in case of Burnout as outcome**

Effect of IV On M	Effect of M on DV	Direct Effect of IV on DV in Presence of M	Total effect of IV on DV	Bootstrap results for indirect effect	
				LL 95 CI	UL 95 CI
.4122	-.2696	.0616	.0	-0.1869	-0.0553

*IV = Passive leadership, DV = Burnout, M = workplace incivility, \*p < 0.1, \*\*p < 0.05, \*\*\* = < 0.01*

**TABLE 4**  
**Mediation Analysis in case of Interpersonal Conflict as outcome**

Effect of IV On M	Effect of M on DV	Direct Effect of IV on DV in Presence of M	Total effect of IV on DV	Bootstrap results for indirect effect	
				LL 95 CI	UL 95 CI
.4	-.1	.1	.0	-.2	-.1

*IV = Passive leadership, DV = Interpersonal conflict, M = workplace incivility, \*p < 0.1, \*\*p < 0.05, \*\*\* = < 0.01*

Moreover, when passive leaders avoid taking responsibilities and avoid resolving the disputes and incompetent in dealing with priorities (Bass, 2008), keeping themselves away from conflicts and trying to suppress discussions and good opinions are not valued (Gelfand et al., 2012), then followers who themselves are not mature enough as per life cycle theory (Hersey & Blanchard, 1969), they take little negative effects of these behaviors. We can rather argue that employees in public sector organizations of Pakistan are more comfortable in working with passive leaders than transformational or any other type of positive leadership attributes. Thus, whenever in public sector organizations the leadership is passive, employees, contrary to findings in literature, won't be emotionally exhausted and will take no effect or involve in interpersonal conflict.

The other interesting finding of the study is that workplace incivility mediates the relationship. Since passive leaders lack control, are irresponsible, do not use authority, display unconcerned behavior, and are not caring at all about their employees' issues (Hamidifar, 2010); it give employees more room to exhibit workplace incivility. This can include answering the telephone in an impolite manner, talking negatively about another employee, and sending a rude e-mail to a coworker (Blau & Andersson, 2005; Martin & Hine, 2005), rude comments, thoughtless acts, or negative gestures (Keashly & Jagatic, 2003; Neuman & Baron, 1997). So, in the presence of uncivil behavior on routine basis, it will generate stress, exhaustion and burnout within their coworkers (Cortina et al., 2001).

Hickson et al., (2004) found that infrequent and irregular decision-making processes are more characterized in public organizations. Public sector therefore shows signs of the avoiding, uneven and political decision-making (Richard, 1982). Ultimately, employees will behave in the same passive manner, and avoid doing task, and engage themselves in uncivil behavior like gossiping and disrespecting others in the workplace. These activities will lead to interpersonal conflict.

Hence, because of the passive behavior of leaders, an eminent outcome is burnout and more conflicts within the organization, so passive leadership, directly, has no effect on burnout and interpersonal conflict, but when incivility mediates, it enhances burnout and interpersonal conflict.

## CONCLUSION

Workplace incivility has major consequences for individuals within the organizations (Porath & Pearson, 2013). The results of this research advocate that incivility is most probable to arise under the supervision of passive leaders, and workplace incivility is measured as an intervening variable that leads to burnout within

employees and interpersonal conflict among co workers. We, therefore, believe the opinion of previous scholars (e.g., Aasland, Skogstad, Notelaers, Nielsen, & Einarsen, 2010) that passive leadership is not just considered an absence of constructive behavior rather it is considered as a negative and destructive leadership. Once incivility creeps into a workplace, it can spread like a virus (Harold & Holtz, 2014). Unless the management does not put the appropriate interventions, uncivil behavior can rapidly spill all over the workforce, and eventually impact an organization's well-being.

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# IMPACT OF INTEREST RATE ON PRIVATE SECTOR CREDIT; EVIDENCE FROM PAKISTAN

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## ABSTRACT

**This study explored the long and short term effect of interest rate on private sector credit on Pakistan for the period of 1975 to 2011. The Stationary of data was analyzed by Augmented Dickey Fuller and Phillips Peron test. This study applied Auto Regressive Distribution Lag (ARDL) model for the purpose of analyzing long and short term relationship. The results revealed significant negative effect of interest rate on private sector credit in the long run, and also in the short run. The results also indicated significant positive effect of inflation on private sector credit in long and short run. However, exchange rate was found to have no effect on private sector credit.**

## INTRODUCTION

Interest rate is the cost of borrowing money by the borrower. It is also return to the depositor in his/her account in bank, or return on investments such as government bonds. It is the channel through which the funds flow from savers to borrower. Usually these funds are generated from financial intermediaries like scheduled banks, development banks, mutual funds and insurance companies etc. It is an indicator that determines the flow of funds from savers to borrowers directly, or through financial intermediation. If the supply of loanable fund is more than the demand of loanable fund, interest rate falls, and if the demand is more than the supply, interest rate rises. Fluctuation in interest rate and changes in the quantity of loanable funds affect the economic indicators (GNP, employment of resources, level of income and general level of prices).

According to Keynesian and Monetarists' views, the impact of interest rate on investment is still a dominant topic of debate. One school reports that it has minimal effect on investment, while the other argues that interest rate is a strong determinant of investment. The Keynesian school avers that interest rate is explained by the supply and demand of money. This school argues that interest rate is not a strong determinant of investment. So, when money supply increases it decreases interest rate,

enhancing investment and employment, and lead to higher economic growth. The Monetarists believe that interest rate is a function of real economy that is explained by demand and supply of loanable funds. When there is increase in interest rate, it causes investment to decrease. They argue that demand for investment is inelastic interest. Therefore, changes in interest play an important role in investment decision, and also have an impact on the determination of prices of assets.

In economics and finance, there are several theories that try to describe that how interest rate affects the economic activities and how the interest rate is used to forecast the future changes, namely classical liquidity preference, loanable funds and rational expectation theories. This study uses the loanable funds theory. Loanable funds theory or neoclassical theory of interest rate describes that interest rate is determined by supply and demand of loanable funds. According to the theory, demand for loanable funds is created from domestic consumer's business government and foreign borrowers; whereas, the supply is created by domestic savings, banking system and capital inflows in borrowing.

A strong financial system makes an economy prosper, while a developed economy is an indicator of strong financial system. A developed economy will raise demand for credit and hence lead to credit growth. The moderate monetary policies and vigorous banking

sector of an economy will tend to increase demand for credit; whereas, strict monetary policies will discourage investors to invest and hence lower the credit and economic growth. State bank of Pakistan (SBP) has the only authority to make and implement monetary policies for the purpose of encouraging economic activities. The objective of monetary policies has been setup in compliance with SBP act 1956. The monetary policies' compliance can be divided into two regimes; before and after 1990's. SBP is used direct and indirect instrument for implementing monetary policies. The direct instruments were adapted before 1990's, while indirect instruments were used after 1990's. The direct instruments include; reserve ratio, cash reserve, fixed margin requirements statutory liquidity ratio and restriction of credit to different sectors etc. The indirect instrument includes; open market operations, discount rate, statutory reserve ratio, T-bill auction rate, etc.

In case of Pakistan, the domestic banking sector credit declined from 51.1 to 46.8 percent of GDP from 1971 to 2010 (World Development Index, 2011). The various factors that has been found to influence negatively the banking sector credit allocation decision beside investors own characteristics include; unstable economic and legal conditions, political environment and government policies. It was also found that credit growth was high before liberalization and low after liberalization. So, in case of Pakistan, liberalization doesn't enhance credit growth rate.

Interest rate is one of the most important parameters of an economy; this parameter not only determines the financial decision of the firms in private and public sectors, but also all types of real decisions related to Pakistan's economy. So, the main objective of the study is to examine the short run and also long run effect of interest rate changes on private sector credit.

The macroeconomic and political factors such as interest rate, inflation rate, regime change or certain political events may have a significant impact upon the private sector credit. Discount rate is also an important instrument that is used by State Bank of Pakistan to formulate monetary policy. This is a benchmark rate that is revised on quarterly basis. The private sector credit is affected by changes in interest rates which are changed because loosening or tightening of monetary policy formulation by regulatory authorities. Investors respond quickly to any change in interest rate, either positive or negative. The main theme of the study is to examine the impact of interest rate on private sector. This study will provide insights of whether the changing in interest rate has impact on private sector credit. Finding of the study would be useful for investors, shareholders, financial institutions and related government departments.

## REVIEW OF LITERATURE

There are many studies which indicate that lending rate effects private sector credit. Gupta (1987) studied the significance of two important factors, that is, financial intermediation and real interest rate. Using pooled time series data, a model of savings was anticipated for Latin American and Asian countries. There is no clear support for the effect of each of the two factors on Latin America countries, but showed some robustness for Asian countries.

Akkina and Celebi (2002) explored factors that can effect fixed investment in private sector and relationship among public and private sector investment in Turkey, considering the period of 26 years from 1970 to 1996. The authors used neoclassical investment model and reformulated flexible accelerator in investment model. The results showed that public and private investment act as substitutes for each other, and size of investable funds is of equal importance as cost incurred for employing capital. On the other hand, at medium term lending rate, financial and liberalization reforms implemented in 1983 did not show any positive impact on private investment.

Alessandria and Qian (2005) studied the financial intermediation, which were facing difficulties due to high monitoring cost. They examined the effect of starting the capital account on welfare and structure of lending deals. They described that competent financial intermediaries in small economies are not important nor enough for capital account liberalization for better welfare.

Khawaja and Din (2007) investigated the factors that effect the interest rate spreads in Pakistan by analyzing the data of 29 banks from 1998 to 2005. They considered real output, inflation, real interest rate, deposit inelasticity with firm level variables, asset quality, market share, administrative costs and liquidity. They concluded that macroeconomic and firm specific variable better clarify the interest rate spread in different banks.

Khan and Gill (2009) elaborated the relation between public sector borrowing, and private investment by using Johansen co-integration and error correction model over the period 1971-2006. They concluded that public borrowing has crowd in effect on private sectors' investment. Their results also indicated insignificant relation between lending interest rate and private sectors' investment in Pakistan.

Bader and Malawi (2010) examined the effect of interest rate on investment in Jordan, by using co-integration analysis. The results indicated that investment was negatively affected by real interest rate. The results highlighted that one percent increase in rate of interest reduced the investment by 44 percent, while income level affects investment positively.

Aisen and Franken (2010) studied eight countries

and found that bank credit growth rate was high before financial crises, as compared to post financial crises period. They said that monetary policies play an important role in dealing with financial crises. They suggested to make suitable monetary policies to enhance the economic growth of an economy.

Guo and Stepanyan (2011) found positive relationship of domestic and funding with credit growth. They said that increase in economic growth leads to increase in credit growth, whereas increase in inflation leads to decrease in credit growth of an economy. They further concluded that monetary policies play a significant role in credit growth of an economy and expansionary policies increases credit, whereas contractionary policies decrease credit growth rate.

Ihsan and Anjum (2013) studied the effect of money supply (M2) on GDP of Pakistan. They took three indicators for that, i.e., interest rate, CPI and inflation rate, because money supply (M2) is affected through one of them. Using regression analysis, they found that inflation has no significant relation with GDP of Pakistan, but Interest rate and CPI have a significant relation with M2 and GDP of Pakistan.

Giannetti and Jentzsch (2013) examined the effect of credit reporting and identification system on financial intermediation covering the data from 2000 to 2008 of 172 countries. Result showed that identification system has a positive relation with financial intermediation in those countries where credit reporting system prevails.

