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Islamic Microfinance and Women Entrepreneurial Success: Mediating Role of Human Capital

Muhammad Zahir Faridi; Professor, School of Economics, Bahauddin Zakariya University, Multan, Pakistan

Shazia Nawaz; PhD Scholar, School of Economics, Bahauddin Zakariya University, Multan, Pakistan

***Sadia Bibi;** Assistant Professor, Department of Economics, Bahadur Sub Campus, Layyah, Bahauddin Zakariya University, Multan, Pakistan / PhD Scholar, School of Economics, Bahauddin Zakariya University, Multan, Pakistan

***Corresponding author's email:** sadia.bibi@bzu.edu.pk

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Purpose: This paper examines Islamic microfinance impeding sustainable women's entrepreneurial performance in South Punjab, Pakistan. Further, we examine whether human capital mediates the relationship between variables

Design/Methodology/Approach: To examine the impact, the primary data were collected from 220 women entrepreneurs who obtained microfinance from Islamic microfinance institutions (IMFIs) and Non-Islamic microfinance institutions operating in South Punjab, Pakistan. The correlation and regression models are used to translate the relationship and measure the impacts of microfinance on women's entrepreneurial performance.

Findings: Results show that Islamic microfinance plays a positive role in women's entrepreneurial success. Further, documented that IMFIs have contributed more to entrepreneurial growth as compared to non-IMFIs.

Implications/Originality/Value: This paper can be further extended by incorporating more factors and increasing sample size in order to get more significant results.



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Introduction and Background

Globally, women entrepreneurs are playing a vital role in boosting the GDP of the economy and managing the sustainable livelihood of their families. Women are facing many socio-cultural attitudes, legal obstacles, lack of education, and personal difficulties (Newman et al. 2017). Microfinance is identified as a significant tool that allows financial and social freedom for poor

women by facilitating access to financial services. Microfinance institutions (MFIs) have a high concentration of women beneficiaries and aim at alleviation of poverty in all its forms. Thus, the primary purpose of MFIs is to be social by reducing poverty (Khaval et al. 2013). The objective of microcredit is to alleviate poverty by enabling the poor to participate in fruitful activities and be self-sufficient in generating income (Siwale & Ritchie, 2012). MFIs have focused on finance-related services to poor families who have no access to official financial schemes (Postelnicu & Hermes, 2016). Access to microfinance enhances the capabilities of the poor by financial support to involve in sustainable self-employment economic activities. The MFIs provide small loans to help the poor women in establishing/enhancing their businesses (Khavul et al. 2013). In Islamic countries, IMF has grown to be a popular method to alleviate poverty by offering new avenues for entrepreneurs and promoting empowerment (especially among women), while improving social and human capital in poor communities (Aldrich & Meyer, 2015).

In the 70s, the microfinance economic expert Muhammad Yunus presented the idea of microfinance; to help poor women by providing them microfinance and enlightened capital. Subsequently, Yunus established Grameen Bank for the awareness of microfinance, and later on MFIs upraised globally (Bruton et al. 2011). Hence, microfinance had increased the abilities and the living standard of the poor as a global strategy (Banerjee & Jackson, 2017). The female inclusion and proportion in micro-enterprises have been remarkably increasing worldwide (Fielden & Davidson, 2005). Pakistan has the lowest rates of female participation in economic business activities as compared to Iran and India (Syed, 2010). Entrepreneurship represents entrepreneurial tenacity and success; it performs a major role in bringing changes in all aspects of the community (Pahuja & Sanjeev, 2015). Entrepreneurial development is the process of generating employment levels and reduction in poverty; however, all economies are willing to generate entrepreneurial development. Kibet et al. (2015) established optimistic impacts of microcredit on the entrepreneurial establishment. Whereas, Zawadi (2014) observed that MFIs have significant effects on micro-entrepreneurship development and offer significant consultation, training, and enterprise-based activities; however, higher interest has important restraint for entrepreneurs in Pakistan. It is also documented that microfinance gives a lot of advantages to poor individuals and households (Newman et al. 2017).