Abubakar & Gani (2013) studied the impact of banking sector expansion on the economic development of Nigeria They used annual time series data that covered the period from 1970 to 2010. Their data was acquired from the Central Bank of Nigeria's annual report. The result of their study showed that the credit granted to private, government expenditure and interest rate have a negative impact on the economic development over the long run. In making remark on the result of the study by the authors, high interest rate and considering few sectors at the expenses of others, as well as channeling huge amount of the fund in purchasing government treasury bills, are the some of the sources of this negative impact on the Nigerian economic development.

## RESEARCH METHODOLOGY

This study considered time series annual data from 1975 to 2011. The data was obtained from various sources, i.e., World Development Indicator, State Bank of Pakistan, and International Financial Statistics.

### Interest Rate

Interest rate (LR) plays an important role in private

sector credit. Investors seek to invest in the market which offers low rate. So, for a country like Pakistan, it is necessary to keep interest rate as low as possible to attract investors. The real interest rate can be measured as

$$\text{Real interest rate} = \text{Nominal interest rate} - \text{Inflation}$$

### Private Sector Credit

Private sector credits are claims of financial institutions on non-financial sector to GDP, which reflects domestic asset allocation. This reflects increase in private sector activity in investment.

### Inflation

This is the average rate at which prices of consumer goods increase in a specific period. Consumer price index (CPI) is a widely used indicator of inflation. CPI is measure as the mean change in the price of goods and services in a specific period.

### Exchange Rate

Exchange rate of country may play a significant role in investment. Many researchers argue that domestic currency appreciation positively affect income of domestic investor, because host country appreciation increases the wealth of domestic investor, and hence increases private investment. Country can attract more domestic investors by appreciation of currency, due to which domestic investors can earn high return. It can be measured as

$$\text{Exchange Rate (local currency units per dollar)}$$

To check the effect of interest rate on private sector credit, the following model was applied.

$$\text{PSC} = f(\text{CPI}, \text{EXR}, \text{LR}) \quad (1)$$

The equation 1 can be formulated into equation 2 as follow

$$\text{PSC} = \beta_0 + \beta_1 \text{CPI} + \beta_2 \text{EXR} + \beta_3 \text{LR} + \varepsilon \quad (2)$$

Where, PSC represents Private sector credit; LR represents Lending rate; EXR represents Exchange rate; CPI = Consumer price index and  $\varepsilon$  represents Error term. The logarithmic transformation was made to all variables.

### Auto Regressive Distributed Lag Approach

This study opted Autoregressive Distributed Lag

Approach (ARDL) to test co-integration developed by Pesaran, Shin, and Smith (1999). This model has advantage over traditional co-integration model, because of its applicability when the model is a mixture of I(1) and I(0) integrated variables. Second advantage of the model is that it is suitable for relatively small sample size. The basis here for opting ARDL model was to analyze long run and short run effect of lending rate on private sector credit. The equation (2) can be formulated into ARDL model as follows. The long run relationship between private sector credit and lending rate was analyzed using ARDL equation (3). The short run association between private sector credit and lending rate was analyzed using ARDL equation (4).

$$PSC_t = c + \phi_1 PSC_{t-1} + \phi_2 LR_{t-1} + \phi_3 ER_{t-1} + \phi_4 CPI_{t-1} + \varepsilon_t$$

$$\Delta PSC_t = c + \psi_1 \sum_{i=1}^p \Delta PSC_{t-i} + \psi_2 \sum_{j=1}^q \Delta LR_{t-j} + \psi_3 \sum_{k=1}^a \Delta ER_{t-k} + \psi_4 \sum_{l=1}^a \Delta CPI_{t-l}$$

In above equations (3), represents the long run parameters. In equation (4),  $\psi_1, \psi_2, \psi_3, \psi_4$  represents short run parameters, represents the 1st difference of variables and shows the speed of adjustment that can be adjusted over long run.

## RESULTS AND DISCUSSION

### Unit Root Test

Before estimation of ARDL model, data was tested for time series properties. For this purpose, Augmented Dickey Fuller (1979) (ADF) test and Phillips Perron

(1989) (PP) test were applied to know about stationarity of variables. The results of ADF and PP test are reported in Table (1). The results show that all variables have unit root at level while stationary at first difference.

### Lag Order Selection

The next step was to select the suitable lag value that will be used in order to estimate ARDL model. The suitable lag value was selected on the basis of VAR statistics. In VAR statistics, Schwartz Criterion is mostly widely used. The selection of suitable lag value was based on the minimum value of Schwartz criterion on a specific lag order. The result of VAR statistics is given in Table (2). The result indicates that Schwartz Criterion is minimum at lag 1, which points to select lag 1 for estimating ARDL model.

### Long Run Equation Results

Table 3 represents ARDL long run equation results. The analyses revealed significant negative effect of lending rate on private sector credit in the long run. This point to the evidence that increase in lending rate discourages investors to take more credit investment, and hence decreases private sector credit, and vice versa. The phenomena can be explained as; when government increases its expenditure for investment and current expenditures by borrowing from scheduled banks, then less funds will be available for the private sector companies and general public, as a result of which the interest rate will increase, and hence public borrowing crowds out domestic private investment in the long run.

TABLE 1  
Unit Root Results

Variable	ADF		PP		
	Level	1st diff	Level	1st diff	Inference
PSC	-1.729368	-4.350015***	-1.577354	-4.202776***	I(1)
LR	-2.887382	-4.657127***	-2.235115	-3.985243***	I(1)
ER	0.224282	-4.145903***	0.098055	-4.096962***	I(1)
INF	-0.000298	-4.204796***	0.075770	-3.301215**	I(1)

Critical values at 1%, 5% and 10% are -3.661661, -2.960411, -2.619160

\*\*\*, \*\* and \* represents significance at 1%, 5% and 10%.

TABLE 2  
Lag Order Selection

Lag	LogL	LR	FPE	AIC	SC	HQ
0	48.82774	NA	8.41e-07	-2.636926	-2.457354	-2.575687
1	227.6302	305.0160	5.88e-11	-12.21354	-11.31568*	-11.90735
2	251.7898	35.52874*	3.80e-11*	-12.69352*	-11.07737	-12.14236*
3	259.0832	9.009514	7.09e-11	-12.18136	-9.846930	-11.38525

\* represents significance at 1%,

Consequently, private investment will reduce. The results also points to the evidence that inflation significantly and positively affect the private sector credit in the long run. The exchange rate has insignificant effect on private sector credit in the long run. The results are consistent with Kashif and Nishat (2011) study on private sector credit in Pakistan. The exchange rate results are inconsistent with Selin (2001) which points out that exchange rate effect the private sector credit.

**TABLE 3**  
**Long run equation results**

ARDL (1,0,0,0)			
Variable	coefficient	Standard error	t-statistics
LR	-.50747	.18937	-2.6798**
ER	-.14270	.28649	-.49809
INF	1.9428	.25843	7.5174***
C	21.7329	.52122	41.6962***

Dependent Variable = PSC

\*\*\*, \*\* and \* represents significance at 1%, 5% and 10%.

**Short run Equation Results**

The short run ARDL equation results are reported in Table (4). The significant negative value of error correction term reveals confirmation of long run relationship in our model. The error correction term shows that approximately 27% disturbance is adjusted over the long run.

**TABLE 4**  
**Short run equation results**

ARDL (1,0,0,0)			
Variable	coefficient	Standard error	t-statistics
ΔLR	-.13903	.065536	-2.1214**
ΔER	-.039094	.076508	-.51098
ΔINF	.53224	.17230	3.0891***
C	-5.9540	1.8231	3.2659***
ECT(-1)	-.27396	.087101	-3.1453***
Dependent variable = PSC			
R-square	0.30303		
Adj. R-square	0.21310		
F-statistic	3.3696***		
DW-stat	1.6830		
Lm test	.95592		
Heteroscedasticity	.11223		

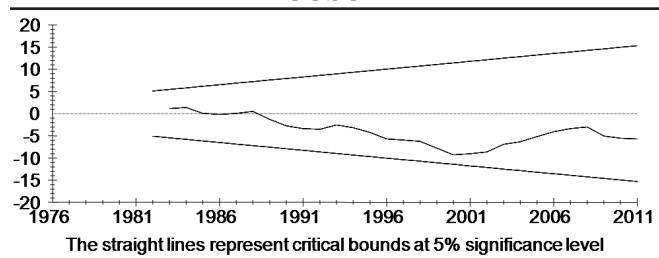
\*\*\*, \*\* and \* represents significance at 1%,5% and 10%.

The results show evidence of significant negative

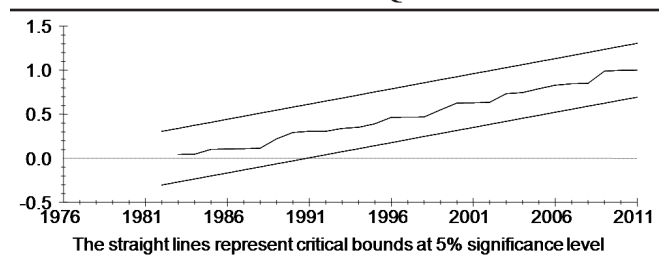
effects of lending rate on private sector credit in the short run. This point to the evidence that any change in lending rate will effect private sector adversely in the short run. The analyses also showed evidence of significant positive effect of inflation on private sector credit in short run. The exchange rate was found to have an insignificant effect on private sector credit in the short run. The diagnostic tests revealed that there was no issue serial correlation, heteroscedasticity and autocorrelation.

For checking robustness of long run and short run results, we applied cumulative sum (CUSUM) test and cumulative sum of squares (CUSUMQ) test. The figure 1 and 2 represents the results of CUSUM and CUSUMQ test respectively. The results show that the straight line of CUSUM and CUSUMQ lies in bounds of 5% significance level which shows that the model is stable.

**FIGURE 1**  
**CUSUM**



**FIGURE 2**  
**CUSUMQ**



**CONCLUSION AND RECOMMENDATIONS**

This study examined the relationship between interest rate and private sector credit in Pakistan covering the period 1975-2011. The Autoregressive Distributed Lag approach was employed for estimation of long and short run relationship. The study supports neoclassical theory of interest rate (loanable fund theory). Lending rate was used to accommodate the neoclassical theory, as the theory suggests that interest rate is determined by supply of loanable funds and demand for credit. The study concludes that lending rate influence significant negative the private sector credit in the long run, and also in the short run. The inflation rate has significant positive relationship with private sector credit in the short run and also in the long run. The exchange rate is found to have no

effect on private sector credit.

This study suggests that policy makers may make monetary policies for the purpose of managing interest rate, because increase or decrease in interest rate will adversely effect private sector credit. Therefore, private sector may be encouraged for the credit investment because it is also a source of financing for economy. As long as excess liquidity exists in financial system, the domestic resources other than State Bank of Pakistan may be used to cover the public expenditures and deficit without exploiting private sector investment. High amount of financing would be given to the private sector by bank at low rate to encourage the business activities in the economy. There is a need of more deregulation of private sector and financial liberalization, so that foreign investors take interest in investment in private sector.

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# **IMPACT OF ABUSIVE SUPERVISION ON INTERPERSONAL CONFLICT; MEDIATING ROLE OF BREACH OF PSYCHOLOGICAL CONTRACT AND MODERATING ROLE OF LOCUS OF CONTROL**

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## **ABSTRACT**

**The purpose of this study was to examine the impact of abusive supervision on the interpersonal conflict among teachers in the education sector of Pakistan. The study also explores the mediating role of breach of psychological contract and moderating role of locus of control in the proposed model. The survey was conducted on the teachers of different schools, colleges, and universities of Rawalpindi, Islamabad, Karachi and Lahore. Data was collected from 272 teachers using questionnaires. Results indicated that abusive supervision is positively associated with the interpersonal conflict. Moreover, locus of control acts as a strong moderator on the relationship of abusive supervision and interpersonal conflict such that it weakens the relationship. However, breach of psychological contract didn't mediate the relationship of abusive supervision and interpersonal conflict.**

## **INTRODUCTION**

Words of renowned author Wayne Dyer “Conflict cannot survive without your participation” holds true in most of today’s organizations. The history of conflict is as old as the history of man itself. People are different in their mental schema, thoughts, opinions and goals, therefore conflicts become inevitable. Conflict refers to some kind of friction or disagreement arising when the beliefs or actions of one or more members of the group are either opposed or unacceptable to one or more members of another group. Conflict is an integral part of human relations, and therefore it has remained a long-standing focus of organizational and team research (Pondy 1967; Jehn & Mannix, 2001). It is the process that begins when one party perceives that the other party has negatively affected, or will negatively affect something that he or she cares about (Thomas, 1992).

One of the important causes of conflict is abusive supervision. According to the survey in US, abusive supervision affects 13.6 % US workers (Tepper, 2000). Two decades ago, according to the estimation of Leymann (1990) the cost of each incident of abusive behavior in workplace was between \$30,000 and \$100,000 annually. The harsh behavior of managers with their subordinates give rise to anarchy at work place, so the exchange of harsh behavior from manager to supervisor and then from supervisor to subordinates causes serious troubles to the lower level employees (Wayne, Hoobler,

Marinova, & Johnson, 2008). Abusive supervision is the result of external conditions, while others suggest that internal factors are responsible for negative outcomes (e.g., Harvey & Martinko, 2008).

Interpersonal conflict arises due to abusive supervision as it is a communicative threatening situation aimed to damage an individual physically or mentally (Leymann, 1990), and it ranges from employees to teams to organizations (Baillien, Neyens, De Witte, & De Cuyper, 2009). Studies frequently discuss the abusive supervision as a source of interpersonal conflict (Baillien et al., 2009; Jehn, 1995; De Dreu & Weingart, 2003; Jehn & Mannix, 2001). Many researchers (Kotlyar & Karakowsky, 2006; Skogstad, Torsheim, Einarsen, & Hauge, 2011) focused that inappropriate leadership style result in interpersonal conflict. In interpersonal conflict, two parties are involved of approximately equal strength (usually at peer level), and show non-verbal, verbal behaviors and/or physical assault (McKenna, Smith, Poole & Coverdale, 2003).

Psychological contract has been widely discussed after 1980s. Literature says that breach is characterized by at least one of five kinds: delay, magnitude, type, inequity (i.e. perceived discrimination), and reciprocal imbalance. It takes place when the output is different from what was expected (Cassar & Briner, 2011). Apart from this, if the factors like complexity, diversity and globalization prevails in the organizations, it causes not only the psychological breach but it also decreases the affective commitment of the employees with the

organization (Bao, Olson, Parayitam & Zhao, 2011).

The term "Locus of Control" was developed by Rotter (1971) as part of social learning theory which states that the relations of employees with their environment is a function of comprehensive learning based on their past experience and expectations from the future (Amram & Benbenishty, 2014). Locus of control refers to a person's beliefs about control over life events. According to the literature, people are of two kinds. The kind of people who feel themselves responsible for the things are known as internals and those who feel that their outcomes in life are based on external factors like fate, luck and other people etc., which are beyond their control, are known as externals (Findley & Cooper, 1983).

The social exchange theory explains that the supervisor and employee's relationship is based on reciprocal treatment. When the supervisor treats the employees in abusive way, the employees will also respond in the form of deviant behavior, and this will ultimately spoil the interpersonal relationship (supervisor-employee). Due to social exchange, employees have some expectations from their supervisors, and they form a certain kind of psychological contract with their organization, but when they perceive that their expectations are not being fulfilled by the employer, then breach of psychological contract occurs (Morrison & Robinson, 1995). So, organizational members have a social exchange relationship not only with other members of the organization, but also with the organization.

The abusive supervision in education sector of Pakistan needs to be addressed at earliest as it negatively harms the overall workplace environment, and create hurdles in achieving the basic objectives of the institute. This study will help the education sector in understanding the fact that abusive supervision is not a type of issue which can be ignored. Pakistani culture is power distant culture where power is mostly concentrated at the top level and the decisions are usually taken by the higher authority in the hierarchy. Similarly, in educational institutes, the teachers are not permitted to make the decisions on their own, that binds them to follow the orders only, rather than to take some innovative steps for the betterment of the organizations.

## LITERATURE REVIEW

### Abusive Supervision and Interpersonal Conflict

The emerging literature explores abusive supervision as rude, offensive, and unfair behavior of supervisors towards their subordinates (Leymann, 1992). Abusive supervision has a negative impact on various organizational outcomes, e.g., job satisfaction

(Tepper, Duffy, Hoobler, & Ensley, 2004), organizational citizenship behaviours (Zellars, Tepper, & Duffy, 2002), job performance (Aryee, Sun, Chen, & Debrah, 2008), loyalty (Aryee, Chen, Sun, & Debrah, 2007), and it enhances work place deviance (Tepper et al., 2009), and psychological distress (Tepper, 2000).

Abuse results in lower morale, lower motivation, increased turnover, increased sick leaves and diminishing creativity, etc. All these outcomes result in poor interpersonal relationships (Johnson & Indvik, 2001). If the supervisor fails to show optimism and consider the employee as an easy target for mistreatment, then the management should take responsibility to help its employees by addressing abusive supervision prevailing in the workplace (Harvey, Stoner, Hochwarter & Kacmar, 2007). Sometimes, minor acts of disrespect and rudeness and their reactions are simple reasons, why many employees don't like their organizations, don't respect their coworkers and wish they were not there (Johnson & Indvik, 2001).

Conflict is a dynamic process that occurs between parties as they experience negative emotional reactions to perceived disagreements and interference with the achievement of their goals (Barki & Hartwick, 2004). The interpersonal conflict is the process in which a person is systematically subjected to aggressive behavior from one or more colleagues or supervisors over a long period of time (Einarsen, 1999). In this situation, it is difficult for the victim to escape or defend himself and this ultimately results in severe psychological trauma. Leymann and Gustafson (1996) consider it an incremental process which is marked with aggressive act and psychological assaults against victim, repeatedly and regularly (at least once a week) and for a long time (at least 6 months) which ultimately results in employee turnover.

If an employee identifies strongly with a particular job, but later on there are unsuccessful and aggressive interactions with the supervisor, then more negative effects may rise as a result (Thoits, 1991). As a reaction of abusive supervision, employees feel decreased attachment/ commitment to the organization; they engage themselves in potentially damaging behaviors towards the organizations, such as shirking, theft, sabotage etc., (Tepper, Henle, Lambert, Giacalone, & Duffy, 2008). They undergo mental and health issues such as anxiety, depression (Spector, & Jex, 1998), and intentionally perform poorly (Mitchell & Ambrose, 2007), which causes the poor interpersonal relationship (Inness, Barling, & Turner, 2005). It also provokes stronger intentions of abused employees to quit the organization to retaliate against perceived supervisor's abusive behavior (Tepper et al., 2009).

Perceptions of interpersonal conflict are related to hostile work environment, job satisfaction, stress,

and job withdrawal as well (Donovan, Drasgow & Munson, 1998), but sometimes interpersonal conflict can be defined as direct competition over resources (Devall & Harry, 1981) or physical incompatibilities among employees or between boss and employee (Bury, Holland & McEwen, 1983). It is also reported that employees who work for longer hours in a hostile work environment are more likely to experience workplace conflict, which, in turn, lead to the poor interpersonal relations at workplace (Markel & Frone, 1998). This is why highlighting various conflict indicators is very essential as it identifies specific problems that may divert management attention towards various conflict handling styles (Vaske, Needham & Cline, 2007).

The impact of interpersonal interaction has not been explored extensively in literature (Venkataramani & Dalal, 2007). It is strongly debatable that interpersonal interactions of employees with their supervisor is an important activity of everyday work life, since the job performance of employees is also based on the quality of interpersonal relationships they have with their supervisor (Wei & Si, 2013). When subordinates experience poor leader-employee relations, they reciprocate with negative behaviors such as workplace deviance and poor interpersonal relationship (Greenberg & Scott, 1996). One of the most important things an organization can do to protect their employees as well as themselves is to ensure a safe organization where abuse and rudeness should be minimized on earlier basis (Johnson & Indvik, 2001). On the basis of above literature our first hypothesis is:

*Hypothesis 1. Abusive supervision is positively associated with interpersonal conflict.*

### **Breach of Psychological Contract as a Mediator between Abusive Supervision and Interpersonal Conflict**

The Psychological Contract can be defined as psychological promise between the employee and the organization. It refers to unwritten set of expectations of the employment relationship in addition to the formal and written employment contract. It is a cognitive model which compose the terms and exchange agreement between the employee and the employer (Rousseau, 1998). The concept of psychological contract was introduced into the management field in 60s of the 20th century. Argyris (1960), an organizational psychologist, used the word "Psychological Work Contract" for the first time to explain the relationship between boss and subordinates in his book "Understanding Organizational Behavior". According to "Levinson", the father of psychological contract, the psychological contract is

the combination of the implicit and unwritten mutual expectations between employees and organization (Zhang & Huang, 2009).

Breach of psychological contract can be defined as unmet expectations of the individuals resulting from a series of unfavorable events. When subordinates perceive that the organization fails to fulfill its responsibilities and/or the organization does not give attention towards the well-being of employees, they experience breach of psychological contract (Robinson & Morrison, 1995). In most of the cases there are major differences in supervisor's and subordinate's perceptions of psychological contract fulfillment on the basis of salary, advancement opportunities, and a desirable employment relationship (Lester, Turnley, Bloodgood, & Bolino, 2002). The subordinate's perception of breach of psychological contract is associated with lower levels of organizational commitment and lower supervisor's ranking of task performance (Lester et al., 2002).

Rousseau (1995) argued that promissory beliefs act as the base of employment relationships. Psychological contracts arise when employees develop expectations that lead to mutual obligations between individual employees and their supervisors (Arshad & Sparrow, 2010). A high quality social exchange relationship between subordinates and supervisors reduce the possibility of breach of psychological contract (Son, 2014) whereas abusive supervision results in negative emotions such as disloyalty, anger, bitterness, shock, insecurity, loss of trust, and disappointment (Morrison & Robinson, 1997).

The consequences of breach of psychological contract escort to the feelings of violation in the employees (Robinson & Morrison, 2000). Psychological contracts are ever changing due to continued change in the external environment. Psychological contracts are based on mutual trust, and betrayal by supervisor tends to evoke the strong emotional reactions by the employees. When an employee perceives that his/her organization has failed to perform the administrative obligations, then it results in breach of psychological contract, which ultimately leads to interpersonal conflict (Bunderson, 2001).