Pakistan is an emerging market with a population size of 210 million, 63 percent of the population used to live in rural areas (Pakistan first-ever report, 2016) about 40 percent of the population was living under the dimensional poverty line. The poverty index reduced from 55 percent to 39 percent between 2015 to 2019, however, later poverty index increased. In rural areas, the poverty level is about 54.6 percent and in urban areas is 9.3 percent. The government of Pakistan's significant concern is to eliminate poverty, enhance the supply of employment, and to achieve sustainable economic growth. The availability of microcredit to poor individuals and households is the foundation of enterprise development. Currently, most of MFIs are introducing new microfinance programs for poor women with zero interest rates. In 2001, the Government of Pakistan constituted MFIs and MFIs Ordinance to legalize performances of MFIs licensed by the SBP. Currently, following MFIs/NGOs and TCs are working in Pakistan, such as Naymet, Akhuwat, Microsoft Innovation Center, Damen, The Founder Institute, SMEDA, The First MF, Kashif Foundation, Peracha Organization, FINCA, Khushhali, NRSP, Social Innovation Lab, CED IBA, Telenor Velocity, Revolt, Plan9, The Nest I/O, Invest2Innovate, LUMS Center for Entrepreneurship, PlanX, Serendipity, The Incubator, Technology Incubation Center, NUST, Arpatech Hatchery. The MFIs provide microcredit, allow quick access to poor people and create prospects for poverty alleviation. MFIs facilitate poor individuals to access microfinance easily; microcredits are provided to them on doorstep; encourage women to get self-employed and reduce the burden of overloaded interests to poor. One important outcome from these benefits is the inclusion and integration of women in economic development (Hartarska &

Mersland, 2012). Thus; women should be a priority in development programs in developing countries, as this will increase their economic integration as well as alleviate absolute poverty. The group lending process of MFI provides the borrowers extra support to fulfil their individual goals. Women are supported through peers' groups to make economic decisions; this gives self-confidence and mutual pledge for their entrepreneurship (Byrne et al. 2019). Recently, MFIs are also growing speedily in Muslim countries such as Pakistan (Shaikh, 2016). Existing literature highlights that microfinance cuts down the poverty level and intensifies empowerment of women in such a way. For instance, in rural areas women have lacked easy access to microfinance from MFIs. In literature, it has been documented that there have been some attempts made. However, such attempts have often resulted in one-to-many as well as many-to-one mappings and the resultant clutter that adds little value in terms of comprehending the underlying relationships. In what follows, we seek to explore the relationship by going to the basics. We seek to delineate the relevant Shariah norms (interest free microcredit) and their impact on one of SDG.

It is also documented that MF successfully eliminates the poverty level among poor women, but, the suitable effect of IMF and human capital on entrepreneurial growth remains under-studied. Further, literature also missing that microfinance is significantly related to women's business performance and relationship is moderated by human capital. Providing Islamic MF to poor women will make a multiplier effect that will increase the MF activities. Islamic microfinance (IMF) has been considered a major approach in supporting poor women by enhancing access to financial services. IMF also assists poor women in providing an improved life condition through increasing household income. Thus, the aim of IMF is to be social performing by reducing poverty. Islamic microfinance (IMF) has been acknowledged globally as an essential tool that permits women to financial and social independence. This study endeavors to fill the gap and attempt to insight the entrepreneurial performance of IMF users in comparison to conventional microfinance in the same socio-economic climate in an emerging economy. Although, some research scholars explored the nexus between MF and entrepreneurial growth in industrialized countries. However, there is a gap that needs to be investigated. It is pertinent to mention that our study is in a local environment and does not investigate earlier; the role of Islamic MFIs are fulfilling the financial need of women's entrepreneurs. The major purpose of the paper is to examine the impact of Islamic microfinance and human capital on women's business growth, particularly in South Punjab, Pakistan; where people have a high poverty level as compared to other regions of Pakistan. Moreover, it is investigated whether the IMFIs contribute more than conventional MFIs in women enterprises' growth. The overall objective of the paper is to get a better understanding of the relationship between Islamic microfinance and performance of the women entrepreneurship. After completion of this study, it is hoped that it will contribute to the current study on the impact of microcredit on women's entrepreneurial growth. It will help other research scholars and policymakers who will be in need of material in different requirements. Findings are beneficial for microfinance institutes that will find it necessary to help entrepreneurs who have direct consequences on wealth creation, poverty alleviation, and job innovation. It will also provide insight to women entrepreneurs into the effects of microcredit in the establishment and extension of their businesses. This study will also show why Islamic microfinance is very important for women's business growth.

Literature Review

Microfinance play an important role in economic development and is used as a tool to eliminate poverty globally. Microfinance is defined as "access to financial services such as saving, microcredit, payment/transfer, insurance to poor and low-income households" (ADB, 2000). In the last two decades, Microfinance and entrepreneurship have to get the attraction by researchers due to economic development has been shifted towards developing countries (Lewin et al. 2016).

The major obstacle in the growth of entrepreneurship in Pakistan is a lack of microcredit (Bagh et al. 2017). Mustafa & Ismailov, (2008) explored entrepreneurial development which comprises innovation, profit maximization, and establishing an enterprise. Entrepreneurial development activities support employment, innovation and raise economic growth. When MFIs put their hands together with entrepreneurs that plays important role in poverty reduction and sustainable entrepreneurial growth.

Umara et al. (2011) explored the impact of access to microfinance on poverty reduction in Pakistan. They found a positive effect of MF in raising the level of education of children and household expenditure. Whereas Osunde & Mayowa (2012) and Jayewardene (2012) pointed out that MFIs are performing an important and significant role in providing loan and technology facilities for women. Moreover, Salwa et al. (2013) described that microfinance performs a vital role in entrepreneurial development. Regardless of much growth in microfinance globally in the last three decades, however, the outcome of MF on entrepreneurial growth is not distinctly appreciated (Roodman, 2013). Nowadays, community awareness is in favor of microcredit. Researchers found that microfinance motivated small size enterprise activity but no such facts were available that it helps in the reduction of poverty. There exist some issues in the case of MFIs if including financial departments, rules, and regulations for the protection of consumers but developing nations lack these facilities. Likewise, Wanambisi & Bwisa (2013) found that microcredit positively affects the SME's growth. Alalade et al. (2013) examined the impact of MFIs on entrepreneurship growth in Nigeria. Findings revealed an insignificant effect of MFBs operations on entrepreneurial growth because MSME has insufficient funds; the owners of MSME borrow from relatives or use their own resources. The entrepreneurial growth could be significant with MFBs if it works for the development of the production sector if the MFBs were managed and operated properly to achieve the basic goal of their foundation. It was recommended by the researcher to provide MF to the poor to encourage them and to avoid default risk, encourage group borrowing, Government policies adopted to provide knowledge to borrowers, give awareness to borrowers, make policies for loan repayment issues, and need to introduce more factors that affect entrepreneurial growth (Unam & Unam, 2013; Akinbola et al. 2013). Salum (2014) concluded that Microfinance institutions were playing a very important role in boosting up entrepreneurial development at the micro-level and also identifying the different types of hindrances in business progress. Therefore, the aim of this study was to remove certain hurdles which were slowing down entrepreneur development which includes lack of collateral, the high-interest rate on loans, lack of registration, and poor management of SMEs.

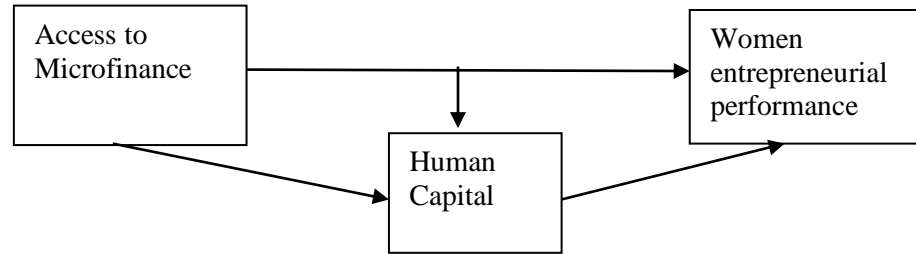
Waithaka et al. (2014) conducted research to measure the impact of microfinance institutions in the flourishing of SMEs in Nairobi. They found a significant impact of microfinance on the growth of SMEs. Microfinance has become a critical tool in credit markets for the elimination of poverty and socioeconomic growth. So far its effect is yet to under examine and varies from country to country and from urban to rural areas. However, academics considered these results true, whereas, others say that these impacts are not as correct as portrayed. Alvarez & Barney (2014) established the research about the potential for microcredit to reduce poverty and increase entrepreneurship suggests that microcredit has no ability to alleviate poverty. For example, scarcity of start-up capital is considered the main hurdle for the poor to exploit entrepreneurial opportunities. But economists and management scholars say that lack of capital is not the only factor required for encouraging innovation and the creation of growth of the business enterprise. Ferdousi (2015) discussed the effects of microcredit on sustainable business growth in Bangladesh. His study results were in favour of encouraging providing microcredit to businesses and a large amount of credit can raise output, but less innovative enterprises put pressure on these outputs. It should be recommended that microcredits connected with accurate entrepreneur expertise, knowledge, and technologies be given by microfinance institutions with a careful check. A major issue of poverty

elimination is creating wealth through sustainable growth of micro-enterprises; microcredit contributes to the wealth-creation procedure.