When supervisors abuse their employees, psychological contract breach occurs (Wu & Hu, 2009). This aggravates the situation and employees respond with behaviors such as disrespect for the supervisor, non-compliance of ethical codes of conduct, and other behavioral patterns which results in poor interpersonal relation between supervisor and employees (Rousseau, 1989). Broken promises produce anger and eliminate trust in the relationship and sometimes violation of the verbal psychological contract can be even more harmful than breaking the formal agreement (Guest, 1998; Rousseau,

1995). Sometimes it results in poor organizational level performance (Turnley, Bolino, Lester, & Bloodgood, 2003). On the basis of above literature second hypothesis of the study is;

*Hypothesis 2. Breach of Psychological contract mediates the relationship between Abusive Supervision and Interpersonal conflict.*

### Moderating Role of Locus of Control

Locus of control can be defined as the extent to which an employee expects reinforcement for behavior of other party to be under personal, i.e., internal locus of control versus impersonal i.e., external locus of control (Lefcourt, 1992). The concept of locus of control was given by Rotter (1966), who had also developed scales for internal and external locus of control to measure employee's differences in causal perceptions (Rose & Medway, 1981). Individuals having internal locus of control react differently across situations than the individuals who have external locus of control (Mitchell, Smyser, & Weed, 1975; Runyon, 1973). Internal locus of control is found to be an indicator of success for entrepreneurs, because internals believe that success and fortune is within the range of their personal control; whereas, externals believe that their lives are controlled by external environment, such as destiny, luck, or power etc. (Begley & Boyd, 1987).

Both Internals and externals prefer different styles of supervision. Internals prefer participative supervision approaches; whereas, externals prefer directive supervision approaches. So, how the employees will be treated in an organization depends upon whether supervisor follows participative approach or directive approach (Harpin & Sandier, 1979). What style of supervision should be adopted also depends upon the task or organizational demands, e.g., directive style should be adopted for the tasks that require close coordination. Similarly, participative style is more suitable for tasks that require initiative and independent actions (Harpin & Sandier, 1979).

People who have control over outside factors are said to have an external locus of control and are termed externals. Those who attribute control of events to themselves are said to have internal locus of control and are termed as internals (Spector, 1982). Employees who experience more positive emotions respond favorably to situations assigned to them; whereas, those having more experience of negative emotions are less likely to respond positively to the particular situations (Larsen & Ketelaar, 1991). Locus of control has also been frequently discussed in literature in association with teachers (Guskey & Passaro, 1994). It is an important

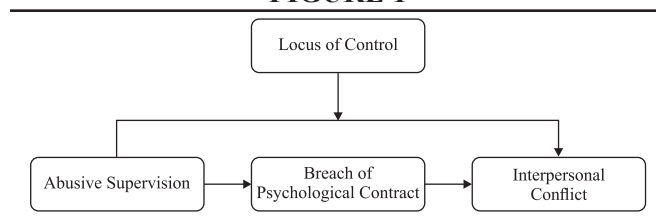
psychological attribute which affects the teachers' perceptions related to their environment and job performance (Spector, 1982).

Teachers with internal locus of control consider that the success and failure of an event is more associated with their own behaviors (Cheng, 1994), and they adopt treatment strategy for the adjustment of emotions (Friedman, Lehrer, & Stevens, 1983). On the other hand, teachers with external locus of control cannot control their emotions at workplace. They respond more vigorously towards abusive behaviors of supervisors, and also show low organizational commitment (Friedman, Lehrer, & Stevens, 1983). Locus of control strengthens the relationship between abusive supervision and employees' counterproductive work behavior towards the organization (Wei & Si, 2013). Instead of self-control, if abusive supervision prevails in the organization, then it strongly influences the interpersonal interaction of subordinates with the supervisor, and also subordinate's behavior towards the organization (Wei & Si, 2013). On the basis of above literature third hypothesis is:

*Hypothesis 3. Locus of control moderates the relationship between Abusive Supervision and Interpersonal Conflict.*

## THEORETICAL FRAMEWORK

FIGURE 1



## METHODOLOGY

The population included faculty members of the schools, colleges and universities working in the institutes of Rawalpindi, Islamabad, Lahore and Karachi. About three hundred and fifty (350) questionnaires were distributed among different teachers of schools, colleges and universities of these four cities. Responses of 272 respondents were used for data analysis, making the response rate as 85%.

## INSTRUMENTATION

Following instruments were used:

### Abusive Supervision

Abusive Supervision was measured using

questionnaire developed by Tepper, (2000) using a 5-point likert scale. The scale reliability was 0.70. The cronbach’s alpha is 0.89. Some of the sample items are, “My boss remind me of my past mistakes and failure.” “My boss doesn’t give me credit for job requiring a lot of effort.” “My boss blames me to save his/her embarrassment.”

**Interpersonal Conflict**

Interpersonal conflict was measured using a questionnaire developed by Doucet, Poitras, and Chênevert (2009) using a 5-point likert scale. The scale reliability was 0.81. The cronbach’s alpha is 0.74. Some of the sample items are; “There are many conflicts relating to work ideas.” “There are often differences in opinion regarding what should be done.”

**Breach of Psychological Contract**

Breach of Psychological contract was measured using the questionnaire developed by Robinson and Morrison (2000) using a 5-point likert scale. The scale reliability was 0.91. The cronbach’s alpha is 0.73. Some of the samples are; “I feel a great deal of anger towards my organization.” “I feel betrayed by my organization.”

**Locus of Control**

Locus of control was measured using the questionnaire developed by Spector (1988) using a 5-point likert scale. The 16-item Work Locus of Control (WLOC) was used to measure locus of control orientation, with 8 items to measure internality and 8 items to measure externality. The scale reliability is 0.79. The cronbach’s alpha is 0.77. Some of the samples are; “Getting the job you want is mostly a matter of luck.” “Making money is primarily a matter of good fortune.” “Promotions are usually a matter of good fortune.”

**RESULTS**

**Correlation Analysis**

Correlation analysis show that there is a significant

and positive correlation between abusive supervision and interpersonal conflict ( $r = .165, p < 0.01$ ). However there is no significant relation between abusive supervision and breach of psychological contract ( $r = .030, p > 0.05$ ); whereas, breach of psychological contract has shown significant and positive correlation with interpersonal conflict ( $r = .159, p < 0.01$ ). Further analysis show that the correlation between abusive supervision and locus of control is negative and significant ( $r = -.028, p < 0.01$ ), whereas, locus of control has significant negative correlation with interpersonal conflict ( $r = -0.158, p < 0.01$ ). The following table (Table 1) shows the correlation analysis of the variables.

**Regression Analysis**

Regression analysis helps to determine the predictive power of a predictor variable for the dependent variable, and to measure the extent to which one variable cause variance in the other. The acceptance or rejection of hypotheses is based on the results of regression.

Table 2 indicates the regression results of abusive supervision and its effect on interpersonal conflict. A linear regression analysis was conducted to evaluate how well abusive supervision predicts interpersonal conflict. The demographics were controlled in the first step and abusive supervision was added in the second step to check the relationships. According to the table, there is a significant and positive relationship between abusive supervision (IV) and interpersonal conflict (DV) with  $\beta = 0.165^{**}$  ( $p < 0.01$ ) that indicates the acceptance of first Hypothesis.

**Mediation Analysis**

Hypothesis 2 was based on the mediation analysis. Hypothesis 2 of the study predicts that Psychological contract breach is a possible mediator between the relationship of abusive supervision and interpersonal conflict. In order to test hypothesis 2, mediation analysis was carried out through Hayes (2013) process macro by using model 4.

**TABLE 1**  
**Mean, Standard Deviation, and Correlation**

Variables	Mean	S.D.	1	2	3	4
1 Abusive Supervision	2.24	0.78	1			
2 Interpersonal Conflict	2.60	0.68	.165**	1		
3 Breach of Psychological Contract	3.44	0.52	.030	.159**	1	
4 Locus of Control	3.41	0.50	-.028**	-.158**	.01**	1

*N=272. \*p<0.05, \*\*p<0.01, \*\*\*p<0.001, Control variables: Age, Gender, Tenure, and Qualification*

**TABLE 2**  
**Hierarchical Regression Analysis for Determinants of Abusive Supervision**

Predictor	Interpersonal Conflict		$\Delta R^2$
	$\beta$	$R^2$	
Independent Variable			
Step 1			
Control variables		0.22	
Step 2			
Abusive Supervision	0.165**	0.046	0.024**

The number of bootstrap re-samples was taken as 5000 whereas the bootstrap results were tested at 95% confidence interval. Age, gender, tenure, and qualification were taken as control variables. Table 3 demonstrates the results of hypothesis 2.

From Table 3, it can be observed that the indirect effect of Abusive supervision on Interpersonal conflict through breach of psychological contract has the upper and lower limits of 0.25 and -0.013 respectively. As both signs of upper limit and lower limit are opposite to each other, so zero is present in the 95% confidence interval which shows that mediation does not exist. On the basis of above results, it can be concluded that psychological contract breach doesn't mediate the relationship between abusive supervision and

interpersonal conflict.

### Moderation Analysis

In order to test hypothesis 3, which proposed the moderating role of locus of control in the relationship of abusive supervision and interpersonal conflict, model 1 from process Macro Hayes (2013) was used. Demographics variables i.e. age, gender, tenure, and qualification were controlled. Following table shows the results of moderation analysis in which the number of bootstrap re-samples was 5000 and bootstrap results were tested at 95% confidence interval.

According to the Table 4, bootstrap values show lower and upper limits of -0.519 and -0.156 and zero is not present in the 95% confidence interval. This shows that locus of control moderates the relationship between abusive supervision and interpersonal conflict. The negative sign indicates that moderator change the direction of the relationship such that if locus of control is high then the relationship between abusive supervision and interpersonal conflict would be weakened. Hence, it fully supports the 3rd hypothesis.

### DISCUSSION

The first hypothesis proposed that abusive supervision is positively associated with interpersonal conflict. This hypothesis was accepted which shows that abusive supervision in an education institute intensifies the interpersonal conflict.

**TABLE 3**  
**Mediation Analysis**

DV	Effect of IV on M (a path)		Effect of M on DV (b path)		Total effect of IV on DV (c path)		Direct effect of IV on DV (c' path)		Bootstrap Results for Indirect effects	
	$\beta$	t	$\beta$	t	$\beta$	t	$\beta$	t	LL 95% CI	UL 95% CI
	IC	0.20	0.496	0.205**	2.603	0.145**	2.750	0.141**	2.699	-0.013

$N=272$ , \*  $p<0.05$ , \*\*  $p<0.01$ , \*\*\*  $p<0.001$ , Control variable: age, No. of bootstrap resample = 5000

\*IV = Abusive Supervision, DV= Interpersonal Conflict (IC), M = Breach of Psychological Contract

**TABLE 4**  
**Moderation Analysis**

DV	Effect of IV on DV		Effect of Mod on DV		Effect of IVxMod on DV		Bootstrap Results for Indirect effects	
	$\beta$	t	$\beta$	t	$\beta$	t	LL 95% CI	UL 95% CI
	IC	.968***	4.350	1.318***	4.043	-0.337***	3.656	-0.519

$N=272$ , \*  $p<0.05$ , \*\*  $p<0.01$ , \*\*\*  $p<0.001$ , No. of bootstrap resample = 5000

\*IV = Abusive Supervision, DV= Interpersonal Conflict (IC), Mod= Locus of Control.

The present study is consistent with the literature that abusive supervision gives rise to aggressive workplace environment.

In the education sector of Pakistan, the rude and offensive behavior of Principal/Head of institute/Supervisor toward teachers result in cold war between them, and it also intensifies the feeling of retaliation, which, in turn, causes the interpersonal conflict. Interpersonal conflicts between principal and teachers effects the teachers in the form of frustration, irritation, and annoyance. As a result, such teachers retaliate by engaging themselves in abusive behavior with their colleagues as well (Kisamore, Jawahar, Liguori, Mharapara, & Stone, 2010). They may utter bitter words in annoyance and frustration especially to the most appreciated colleagues. This intensifies the negative social interactions among the colleagues in the long run. Interpersonal incompatibility and all these factors increase the interpersonal conflict (Jehn&Mannix, 2001). This results in poor interpersonal relationship with the other employees (Bies&Tripp, 1995).