Kibet et al. (2015) documented that MF has a positive influence on entrepreneurship development. It was concluded that better opportunities were needed to enhance SMEs and easy access to MFIs, better government policies needed, MFIs were needed to facilitate SMEs to attract them by easy terms and conditions, the partnership of MFIs with govt. and other financial institutions, involvement of central banks needed, financial advisory services needed for avoiding risk to provide credit to individuals and train entrepreneurs how to avoid business failure (Thorpe, 2017; Vigano, 2004). Yousaf et al. (2016) point out that women playing important role in economic development. Results show a positive nexus of MF with women's business growth and this relationship is also mediated through social capital. Hence, women should be encouraged to engage in SHGs to improve empowerment and play a very important role in economic growth. While Kapila *et al.* (2016) findings indicate that microfinance significantly contributes to women's entrepreneurial growth in India. Further, Bernard *et al.* (2016) results indicate that microcredit has a positive influence on women's entrepreneurship. Whereas Dutta & Banerjee (2018) analyzed whether MFIs influence business plans of women borrowers which contribute to poverty reduction. This research is based on the comparison of women financing through MFIs and non-MFIs in their social and economic conditions. Rathirane & Semasinghe (2016) found out that the microfinance elements (loans, savings, workshops, and social networks) have a positive relationship with entrepreneurial activities. Mahmood (2011) investigated the relationship between microfinance on women's entrepreneurship in Pakistan. The data was collected through questionnaires from women who got credit from MFIs. The statistics showed that 62% of women started their businesses with the support of MFIs. Findings show that MFIs offered loans to poor women for establishing their businesses. Findings also show that MFIs' lack of training is a hindrance in establishing their business. Mula & Sarker (2013) evaluated the effects of MFIs on women entrepreneurs in India. They found that majority of respondents were of average age and based on farming families. There is a significant increase in income generation, level of employment, consumption, rate of investment, savings, and assets of those women who participated in the SHGs. In summary, microcredit plays a very important role in the improvement of the social life of the rural population.

Kaka & Abidin (2015) analysed the moderating effects of performance and mediating impacts of MFs workshops on the reduction of poverty in Nigeria. They figured out that MFIs play an important role to help poor women to extant or to begin enterprise through workshops and training to improve the living standard of their families. Similarly, Shakya (2016) results showed that economic and social development has a relationship with income and saving. Thus, rural women borrowed from other institutions on high-interest rates as compared to urban women borrowing from MFIs. Nyoni (2017) recommended policies for betterment of women business growth such as Government, needs to offer education & training and financial support should be offered for women through govt. Swapna (2017) established the relationship between MFIs and women entrepreneurship in India. This study indicated factors such as lack of market knowledge; record-keeping and attainable profit gaining cause the women hardships to generate profit and hurt their business. This study focused that the offer of investment in women proved to be more beneficial for themselves and their families' living standards as food, medical, health, and their literary rates got better which perform a positive impact on society as a whole. Ukanwa et al. (2018) explored MF can affect the household needs of family and their potential to pay back the credit. Thus, a number of women-run small businesses for the survival of their basic needs such as food and the schooling of their kids. So, as to reduce poverty through micro-businesses is not always a required solution. Bhatt & Shastri (2018) investigates the effect of MFIs on women's entrepreneurship and suggested that microfinance plays important role in women's entrepreneurial success.

Conceptual Framework



Hypothesis

H1: Microfinance has a significant impact on sustainable women entrepreneurial performance

H2: Human capital has a positive relationship with women's entrepreneurial success.

H3: Human capital mediates the relationship between MF and sustainable women's entrepreneurial success.

Research Methodology

In this research venture, we used the quantitative survey approach to inspect examine the relationship of variables. The data was collected through a questionnaire from March-July 2019 to examine the nexus between all variables. The convince sampling technique was employed to select the respondents for data collection; 220 questionnaires were get filled out form women enterprise that has access to microfinance from Akhuwat and Kashaf Foundation. For questionnaire preparation, the researcher conducted in-depth interviews with the managers of Akhuwat, Kashaf foundation and UPAP. The questionnaire was evaluated and approved by relevant researchers. After finalizing the questionnaire, every question was translated into Urdu. The Urdu translation was assessed, evaluated and approved by my respected teachers and researchers. We observed that respondents hesitate to fill the questionnaire; the managers of institutions helped the researcher and requested the respondent to complete the questionnaire. Despite all that, we could collect 220 questionnaires, out of 300 questionnaires given to respondents. The questionnaire-based was on the five Likert scale points (1 Strongly Disagree to 5 strongly Agree) and the women respondent were requested to rate the 42 items that were divided into four constructs, which are microfinance credit, microfinance services, women entrepreneurial performance, and demographic profiles. When a researcher is making a questionnaire, it focused on structured and unstructured questionnaires types. A questionnaire with well-defined, concrete, and predetermined questions is known as structured questionnaires and those questionnaires whose characteristics are not present in its questions are known as unstructured questionnaires (Saunders et al. 2009). A survey questionnaire is a tool that represents the structure formed questions to receive data from the participants, as these questions are generally in a prearranged category and comprise a uniform scale to determine the dimensions of research. Questionnaires are an important technique for data collection because it saves money and time; simple for collecting data from participants; flexible with time, data analyzed easily, and manage large sample size by reducing errors of primary data (Boyce, 2003). The Likert scale approach is mostly applied in the majority of the questions to continue consistency and it's an easy way to code and categorize different variables according to the responses. The scale of code was elaborated to the women participants, those who requested to pick the reply via various measuring scales for approximately of questions in questionnaire excluding the demographic information. With all these the academic reason of the research was also explained in advance to the participants to get rid of unexpected errors. These points should be considered while constructing a questionnaire, (Pallant, 2007).