The second hypothesis was that breach of psychological contract mediates the relationship of abusive supervision and interpersonal conflict. According to the results, this hypothesis was rejected. There may be many reasons for it. The cultural dimension is an important phenomenon which can't be ignored (Hofstede, 1993). In Pakistan, there is a high level of power distance between the boss and the employee. Also, there is an established trend that boss is at a high rank, so he/she has full authority to behave in a way he/she likes. Abusive behavior of boss/principal is not something which is unexpected by teachers. What kind of tone or words a boss uses to treat his/her employees (polite or abusive) depends on his/her choice. So, psychological contract of employees is not associated with abusive supervision, which doesn't let the employees to think that breach has been committed by their boss.

Moreover, in Pakistan, the level of unemployment is very high (8.3%). So employees' breach of psychological contract is more associated with attractive salary packages and other benefits like incentives, bonuses and increments etc., offered by organization, and they are less concerned about other factors such as abusive behavior of boss (Lester et al., 2002). Moreover, due to very few employment opportunities, the teachers in education sector have no other option but to bear the abusive behavior of boss, and they continue to work there for the sake of money. These are the reasons why the mediation was not confirmed.

The third hypothesis of the study was that locus of control moderates the relationship of abusive supervision and interpersonal conflict. This hypothesis was accepted

and it is consistent with various past studies. Most of the teachers in Pakistan have internal locus of control. They can better maintain the interpersonal relationships (Wei & Si, 2013), and if the boss abuse them, they think that they were inefficient in performing the due tasks. So, they don't perceive those comments as harsh or inappropriate and consider themselves responsible for the situation. Such teachers use the treatment strategy for the adjustment of emotions (Friedman, Lehrer, & Stevens, 1983) and they have ability to handle stress in general life and at workplace (Spector, Cooper, Sanchez, O'Driscoll, & Sparks, 2002). The study also confirms that the employees having internal locus of control can better control the organizational work settings, operating procedures, work assignments, working conditions, work scheduling, organizational policy and, they also have tendency to maintain the effective social relationships with the supervisor and colleagues as well (Spector, 1982).

## CONCLUSION

On the basis of the above discussion and considering the fact that the relationship of variables is tested in Pakistani context, it is concluded that most of the education sector is facing abusive supervision which causes the negative effect on the interpersonal relationship of teachers with supervisor and with colleagues as well. Unfortunately, supervisors in the education sector feel free to abuse their subordinates at any time without considering its outcomes. They feel themselves righteous in selecting an abusive tone for handling different complex workplace issues. The teachers who face abusive behavior of supervisor on frequent basis release their frustration and anxiety by either abusing their colleagues or mistreating their students. It is also concluded that psychological contract of teachers is much more associated with other attractive packages offered by organization instead of attitude of boss towards them than other factors. Moreover, employees with the internal locus of control can make better adjustments against abusive supervision, and it can reduce the chances of emerging interpersonal conflict between subordinates as compared to employees with external locus of control.

## Limitations, Recommendations and Future Research Directions

Despite significance of the study and its results, there are few limitations of the study i.e., the study comprises of four major cities of Pakistan i.e. Rawalpindi, Islamabad, Lahore, and Karachi. Due to constraint of time and resources, the present study does not include

data from teachers of other cities and especially from rural and backward areas of Pakistan which may have given different results. Also, the study includes the common method technique of data collection that is through survey questionnaires; however, detailed interviews with faculty members would have provided a more in-depth analysis.

The growth of education sector is not possible without having positive interpersonal relationships between supervisor and teachers. The growth of a nation greatly lies on the growth of its education sector. So, it is recommended that the supervisor should act more like leaders rather than just bosses. Supervisors cannot achieve organization's objectives without having effective interpersonal relationships with the teachers. The supervisors must be given trainings and guidelines about emotional management and how to treat the teachers for having the favorable interpersonal relationships. There is a dire need to create awareness among supervisors that there can be other ways to treat teachers for obtaining the positive outcomes. The study has tested the model in the education sector of Pakistan. The future researchers can test the same model in other sectors i.e. banking sector, Telecom sector and hospitality sectors etc.

The study has discussed the model in Pakistani culture. With the change of cultural context, the study may exhibit notable variations, so the future researchers can test the same model in the other dimensions of culture. It is suggested that seminars and awareness programs should be conducted to let supervisors know about the importance of effective leadership and interpersonal relationships. The future researchers can work on other variables as moderators like organization citizenship behavior, psychological capital, perceived injustice, etc., and moderators like workplace stress, burnout etc. Similarly, the present study is cross sectional in nature. The future researchers can conduct the longitudinal study to get the more effective results. Beside abusive supervision, the future researchers should explore the other neglected issues which intensify the interpersonal conflict among employees.

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# THE CORPORATE SOCIAL-FINANCIAL PERFORMANCE LINK: EVIDENCE FROM PAKISTAN

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## ABSTRACT

**This empirical investigation has been conducted to constitute a link between corporate social performance and corporate financial performance in Pakistani listed firms. For this purpose the data from seventy listed non-financial firms at KSE from twenty one sectors which are engaged in CSR activities for a period of six years from 2008 to 2013 was employed. The two-stage least square (TSLS) methodology has been used to explore a link between CSP and CFP. The results of study revealed that there is a simultaneous link between social and financial performance. Corporate social performance has been found as positively linked with the previous CFP which supports the slack resources theory. Social performance initiatives taken by the firms have also been found as having a positive relationship with future CFP. Secondly, this study examined the relationship between financial performance and social performance, and the results disclose that there is a positive relationship between CFP and CSP, and the foremost influential factor of corporate social performance was found to be size of the firms and the association between firm size and CSP was found as positive.**

## INTRODUCTION

Corporate Social Performance (CSR) has gained great popularity and attention by various corporations and researchers in the last few decades. The reason of growing attention is that reporting on a corporation's actions has become a dominating factor, as various stakeholders want to know everything about the business in a fair and true manner (Singh, 2014). According to Kim, Park and Wier (2012), CSR has become a need for all kinds of business organizations now and is no longer confined to big companies. Different terms have been used for corporate social performance by corporate managers and researchers such as corporate philanthropy, corporate social responsibility, corporate citizenship, business ethics, socially responsible investment and community involvement. According to World Business Council for Sustainable Development (2002), CSR is "the commitment of business to contribute to sustainable economic development, working with employees, their families and the local community and society at large to improve their quality of life. McWilliams and Siegel (2001) defined CSR as "actions that appear to further some social good, beyond the interest of the firm and that which is required by law". This definition

states that CSR is more than just following the law. Tsoutsoura (2004) stated that CSR is viewed, then, as a comprehensive set of policies, practices and programs that are integrated into business operations, supply chains and decision making processes throughout the company and usually include issues related to business ethics, community investment, environmental concerns, governance, human rights, the marketplace as well as the workplace. According to Business for Social Group Responsibility (BSR) "while there is no single, commonly accepted definition of corporate social responsibility, it generally refers to business decision making linked to ethical values, compliance with legal requirements, and respect for people, communities and the environment". Competition has become severe and stiff between domestic and foreign companies to gain more benefits by establishing trust and goodwill between both the government and the society at large and only those companies that attain the trust of the public and behave good corporate citizens will be able to develop these intangible assets into strategic advantages (Ehsan & Kaleem, 2012). World's top companies' corporate scandals such as Enron and WorldCom with environmental changes also highlighted CSR as one of the core challenges (Silberhorn & Warren, 2007). Doane (2005) was of

the view that CSR relates to the implicit expectation from business to provide better environmental and social results without any regulatory framework from government. Stated generally, CSR is the initiative which a corporation takes about its impacts on the community and society. The aim of this study is to establish a link between corporate social performance and corporate financial performance. This study is unique in a sense that it is a bi-directional study, which will examine a simultaneous relationship between CSR and CFP, which will identify the direction of influence, i.e., whether good managerial efforts on CSR will lead to improved financial performance, or a good financial performance will lead to better corporate social performance. Further, this study will also explore the nature of relationship between corporate social performance and firm financial performance. Many researchers studied the relationship between CSP and CFP, but most of the studies have been made in developed nations. In the context of Pakistan, very few studies have been done on CSR which were unidirectional in nature. This study is unique in a sense that it will conduct firm and industry level analysis to gauge the link between the said variables, CSP and CFP, in an emerging economy i.e., Pakistan. This study will also highlight those financial factors which affect corporate social performance, which will eventually guide the firms in this context, and will also assist the prospective investors from abroad in allocating their investments in socially desirable companies.

In Pakistan, both the companies and society have relatively less awareness about their duties and rights with regard to CSR, so Pakistan is lagging behind the western nations in creating awareness of corporate social responsibility benefits in society and firms as well. Then, Pakistan is going through a lot of domestic problems in the form of war against terrorism, energy crises, illiteracy, poor health infrastructure and above all, political and economic uncertainty. Few big local companies and multinational companies like FFC, Nestle, Pakistan Petroleum, Shell, Engro Corporation, ARL, ICI, and Unilever Pakistan are allocating towards CSR. Therefore, it has become very much essential to educate the society and corporations about the long run benefits of adopting CSR programs. Government, firms and people are the three main stakes, which form a society and community and any single stake from these three cannot survive without the backing of other. Pakistan has been undergoing a lot of domestic economic and law and order difficulties along with international issues. This study will provide an understanding to the corporate sector about the various desires of society and how the financial performance can influence the corporate social responsibility activities, so it is very

crucial to study the factors which may affect the corporate social performance of firms.

## REVIEW OF LITERATURE

An attempt to examine the relationship between CSP and CFP was made by Cochran and Wood (1984) using new methodologies and ideas. They found the existence of relationship between the two variables with or without age of corporate assets. Another research was carried out by Aupperle, Carroll, and Hatfield (1985) who for the sake of same comparison employed a unique instrument to cater for ideological bias while viewing the relationship between CSP and financial performance of the firm. That instrument was distributed among CEOs of different corporations and conclusion drawn was that CSP was not related to profitability of any company. According to Ullman (1985), there are many variables which can intervene between the CSP and FP, so we should not expect a relationship between these two aspects. McGuire, Sundgren, and Schneeweis (1988) concluded that lagged financial performance is a predictor of better corporate social performance, and CSP does not predict CFP. In a unique attempt to study the relationship between CSR and CFP, Clarkson (1995), instead of doing a fresh study, tried to cover the 70 older notable studies carried out in the past 10 years and ended up in development of a comprehensive analysis of CSP evaluation including a framework and methodologies to be followed in evaluation of CSP. He summarized that firms are more responsive to Stakeholder issues rather than social issues covering society as a whole. Turban and Greening (1997) argued that the corporations which follow proper CSR principles and policies are able to attract and retain employees which help to reduce turnover and training costs. Preston and O'Bannon (1997) argued that social activities involve financial costs, and if a firm spends on social performance activities, it will decrease its financial performance in comparison to its competitors. When it comes to causality, Waddock and Graves (1997) found that CSP depends upon financial performance which supports the Slack Resources Theory, and at the same time financial performance also depends upon social performance, which supported the good management theory, and this simultaneous link is referred as a virtuous circle. Preston and O'Bannon's (1997) study highlighted that there is a positive link between CSP and CFP which, as per the stakeholder theory and CSP-CFP correlations, are best explained by positive synergy hypothesis which supposes that higher level of CSP improves CFP, which yields surplus available funds, which are reinvested to the various stakeholders, which eventually creates a simultaneous link between CSP and CFP, leading to virtuous circle. Balabanis, Phillips, and Lyall (1998) focused on UK market and based their

conclusion on sample of 56 companies of suitable size. They found very little relation between CSR application and profitability of the firms. They also concluded that consistency was also lacking between them.

Carter, Kale and Grimm (2000) concluded that environmental purchasing is significantly related to both net income and cost of goods sold. This perspective of positive link between corporate social performance and corporate financial performance is based on Stakeholder Theory given by Freeman (1984). Dowell, Hart, and Yeung (2000) studied the effectiveness of Global Environmental standards in comparison to local standards. Their sample was based on US MNE companies considering their market performance. McWilliams and Siegel (2000) tested the association between CSR and financial performance by taking R & D as variable for CSR, and their results showed that CSR and R & D are highly correlated and eventually they found that CSR has a neutral effect on profitability. Kind and Lenox (2001) studied 652 US companies to conclude that companies which cause lower level of pollution and gas emissions show better financial performance and the main reasons identified were strategic position and fixed characteristics of the firm. This relationship was also examined by Hillman and Keim (2001), they argued that only concerns for the community has a positive linkage with the firm's profitability.

According to Ruf, Muralidhar, Brown, Janney, and Paul (2001), the inconclusive results of studies which explored a link between CSR and CFP is due to no standardized measure for CSR, no theoretical background, sampling issues, no matching of CSR and CFP variables and methodology issues. Hillman and Keim (2001) also found a virtuous circle between CSP and CFP in their study. Moderated Regression and subgroup analysis were run by Goll and Rasheed (2004) to study the relationship between CSR and CFP. They selected a sample size of 62 firms and 3 item scale questionnaire to measure CSR, while archival information was used for financial performance and environmental impact. They arrived at the conclusion that firms of dynamic environment willing to voluntarily invest in social activities actually show better financial performance. According to Tsoutsoura (2004), CSR is positively related to financial performance, and actual costs of CSR are covered by the benefits, supporting the view that socially responsible corporate performance is associated with a series of bottom-line benefits. Curran (2005) studied the relationship between CSR and CFP by conducting three impressive empirical studies. First of them was an event study evaluating listings on FTSE 4 Good Index, and found no impact on firms for being listed or not on index. The second study found that firms that have small market capitalization, low levels

of income statement gearing and are high in respect of net profits reported in any sector have a positive relationship with CSR. The third found out that when faced with investment decisions, those who study the business studies consider social issues. Chand (2006) claimed a strong relationship between CSP and CFP only if looked at from a different angle. After analyzing various past studies on the topic he concluded that if industry type is used as a boundary condition, then every research will end up with confirmatory results. Guenster, Derwall, Bauer, and Koedijk (2006) used eco-efficiency data compiled by Innovest Strategic Value Advisors and financial performance figures from US stock market listings and found that relationship exists between the two. Using a questionnaire for survey of Japanese companies in order to assess the relationship between CSP and CFP, Hino et al (2006) discovered a significant relationship between the two variables. Brammer, Brooks and Pavelin (2006) concluded that firms whose social performance scores were high, their returns were lower; whereas, the firms whose CSP scores are very less, their market performance was excellent, supporting the negative association between CSP and CFP.

According to other school of thought, there is no significant association between CSP and CFP. Barnett and Salomon (2006) found that association between CSP and CFP is neither positive nor negative; instead they found it as curvilinear. Artiach, Nelson, and Walker (2007) discovered that those companies that are leading CSP operators exhibit much better financial performance than those firms that do not follow CSP practices; thus, confirming the view that those companies that invest in CSP have always been better as far as financial performance is concerned. The relationship of CSR and stock prices was studied in the context of Italian markets by Fiori et al (2007), who pointed out that in the absence of generally accepted standards in Italy, the general investor perception was relatively low about importance of social issues. An attempt was made by Hill, Ainscough, Shank, and Manullang (2007) to measure the relationship between CSP and CFP across the different continents namely US, Europe and Asia. They did find the relationship between the two, but with investor biases as to how do they figure SRIs as factor in investment decisions.

The relationship between CSR and CSP was also examined by Pirsch, Gupta, and Grau (2007) and they argued that the existence of a firm will depend upon its ability to attain its economic and non-economic (social initiatives). The relationship between the CSR and CFP was also investigated by Brammer and Millington (2008), they used Tobin's Q (market to book value) to measure the effect of financial performance. They asserted that if firms focus on the relations with society,

which will in turn improve their image in market, then various CSR dimensions will lead to improvement in financial performance of firms. Bouquet and Deutsch (2008) tried to study the relationship between CSP and ability of firms to achieve required sales in foreign countries. They found that those firms that are active in following social activities are leading those who are still at intermediate level of CFP. Goukasian and Whitney (2008) selected the top 100 KLD companies to conduct an event study, to examine the relationship between CSR and CFP by selecting year 2000 as the event year, while the total time period was 6 years. They confirmed that those companies who are perceived as socially responsible are able to maintain healthy relations with their shareholders, and can afford to pay higher returns on shareholder's investments. According to Lee (2008), the studies on CSR revolved around two areas. From theoretical perspective, scholars initially focused on ethical behavior and then they shifted their arguments towards implied performance based studies. An attempt was made by Lin, Yang, and Liou (2009) to study the same association in Taiwan firms. They stated that corporate social performance has a positive impact on the long run financial performance of firms.

Banerjee et. al. (2009) viewed CSR with perspective of Corporate Governance and its impact on firm's performance. They used CG score that was obtained from CRISIL and used that as a proxy for quality of Governance. They chose Tobin's Q as proxy for financial performance and adopted a fixed affect regression analysis to draw their conclusion. They concluded that positive relationship exists between CG score obtained and value of the firm. Another study was conducted by Kacperczyk (2009), they concluded that three areas namely environmental concerns, concern for the society and diversity related problems are positively associated with firm's financial performance. Fauzi and Idris (2009) measured the relationship between CSP and CFP, but this time by control variable of Industry type and by moderating the variables of company size and leverage. Their results displayed that only financial leverage has the ability to affect the relationship between the two main variables, but commented that this relationship may well only be spurious. A well designed questionnaire was used by Fauzi and Idris (2009) to study the relationship between CSP and CFP, and they based their research on two theories, i.e., Slack Resource Theory and Good Management Theory.

Covering the angles of economy, society and environmental performance in performance of the company, they found the positive relationship between the two variables. Another important study was carried out by Barnea and Rubin (2010), who claimed that one of the main reasons of over investment in CSR activities

could be the wishes of managers and large stakeholders who want to be known as responsible citizens. They analyzed the CSR rating of the corporations with the perspective of ownership and capital structures. Sample size was of 3000 largest US companies, and they were to be branded as either socially responsible or irresponsible (SR or SI). Conclusion drawn was that ownership structures are negatively related to CSR score although they found no relationship of institutional ownership and CSR score. Another research to study the relationship between the CSR and CFP was carried out by Blazovich and Smith (2010) with one addition, i.e., they also used Market Value Premium as performance measure in addition to traditional ones, e.g., profitability or Cost of Capital, and showed no direct relationship between Market value and CSR activities when control for last year equity yielded. The relationship between CSP and CFP was also studied in the context of Korean market by Choi, Kwak, and Choe (2010) with sample size of 1122 Korean companies. They used the model used by Akinpar et al. (2008) including an index of equally weighted CSR and Index of Stakeholder weighted average CSR, and used ROA, ROE and Market to Book ratio (Tobin's Q) in order to measure CFP. They found that CFP was related to index of Stakeholder weighted average CSR only.

Pleasantly this relationship between CSP and CFP has also been tested in the context of Pakistani markets by Hamid, Akash, Asghar, and Ahmad (2011). They discovered no relationship between CSP and CFP as far as Pakistani companies are concerned. In order to assess the impact of CSR on financial performance, Inoue, Kent, and Lee (2011) analyzed the previous studies made by various scholars. They concluded inconsistent results. According to Bashir, Hassan, and Cheema (2012), a good CSR program has a positive impact on the employees of the firm, and it provides them mental relaxation. Ehsan and Kaleem (2012) also made an attempt to study the relationship between corporate social responsibility and financial performance from Pakistani perspective. They concluded a positive relationship between CSR and FP, which revealed positive social behavior of Pakistani firms. Windsor (2013) pointed out that CSR literature mainly consisted of four different thoughts. The first two schools of thought were related to CSR attractiveness. The first thought related to a comparison between those who favored CSR and those who were against the CSR. The next area was about the minimum and maximum threshold about the CSR spending. The next view point was linked with the argument that whether CSR should be considered as ethical or strategic oriented, and then another thought which emerged from literature suggested replacing CSR with that of corporate citizenship. Lee, Park, and Lee (2013) were of the view that socially

responsible firms creates a positive insight among their employees, which in turn improves their commitment and performance. An effort was made to capture the relationship between CSR and FP of Pakistani firms by Javed, Syed, Lodhi, and Malik (2013). They found mixed results, the first two parts of Carroll’s model, Economic and Legal responsibility were positively related while the last two parts, Ethical and Discretionary responsibility were negatively associated. On the basis of the above discussion the following hypothesis can be formulated:

*Hypothesis 1. There is a positive impact of CSP in ROA.*

*Hypothesis 2. There is a positive impact of CSP on ROE.*

*Hypothesis 3. There is a positive impact of ROA on CSP.*

*Hypothesis 4. There is a positive impact of ROE on CSP.*

**RESEARCH METHODOLOGY**

The literature review has identified six variables to explore and establish a link between corporate social performance and financial performance of Pakistani firms. For the purpose of this study, sample size comprised of 70 non-financial public limited companies (PLC) listed on Karachi stock exchange, and analysis was based on six year data from 2008-2013. The seventy companies selected

for the study belonged to twenty two sectors of KSE. The data on corporate social responsibility was taken from annual reports of companies. The data on CSR of firms that produce sustainability reports separate from annual reports was taken from their corporate sustainability reports covering CSR. To assess the CSR involvement of firms, we studied the annual reports of sample firms and a checklist of 20, used by Muttakin & Khan (2014) in their study in Bangladesh. They followed the checklist constructed by Haniffa and Cooke (2002, 2005) and Ghazali (2007), and developed a modified checklist including the items relevant to Bangladeshi companies. Since, there is a similarity between Bangladeshi and Pakistani culture, so we also used that checklist to assess the information. Figure 1 shows the checklist items considered in this study.