Following model employed to analyze the nexus between microfinance and women's entrepreneurial performance

$$WEP = f(MC, HC, AGE, FSIZE,)$$

$$WEP = \alpha + \beta_1 MC + \beta_2 HC + \mu_i$$

Where,

WEP=Women entrepreneurial performance; MC= Microfinance; HC= Human Capital

AGE= Business Age; FSIZE= Family size; Edu= Respondents Education; TB= Types of Business

Descriptive Analysis

Further, collected data were analyzed and summarized by using statistical techniques of the overall score and easy percentage. The characteristics of respondents are shown in table 02.

Table 2: Characteristics of Respondents

Age	Frequency	Percent	Valid %	Cumulative %
18-30 Year	45	20	45	20
31-40	89	40	89	60
41-50	61	28	61	88
51 years and above	25	11	25	100
Family Size				
0-2	14	6	6	6
3-4	70	32	32	38
5-<	136	62	62	100
Education				
No Formal Education	80	36	36	36
Primary Education	10	5	5	41
Secondary Education	60	27	27	68
Graduation And Above	70	32	32	100
Business Type				
Beauty Parlor	24	11	11	11
Boutique	28	13	13	24
Retail Shop	41	19	19	43
Tailoring/stitching	12	5	5	48
School	29	13	13	61
Others	86	39	39	100

The descriptive results show that most women between the ages of 31 and 40 were actively involved in the business. These results also show that there is a very significant relationship between starting a business with the age as more women are encouraged to start up their enterprises at a younger age than old age as the age range of 31 to 40 is the ideal age. The results are consistent with the findings of Carter et al. (2001) and Shaw et al. (2005) are females starting up their enterprises at a young age. Findings also show that most of the women respondents have started their business having large members as their family size was 5 to more than five members. Literature indicates that education is considered as a positive effect on starting up a new business (Goedhuys & Sleuwaegen, 2000) and achievement, development, and growth of enterprises (Parker & Van Praag, 2006). Women businesses are also affected by the level of education as the opportunity of starting a business or expanding existing business increases among educated females (Harding et al. 2007). Therefore, in developed and underdeveloped countries it is estimated that the level of education in already running business ladies is more than those starting up a business. This indicates that education might be playing a very important role to influence enterprise growth and sustainability positively (Harding et al. 2006). Results show that majority of respondents have no formal education. The main reason for the lack of education among women in the early age weddings causes the dropout of girls from school (Kamal & Haider, 2006). Further, our study, shows that the following categories of business are run by women, i.e boutique, retail shops, beauty parlor business; tailoring/stitching; school, and women invested in different businesses (livestock, cloth dying, scrap business, etc.). The most important reason is the responsibilities of their children for the female to set up their own business, and negative incidents as gender inequity and/or children bringing up issues (Brindley & Ritchie, 1999).

Table 3: Overall Descriptive Statistics

	MC	WEP	HC
Mean	4.286	4.420	4.193
Std. Deviation	0.619	0.674	0.593
Minimum	1.00	1.00	1.00
Maximum	5.00	5.00	5.00

Table 03 shows the overall descriptive results (mean, standard deviation) of all variables. Findings indicate that the average value of microfinance is 4.286; the standard deviation is 0.619, the WEP mean value is 4.420; the standard deviation is 0.674. The average value of human capital is 4.193; the standard deviation is 0.593, this show majority of respondents' response is more than normal.

Table 4: Means Comparison between Islamic & Non- Islamic MFIs

	Mean Value		t-test for Equality of Means		Inference
	IMF	Non-IMF	Difference	p-value	
MC	4.346	4.180	0.166	0.031	H1 accepted
WEP	4.502	4.382	0.120	0.010	H1 accepted
HC	4.320	4.105	0.215	0.000	H1 accepted

One of the objectives of this paper is to investigate whether Islamic microfinance institution contributes more as compared to non-Islamic microfinance institution in entrepreneurial performance. Table 4 outcomes indicate a significant difference between IMFIs and non-IMFIs. These results confirmed that IMF contributes more to women's entrepreneurial performance as compared to non-IMFIs. Further, findings investigated that IMF imparts more in poverty reduction as compared to non-IMFIs. Islamic finance prohibits interest-based (riba) transactions and speculation (gharar), while non-IMF is based on the debtor-creditor relationship. Further, to check the reliability of measurement items, CFA analysis was done and results meet the criteria. Further, composite reliability (CR) should be greater than 0.70 (Bagozzi & Yi, 1988), CR should be higher than AVE, which should be more than 0.50 (Hair et al. 2010). Hence, data met the criteria and validity of convergent and discriminant. Hence, the variables are considered to be adequate for further analysis.