A dichotomous procedure is was applied whereby a company was awarded 1 if an item included in the checklist was disclosed in annual report otherwise 0. CSR index was derived by computing ratio of actual scores awarded to the maximum possible score attainable for items appropriate to that firm. CSR index used by Haniffa and Cooke (2002) given as following was used:

$$CSR_j Index = \sum_{i=1}^{n_j} x_{ij} / N_j$$

Where,  
 CSR<sub>j</sub> Index = Corporate Social Responsibility Index for j<sup>th</sup> firm

**FIGURE 1**  
**CSR items checklist**

Item No.	Items Name	Items Description
I	Community Involvement	<ol style="list-style-type: none"> <li>1. Charitable donations and subscriptions</li> <li>2. Sponsorships and advertising</li> <li>3. Community program (health and education)</li> </ol>
II	Environmental Information	<ol style="list-style-type: none"> <li>1. Environmental policies</li> </ol>
III	Employee information	<ol style="list-style-type: none"> <li>1. Number of employees/human resource</li> <li>2. Employee relations</li> <li>3. Employee welfare</li> <li>4. Employee education</li> <li>5. Employee training and development</li> <li>6. Employee profit sharing</li> <li>7. Managerial remuneration</li> <li>8. Workers' occupational health and safety</li> <li>9. Child labor and related actions</li> </ol>
IV	Product and service information	<ol style="list-style-type: none"> <li>1. Types of products disclosed</li> <li>2. Product development and research</li> <li>3. Product quality and safety</li> <li>4. Discussion of marketing network</li> <li>5. Focus on customer service and satisfaction</li> <li>6. Customer award/rating received</li> </ol>
V	Value added information	<ol style="list-style-type: none"> <li>1. Value added statement</li> </ol>



$N_j$  = Number of items expected for  $j^{\text{th}}$  firm, where  $N \leq 20$   
 $x_{ij} = 1$ , if  $i^{\text{th}}$  items are disclosed for firm  $j$ , 0 if otherwise,  
 so that  $0 \leq \text{CSR}_{ij} \leq 1$

Two stage least square (TSLS) methodology was used for data analysis to capture the relationship between CSP and CFP; as in cases of over identified equations, the two-stage least squares (TSLS) method is the most commonly used method. In regression equations, CSP and ROA/ROE were considered as endogenous variables.

$$\text{CSP}_{it} = \beta_0 + \beta_1(\text{ROA})_{it} + \beta_2(\text{AGE})_{it} + \beta_3(\text{FSIZ})_{it} + \beta_4(\text{RISK})_{it} + \beta_5(\text{CSP})_{it-1} + \beta_4(\text{SGR})_{it} + \varepsilon_{it} \quad (1)$$

$$\text{CSP}_{it} = \beta_0 + \beta_1(\text{ROE})_{it} + \beta_2(\text{AGE})_{it} + \beta_3(\text{FSIZ})_{it} + \beta_4(\text{RISK})_{it} + \beta_5(\text{CSP})_{it-1} + \beta_4(\text{SGR})_{it} + \varepsilon_{it} \quad (2)$$

$$\text{ROA}_{it} = \beta_0 + \beta_1(\text{CSP})_{it} + \beta_2(\text{AGE})_{it} + \beta_3(\text{FSIZ})_{it} + \beta_4(\text{RISK})_{it} + \beta_5(\text{ROA})_{it-1} + \beta_4(\text{SGR})_{it} + \varepsilon_{it} \quad (3)$$

$$\text{ROE}_{it} = \beta_0 + \beta_1(\text{CSP})_{it} + \beta_2(\text{AGE})_{it} + \beta_3(\text{FSIZ})_{it} + \beta_4(\text{RISK})_{it} + \beta_5(\text{ROE})_{it-1} + \beta_4(\text{SGR})_{it} + \varepsilon_{it} \quad (4)$$

Where:

$\text{CSP}_{it}$  = Corporate social performance for firm  $i$  in period  $t$ ,  $\text{ROA}_{it}$  = Return on Assets for firm  $i$  in period  $t$ ,  $\text{ROE}_{it}$  = Return on Equity for firm  $i$  in period  $t$ ,  $\text{CSP}_{it-1}$  = Corporate social performance for firm  $i$  in period  $t-1$ ,  $\text{AGE}_{it}$  = Age of firm for firm  $i$  in period  $t$ ,  $\text{FSIZ}_{it}$  = Size of firm for firm  $i$  in period  $t$ ,  $\text{SGR}_{it}$  = Growth rate of firm for firm  $i$  in period  $t$ ,  $\text{RISK}_{it}$  = Leverage for firm  $i$  in period  $t$ ,  $\varepsilon_{it}$  = Error term.

## RESULTS AND DISCUSSION

This study intended to establish a link between corporate social performance and corporate financial performance, i.e., whether CSP is dependent upon on CFP or CFP is dependent upon CSP. To check this, two-stage least square method (TSLS) was applied for panel of 70 firms and six years data from 2008-2013 was used for the analysis. Descriptive statistics are tabulated in table 1. The average size of the sample was 16.25. As size is reported in millions, to smoothen the data, Log

(asset) was used. Standard deviation of size was 1.53 which means that the mean can deviate 1.53 in either direction. As the standard deviation value was not so abnormal; therefore, data posed a normal behavior. The mean value of corporate social performance in the study was 0.47 and its standard deviation is 0.21, as this value was not abnormal, so data represented a normal pattern. The mean value of age in the study was 3.24 and its standard deviation is 0.55. As this value is not abnormal, so data represented a normal pattern. The average size of the risk was 1.61 and standard deviation of risk was 1.94 which means that the mean can deviate 1.94 in either direction. As the standard deviation value is not so abnormal, therefore data posed a normal behavior. The mean value of ROA in the study was 11.92 and its standard deviation was 3.32, which means that the mean can deviate 3.32 in either direction. As this value is not abnormal, so data represented a normal pattern. The same pattern exists for remaining variables as well.

Two models were used to explore the link between CSP and CFP. The table 2 relates to the results in which CSP has been taken as dependent variable and it has been regressed on various factors taken as instruments including ROA which were used as proxy to measure firm's financial performance. According to the table, the explanatory power of the equation 1 in model1 is 0.87, which reflects that 87 % variation in dependent variable is attributable to the independent variables. The value of F-Stat is highly significant which shows model is fit. Here, ROA has been taken as a proxy to measure financial performance, and to check its impact on corporate social performance.

The results showed that ROA affects the corporate social performance positively and this relationship is significant at 5% level. This result signifies that if a firm is earning more profits then it will allocate more funds towards corporate social activities of the society. In modern era of responsible corporations, it is evident that the more a corporation is profitable; there will be paucity of resources towards CSR activities. The results are in line with Ullmann (1985), Waddock and Graves (1997) and Choi et al (2010). According to Slack resources theory, those firms which have slack resources available with them due to better financial performance can freely invest in socially desirable projects.

**TABLE 1**  
**Descriptive Statistics**

	FSIZE	CSP	AGE	RISK	ROA	ROE	SGR
Mean	16.250	0.476	3.249	1.618	11.928	26.389	0.163
Median	16.255	0.458	3.238	1.190	8.890	21.130	0.150
Maximum	19.841	1.000	4.158	9.800	25.230	110.160	1.650
Minimum	12.611	0.000	1.386	-2.230	-17.610	-36.770	-0.623
Std. Dev.	1.530	0.217	0.550	1.949	3.320	5.852	0.263

TABLE 2

Dependent Variable: CSP		
Name of Variable	Coefficient	t-statistic
Constant	0.05	4.23**
ROA	0.13	1.99**
AGE	0.01	0.41
FSIZ	0.08	2.21***
RISK	-0.21	-0.87
SGR	0.02	0.12
CSP(-1)	0.91	7.06*
Adj. R Square: 0.87		
F Stat: 367 (0.00)		

**\*\***, **\*\*\*** and **\*** indicate 5 per cent, 1 per cent and 10 per cent level of significance.

Eventually, this helps in creating good image and repute among the community with which the firms have to interact and this view is also aligned with the results. Further analysis revealed that lagged value of corporate social performance is positively associated with CSP, and this relation was highly significant. CSR is not just one time activity; rather, it is a behavior which society or community, where the corporation functions, demands from the organization. Results manifest that previous period CSR has an impact on current period spending; therefore, it can be argued that corporations do have history of community development. As corroborated by Choi et al (2010) and Gang Fu et al. (2012), previous spending of corporation on community does effect the current spending. Firm size and age were positively linked with CSR, but only size of firm showed significant impact.

As corporations grow in size, its resources increases, which, in result, enhance the slack resource of the organization. These slack resources are used to develop the community besieging the corporation. Leverage was used as a proxy of the firm risk; the more leverage a company has, the more risk it will have. Risk showed negative relation with CSR. According to debt covenants hypothesis, debt holders barred the organization to take part in any welfare distribution, till the debt is fully repaid. Therefore, more leverage will bound the organization to first payoff the liabilities and then distribute any share of its income to its besieged. Sales growth was positively related with the social performance of organization, but statistically the impact was insignificant. Risk was negatively related with corporate social performance and their relationship was not significant as well. The study of Muttakin and Khan (2012) also confirms the result. However, the relationship is eminent that more risk will lessen the investment in societal affairs.

TABLE 3

Dependent Variable: CSP		
Name of Variable	Coefficient	t-statistic
Constant	0.06	1.51*
ROE	0.2	2.23**
AGE	0.08	0.28
FSIZ	0.18	2.04**
RISK	-0.24	-1.32*
SGR	0.04	0.25
CSP(-1)	0.92	7.19***
Adj. R Square: 0.86		
F Stat: 366 (0.00)		

**\*\*\***, **\*\*** and **\*** indicate 1 per cent, 5 per cent and 10 per cent level of significance.

Table 3 shows the results in which CSP has been taken as a dependent variable, and various factors have been taken as instruments which also include ROE, which has been used as proxy to measure financial performance. The explanatory power of the equation 2 (model 1) is 0.86 which shows that 86 % variation in CSP is due to variables taken and the value of F-stat is also significant which reflects model fitness. Here in table 2, ROE has been considered as a proxy to measure CFP, and to check its effect on CSP. The results suggest that ROE has a positive association with CSP, and their relationship was found significant at 5% level. This result shows that if a firm is doing well and strongly on financial side, then it will have sufficient resources to allocate for social causes, which ultimately will help in building better relations with the community.

The studies of Preston and O'Bannon (1997); Orlitzky, James, Schmidt, and Rynes (2003); Rim Makni et al. (2008); Ehsan and Kaleem (2012) also support this result. According to Slack resources theory, the more the resources are at the corporation disposal, the more investment will be in social performance. Lagged value of corporate social performance was found to be positively associated with CSP and their relation was also significant. This result reveals that investing on socially conducive activities in last year does create a positive effect on current year CSP. The study of Choi et al (2010) and Gang Fu et al. (2012) also support these findings. Age of the firm and corporate social performance were found to be positively linked but their relation was insignificant. Firm size was positively associated with social performance and their relation was also significant. This result highlights that as the firm grows in size, it is inclined to spend more on the welfare of the society. Risk was found to be negatively related with corporate social performance and their relationship was not significant as

well. It can be argued that more risk alter the priorities of the organization, hence we observe less investment in social activities. Sales growth and CSP were found to be positively linked, but there relation was insignificant.

**TABLE 4**

<b>Dependent Variable: ROA</b>		
<b>Name of Variable</b>	<b>Coefficient</b>	<b>t-statistic</b>
Constant	0.53	0.37
CSP	8.30	3.62***
AGE	0.07	2.11**
FSIZ	0.09	1.99**
RISK	0.55	2.37**
SGR	8.38	4.80***
ROA(-1)	0.65	8.45***

Adj. R Square: 0.60

F Stat: 84 (0.00)

\*\*\*, \*\* and \* indicate 1 per cent, 5 per cent and 10 per cent level of significance.

Table 4 discloses the results in which ROA has been considered as dependent variable. The explanatory power of the equation 3 is 0.60 which shows that 60 % variation in ROA is due to variables taken as instruments, and the value of F-stat is also significant which reflects model fitness. In these results, ROA has been taken as proxy to capture financial performance and CSP effect on ROA has been analyzed. It is evident from the results that CSP is positively linked with the ROA and the relationship between these two variables was also found significant. The results found a simultaneous linkage, which suggests that financial performance does depend upon social performance initiatives taken by the management, and these results are in conformity with good management theory, stakeholders theory, social contract theory and legitimacy theory, which state that a firm's performance depends upon meeting the expectations of stakeholders well in advance before any concerns and problems relating to stakeholders may arise, which depicts proactive attitude towards stakeholders. Lagged value of return on assets was found to have a positive linkage with return on assets, and their relationship was significant as well, suggesting that better financial performance in previous year leads to good performance in the current year as well. Social contract theory asserts that business firms are important members of the society, and they should be as responsible in their business dealings as other members of society exhibit in their dealings. Legitimacy theory signifies the importance of CSR to firms as a form of getting repute and relations with society with the motive of adopting an image that will legitimize their operations and conduct, inclined in favor of various stakeholders.