Table 5: Measurements Model Results (Reliability and Validity)

	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Women Enterprise Performance	0.841	0.919	0.742
Microfinance (MC)	0.852	0.900	0.694
Human Capital	0.880	0.908	0.590

Results, Analysis, and Explanation

The correlation test was used to confirm the significance of nexus between microfinance (MC), women's entrepreneurial performance (WEP), and human capital (HC). Table 6 outcomes indicate that there is a positive correlation of WEP with MC & HC at a level 1% and 5%. The results are similar to the traditional, findings which evidence that microfinance has a positive impact on women's business performance (Osunde and Mayowa, 2012).

Table 6: Pearson Product Correlations Results

Variables	MC	WEP	HC
WEP	0.550*** (0.000)		
HC	0.431** 0.034	0.896*** 0.000	1

Note: *** is significant at 0.01 level; ** is significant at the 0.05 level

Further, the normality of the response variable and autocorrelation was checked, the results confirm no normality issues found in the data. Lastly, to test the null hypotheses, the regression and mediation test was employed.

Table 7: ANOVA Results

Model	Sum of Squares	Df	Mean Square	F	p value
Regression	29.262	3	9.754	45.155	0.000
Residual	44.498	206	0.216		
Total	73.760	209			

Table 8: A: Regression Results (Dependent Variable: WEP)

Model	Unstandardized Coefficients		t-statistic	p-value
	B	Std. Error		
Constant	0.199	0.452	0.440	0.660
MC	0.654	0.057	11.565	0.000
HC	0.438	0.034	7.456	0.000

Table 9: Mediation Results of MC-HC-WEP

Direct Effect	Coefficient	Sample Mean	Std. Deviation	t-statistic	p-value
MC -> WEP	0.577	0.585	0.073	7.934	0.000
MC -> HC-> WEP	0.078	0.084	0.040	1.947	0.050

Regression results show that MF significantly affects women's entrepreneurial growth. This shows that a better perception of microfinance worthiness leads to better performance of women entrepreneurs. The results are similar to our assumptions that a better perception of microfinance creditworthiness improves the performance of women entrepreneurs, so H1 is accepted. Results are similar to previous findings that microfinance has a positive impact on women's business performance (Osunde & Mayowa, 2012). The table 09 results show a mediation relationship of human capital between microcredit and women's business growth because this study found a direct positive and significant relationship between microfinance and women's business growth. This indicates that there is a partial mediation of human capital between microfinance and women's business growth. The possible justification of our results may be due to certain barriers that impede entrepreneur development including lack of collateral, the high-interest rate on loans, and lack of registration and poor management of micro-entrepreneurs (Salum, 2014). Mahmoud (2011) documented similar patterns that although MFIs are providing credit to women for starting their business, however a lot of women did not use microfinance for the said purpose. Further, it is recommended by the researcher to provide MF to the poor to encourage them and to avoid defaulting risk, encourage group borrowing, government policies need to be adopted to provide knowledge to borrowers, discussion in groups and conferences done to give awareness to borrowers, need more MFIs to be established in villages, to make policies for loan repayment issues and need to introduce more factors that affect entrepreneurial growth.

Conclusions and Policy Recommendations

The major purpose of the study is to measure the effects of microfinance on women entrepreneur performance. Further, we conduct a deep review of literature in women's entrepreneurial performance, microfinance area, and their critical consideration of the issues influencing them; the socio-economic benefits of encouraging women to begin a journey of entrepreneurship. The study encourages women for starting their own enterprises, significant the gender performance and performance of factors as socio-economic (age, level of employment, educational level, income of household, balance in life work), and detail of effects of the financial and non-financial resources.

The major aim was attained about thoughtful level about problems of gender discrimination which were faced by women. The most important theoretical conclusion of the research is microfinance played a significant role in the development of women's entrepreneurial performance not only in starting a business but in boosting up the established business as well. Moreover, this paper examines the role played by microfinance in women's entrepreneurial performance. So results provide helpful insights into the entrepreneurship and microfinance accessibility research domains.

Future researchers should include more regions (data coverage) for the generalization of these results. Women entrepreneurship improvement is one of the major issues which could be better unearthed through interviews. Thus, future researchers should use qualitative research design (interview method) to help us understand the intricacies of women's entrepreneurial activities and their perception of the creditworthiness of microfinance institutions. Lastly, the sample size is not enough to compute or represent the whole population, so the sample size must be increased.