Studies of McGuire et al (1988); Donaldson and Preston (1995); Waddock and Graves (1997); Tsoutsoura (2004) also confirm the results. Size of the firm was found to have a positive association with ROA. This result suggests that as the firms become larger in size, their financial performance also improves. Risk was found to be positively linked with return on assets; this asserts that as the firm uses more debt, its financial performance should also improve. This result is in alignment with the signaling theory which states that if future prospects of the firm are bright, then firms tend to issue debt instead of equity. Sales growth and ROA were found to have a positive and a significant association. This result depicts that the firms whose sales are on the rising side than the last year will tend to show better financial performance. The same pattern of positive relation exist between age and ROA according to the results, which exhibits that as the corporations get old, they start developing relations with the outside world and environment, and they tend to spend more on the community social causes.

**TABLE 5**

<b>Dependent Variable: ROE</b>		
<b>Name of Variable</b>	<b>Coefficient</b>	<b>t-statistic</b>
Constant	-17.97	-2.20**
CSP	62.25	4.92***
AGE	0.37	1.98**
FSIZ	1.19	2.74**
RISK	5.94	1.36
SGR	21.20	2.10**
ROE(-1)	0.25	1.92*

Adj. R Square: 0.35

F Stat: 30.58 (0.00)

\*\*\*, \*\* and \* indicate 1 per cent, 5 per cent and 10 per cent level of significance.

Table 5 states the results in which ROE has been considered as dependent variable and various factors have been taken as instruments which also include CSP, which has been used as proxy to measure corporate social performance. The explanatory power of the equation 4 (model 2) is 0.35 which shows that 35 % variation in ROE is due to variables taken as instruments, and the value of F-stat is also significant which reflects model fitness. Here, in table 5, ROE has been considered as a proxy to measure CFP and the effect of CSP on ROE has been tested. The results suggested that ROE has a positive association with CSP and their relationship was also found significant. The results again reflect that financial performance is dependent upon corporate social investments undertaken by firms, and these results are as per the stakeholder theory, good management theory and

social contract theory as well. The studies of Choi et al (2010); Tsoutsoura (2004) also support these findings. Size of the firm was found to have a positive link with ROE. This result suggests that as the firms become larger in size, their financial performance also improves. Risk was found to be positively linked with return on equity; this asserts that as the firm uses more debt, its financial performance should also improve. This result is in conformity with the signaling theory of capital structure, which states that if future prospects of the firm are bright, then firms tend to issue debt instead of equity. Sales growth and ROE were found to have a positive and significant association. This result depicts that the firms whose sales are on the rising side than the last year, will tend to show better financial performance. Lagged value of return on equity was found to have a positive association with return on equity, but their relationship was found insignificant. Age of the firm was found to have a positive and significant linkage with ROE, which depicts that the established firms are inclined to invest more favorably towards societal betterment causes and wellbeing ventures.

## CONCLUSION AND RECOMMENDATIONS

There are two aspects of this study, first one is related to identify and establish a link between CSP and CFP, either CSR is predictor or consequence of financial performance, and secondly to identify the relationship between corporate social performance and financial performance, and to determine the financial factors which cause the CSP, in case CSP is consequence of CFP. The study was conducted by taking data covering from 2008-2013. To establish a link between corporate social performance and corporate financial performance, method of two-stage least square (TSLS) was applied and used. Empirical evaluation and analysis reflect that corporate social performance is both a predictor and consequence of firm financial performance. The thorough discussion is being elaborated below.

In establishing a link between CSP and CFP, firstly it was found that corporate social performance of firms is dependent upon their financial performance, and this finding is as per the slack resources theory, which states that firms which have slack resources available with them due to better financial performance can freely invest in socially desirable projects. Eventually, this helps in creating good image and repute among the community with which the firms have to interact. These findings suggest that Pakistani firms tend to make more investments in community and social welfare, as they earn more due to better performance on financial side and this will have a strong positive impact on building a favorable image within the society.

Furthermore, while establishing a link between CSP

and CFP, this study also found a simultaneous linkage which manifests that financial performance does depend upon social performance initiatives taken by the management. Good management theory, stakeholders theory, social contract theory and legitimacy theory support these findings, which state that a firm's performance depends upon meeting the expectations of stakeholders well in advance before any concerns and problems relating to stakeholders may arise, which depicts proactive attitude towards stakeholders. So this study has concluded that there exists a simultaneous link between CSP and CFP, which means that whichever variable is chosen as dependent variable, the effect is positive and it can be interpreted that relationship is bidirectional between CSP and CFP, means that improved CFP leads to improved spending on CSR activities, and proactive initiatives taken on CSP will result in better financial performance.

Secondly, this study explored the relationship between financial performance and social performance, and the results highlight that there exists a positive association between CFP and CSP. This supported those past studies which manifested positive association (e.g., Auperle, et al., 1985; Waddock & Graves, 1997; Choi et al., 2010). The leading determining factor of CSP has been found as size of the firm, and the relationship between size and corporate social performance has been found as positive. A good number of firms in the sample are well known and have large size, which helps in making a conclusion that large firms tend to have more resources, which give them greater liberty to invest in community welfare and society well-being projects to gain strategic benefits in the form of improved relations and image with different stakeholders. Risk showed negative relation with CSR, as according to debt covenants, debt holders imposes restrictions on the organizations to take part in any welfare distribution, till the debt is fully repaid.

On the basis of the study conducted some recommendations can be set forth. First, the firms should devote and invest consistently for the wellbeing and uplift of the society to enjoy cordial relations with the community. According to social contract theory, firms are important member of society and in this capacity they should display same level of morality for the society as other members are expected to. Second, government should encourage and acknowledge the firms engaged in doing CSR investments and should reward them so that they may be more motivated towards community welfare areas. Government should also provide reduction in taxes to those corporations which help and contribute for the community welfare.

There are some limitations to the results of this study. This study has concentrated on the disclosures which have been made by companies in their annual financial reports. However, the management may have adopted other

means of communication to highlight their initiatives and investments on the social causes and community welfare like print media and internet, so future research should also incorporate these other modes of communication while analyzing CSR performance of firms. Secondly, in this study CSR index has been computed which is based on five broader categories relating to CSR disclosures. The CSR index calculated here might not have fully incorporated all the corporate social responsibility practices. Therefore, future research should take into account more insights of CSR areas.

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## CONTRIBUTOR'S GUIDELINES

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#### *Length*

All submitted papers must be formatted according to the instructions below, and must be no more than 15 – 20 US letter pages, as defined earlier. This page limit includes all parts of the paper: title, abstract, body, bibliography, appendices and tables.

#### *Abstract*

An abstract not exceeding 250 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 content should clearly state:

- a) Research questions and/or objectives
- b) Methodology
- c) Scope of investigation/findings

#### *Full paper*

- a) A4 size paper
- b) Margins must be 1 inch on all sides
- c) Font size 12 Times New Roman (body text)
- d) Title, subtitles, abstract and references single spaced; body text 1½ - line spaced
- e) Referencing, graphics & tables will be considered in the total page count.
- f) Do not include page numbers, header & footer.
- g) Maximum 15 – 20 pages
- h) Other formatting details see next section

#### *Tables and Figures*

- a) All unessential tables and figures should be eliminated.



- b) 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.
- c) Figures must be clearly produced in black and white. All text included in figures should be Times New Roman (10 point minimum).
- d) 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.
- e) Each table and figure should be submitted on a separate sheet and identified with a table or figure number and a descriptive title.
- f) Legends and titles on tables and figures must be sufficiently descriptive such that they are understandable without reference to the text.
- g) 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.
- h) Every table and figure must be referred to in the text. Each table and figure will appear in the journal after its first mention in the text.

### **File type**

All papers are to be submitted as a single MS WORD file, formatted for 8.5" x 11" paper. It is essential that submitted papers print without difficulty on a variety of printers.

### **Anonymity Requirements for Double-Blind Reviewing**

All research papers submitted to JBR will undergo a "double-blind" reviewing process: the program committee members and referees who review the paper will not know the identity of the authors. To ensure anonymity of authorship, authors must prepare their manuscript as follows:

- a) Authors' names and affiliations must not appear on the title page or elsewhere in the paper.
- b) You must also use care in referring to related past work, particularly your own, in the paper. The following types of statements must be avoided:  
'In our previous work [1,2], we presented two algorithms for \_\_\_\_\_. In this paper, we build on that work by \_\_\_\_\_'

### **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 superscripted. 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.

*i) In-text, citations should be placed in parentheses and noted as follows:*

For book or academic journal - (last name of author[s], date); such as: (Hill, 1988); (Beatty, 1989; Feltham, et al. 1991; Leland & Pyle, 1977).

If no author, cite journal, institution, or publisher. 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.

*ii) The full bibliographic information in the references should be composed as follows:*

For book - author[s]. year. book title. edition number [if applicable]. location: publisher.  
Such as: Yin, R.K. (2003). Case Study Research: Design and Methods. 3rd Edition. Thousand Oaks, California: Sage Publications, Inc.

For edited volume—editor[s] (ed[s].). year. book title. edition number [if applicable]. location: publisher.

Such as: Nelson, R.R.(ed.).(1993). National Systems of Innovations: A Comparative Analysis. Oxford: Oxford University Press.

For chapter in edited volume - author[s]. year. "chapter title." in editor[s] (ed[s].). book title, pp. chapter page numbers. location: publisher.

Such as: Groenewegen, John and Jack Vromen (1997). "Theory of the firm revisited: New and neo-institutional perspectives." In Lars Magnusson and Jan Ottosson (eds.) Evolutionary Economics and Path Dependence, pp. 33-56. Cheltenham, UK: Edward Elgar.

For article in academic journal - author. year. "article title." journal title. volume number (issue number): page numbers.

Such as: Black, J. S., Gregersen, H. B. & Mendenhall, M.E. (1992). "Toward a Theoretical Framework of Repatriation Adjustment." *Journal of International Business Studies* 23 (4): 737-760.

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.

### **Copy Preparation**

JBR accepts manuscripts via internet or post or e-mail. All hard-copy submissions must be accompanied by a disk or CD containing an electronic version of the manuscript. The manuscript should be prepared using a recent version of Microsoft Word and should utilize standard fonts and symbols. Ideally, such a manuscript should be formatted with regard to the following guidelines:

- a) Do not use tabs except in tables.
- b) Do not indent block quotations.
- c) Do not hyphenate or otherwise break words across lines.
- d) Use headings sparingly and logically. Do not use more than three levels of headings. Use consistent formatting for each heading level employed.

### **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 dissemination of information.
- c) It is understood that submission of the paper for publication has been approved by all of the authors and by the institution where the work was carried out; it is further understood that any person cited as a source of personal communications has approved such citation.

### **Miscellaneous**

- a) Papers must be in English. Use American spelling instead of British (e.g., labor, not labour). 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 "16 $\mu$ m"*

- c) Italicize and define non-English words at their first occurrence; at subsequent occurrences, format the word in roman (no italicized) type.
- d) A short abstract of the paper should always be included with the submission.
- e) Please keep a copy of everything sent to JBR, both hard copy and electronic copy, and bear in mind that the electronic version received at JBR will be considered the master copy. The Editors do not accept responsibility for damage to or loss of submitted papers or electronic media.
- f) A short note listing each author's institutional affiliation, current address, telephone numbers, e-mail address, and other relevant biographical information, including publications and a photograph should be provided.
- g) Any manuscript that does not conform to the above instructions may be returned for the necessary revision before publication.
- h) 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.



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