References

- Akinbola, A., Ogunnaike, O., & Tijani, A. (2013). Microfinancing and entrepreneurial development in Nigeria; the mediating role of marketing. *Arabian Journal of Business and Management Review*, 1(6), 7-19.
- Alalade Y. Samson, Amusa B. Olubumi, Adekunle Olusegun A., (2013). Microfinance Bank as a Catalyst for Entrepreneurship Development in Nigeria. *International Journal of Business and Social Science*. 4(12), 286-303.
- Aldrich, P., & Meyer, A. (2015). Social capital and community resilience. *American behavioral scientist*, 59(2), 254-269.
- Alvarez, A. & Barney, B. (2014). Entrepreneurial opportunities in abject poverty: Can entrepreneurship be a source of economic development? *Entrepreneurship Theory and Practice*. 39(1), 159–184.
- Banerjee, B., & Jackson, L. (2017). Microfinance and the business of poverty reduction: Critical perspectives from rural Bangladesh. *Human Relations*, 70(1), 63-91.
- Bernard, K., Kevin, T., & Khin, A. (2016). Entrepreneurial success through Microfinance services among women entrepreneurs in Sri Lanka: *International Journal of Economics and Financial Issues*, 6(3), 1144-50.
- Bhatt V. & Shastri S. (2018). Measuring the Impact of Microfinance on women empowerment among women of Rural Gujarat. *International Journal of Reviews and Research in Social Sciences*. 6(3), 123-128.
- Brindley, C. & Ritchie, B. (1999) Female Entrepreneurship: Risk Perceptiveness, Opportunities and Challenges. Paper presented at the 22nd ISBA National Small Firms Policy & Research Conference, Leeds, UK.
- Bruton GD, Khavul S. & Chavez (2011). Micro lending in emerging economies: Building a new line of inquiry from ground up. *Journal of international Business Studies* 42(5), 718-739.
- Byrne, J., Fattoum, S., & Diaz C. (2019). Role models & women entrepreneurs: Entrepreneurial superwoman has her say. *Journal of Small Business Management*, 57(1), 154-184.
- Carter, S., Anderson, S., & Shaw, E. (2001). Women's business ownership: A review of the academic, popular and internet literature with a UK policy focus. *ARPENT: Annual review of progress in entrepreneurship*, 1, 66.
- Dutta, A., & Banerjee, S. (2018). Does microfinance impede sustainable entrepreneurial initiatives among women borrowers? Evidence from rural Bangladesh. *Journal of rural studies*, 60, 70-81.
- Ferdousi, F. (2015). Impact of microfinance on sustainable entrepreneurship development. *Development Studies Research*, 2(1), 51–63.

- Fielden, S.L. and M.J. Davidson (2005). *International Handbook of Women and Small Business Entrepreneurship*, Cheltenham, UK and Northampton, MA: USA: Edward Elgar.
- Fornell, C., & Larcker, F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Market Research*, 18(1), 39-50.
- Goedhuys, M. & Sleuwaegen, L. (2000). Entrepreneurship and Growth of Entrepreneurial Firms. *The Journal of Development Studies*, 36 (3), 122-144.
- Hair, F., Anderson, E., Tatham, L., & Black, C. (2010). *Multivariate Data Analysis (7th Ed.)*. Prentice Hall: USA.
- Harding, R., Brooksbank, D., Hart, M., Jones-Evans, D., Levie, J., & Walker, J. (2006). *Global Entrepreneurship Monitor: United Kingdom*. London: London Business School.
- Jayawardana, P., (2012). Integrating Women into Development through Microenterprise Approach in Rural Areas: Role of Microfinance in Sri Lanka. *Paper presented at the annual meeting of 10th International Conference, Universita Degli Studi Di Siena, Italy*.
- Jhamb and Jhamb (2017) Microfinance and Entrepreneurship Development. *International Journal of Latest Technology in Engineering, Management & Applied Science* 6(2), 54-56.
- Kaka E.J. & Abidin F. Z. (2015). Mediating role of performance and the moderating effect of microfinance training on poverty alleviation in Northeast Nigeria: *International Journal of Management Research & Review*, 5(11), 1037-1044.
- Kapila, M., Singla, A., and Gupta, L. (2016). Impact of Microcredit on Women Empowerment in India: *World Congress on Engineering*, 2 (June 29 - July 1).
- Khan, M. A., & Rahaman, M. A. (2007). Impact of microfinance on living standards, empowerment and poverty alleviation of poor people: a case study on microfinance in the Chittagong District of Bangladesh.
- Khavul S (2010). Microfinancing: Creating opportunities for the poor? *Academy of Management Perspectives* 24(3): 58–72
- Khavul, S., Chavez, H., Bruton, G. (2013). When institutional change outruns the change agent: The contested terrain of entrepreneurial microfinance for those in poverty. *Journal of Business Venturing*, 28(1), 30-50.
- Kibet, D., Achesa, K., & Omwono, G. (2015). Effects of microfinance credit on the performance of small and medium enterprises in Kenya. *International Journal of Small Business and Entrepreneurship Research*, 3(7), 57-78.
- Kumah, A. (2017). Impact of Microfinancing on Entrepreneurial Growth & Development in Ghana. *International Journal of Latest Engineering Research & Applications*, 2(6), 27-36.
- Lewin, A.Y., Kenney, M. and Murmann, J.P. (eds) (2016) *China's innovation challenge: Overcoming the Middle-income Trap*. Cambridge: Cambridge University Press.
- Mahmood, S. (2011). Emerging scholars section Microfinance and women entrepreneurs in Pakistan. *International Journal of Gender and Entrepreneurship*, 3 (3), 265-274.
- Mula G. and Sarker S. C. 2013). Impact of microfinance on women empowerment: An economic analysis from India. *African Journal of Agricultural Research*, 8(45), 5673-5684.
- Mustafa, Z., & Ismailov, N. (2008). *Entrepreneurship and Microfinance-A tool for empowerment of poor-Case of Akhuwat, Pakistan*. Mälardalens högskola.
- Newman, A., Schwarz, S., and Ahlstrom D. (2017). Microfinance and entrepreneurship: An introduction. *International Small Business Journal*. 35(7), 787 –792.
- Nyoni, T. (2017). An empirical investigation of factors affecting the performance of women entrepreneurs in Harare: A Case of Food Vendors.
- Osunde, C. & Mayowa, A.G. (2012). Microfinance and entrepreneurial development in Nigeria. *Journal of Research in National Development*, 10(3), 405-410.
- Pahuja, A., & Sanjeev, R. (2015). *Introduction to Entrepreneurship*. Available at SSRN 2761878.
- Parker, S. C. & Van Praag, C. M. (2006). *The Entrepreneur's Mode of Entry: Business Takeover or New Venture Start?* Max Planck Institute of Economics: Entrepreneurship, Growth and

Public Policy Group.

- Roodman D (2013). Armageddon or adolescence? Making sense of microfinance's recent travails. In: Köhn DE (ed.) *Microfinance 3.0: Reconciling Sustainability with Social Outreach and Responsible Delivery*. Heidelberg: Springer, 13–40.
- Salum, Z. (2014). The role of microfinance on entrepreneurial development: A Case of Dae es Salaam City.
- Saunders, M., Lewis, P. & Thornhill, A. (2009) *Research Methods for Business Students*. Harlow, UK: Prentice Hall Financial Times.
- Shaw, E., Carter, S., Lam, W. & Wilson, F. (2005) *Social Capital and Accessing Finance: The Relevance of Networks*. Paper presented at the 28th Institute of Small Business and Entrepreneurship Conference, Blackpool, UK.
- Siwale, J. N., & Ritchie, J. (2012). Disclosing the loan officer's role in microfinance development. *International Small Business Journal*, 30(4), 432-450.
- Swapna K., (2017). Impact of Microfinance on Women Entrepreneurship. *International Journal of Business Administration and Management*. 7(1), 229-241.
- Ukanwa, I., Xiong, L., & Anderson, A. (2018). Experiencing microfinance: Effects on poor women entrepreneurs' livelihood strategies. *Journal of Small Business & Enterprise Development*, 25(3), 428-446.
- Umara N., Rabia I., Arshad Z., and M. Iqbal S., (2011). Impact of Microfinance on Poverty: A Case of Pakistan" *World Applied Sciences Journal* 12 (6).
- Unam, J., & Unam, F (2013). Promoting production capabilities of small-scale manufacturing business through microfinance banking in Nigeria. 11(2), 42-50.
- Y., Rathirane; SD, Semasinghe. (2016). The Impact of Microfinance Factors on Women Entrepreneurs' Performance in Northern Sri Lanka. *International Journal of Soc. Sci. Stud.*, 4, 94.
- Waithaka, T., Marangu, N., & N'gondu, N. (2014). Entrepreneurship Development by Micro Finance Institutions Effect on the Growth of Micro and Small Enterprises in Nairobi Central Business District: *European Journal of Business and Management*, 6(13), 177-186.



Literacy, Poverty and Trade Openness in Pakistan: An Empirical Investigation

Syed Jawwad Raza Bukhari, Assistant Professor, Government Faridia Graduate College, Pakpattan, Pakistan

Ahmad Raza Cheema, Assistant Professor, Department of Economics, University of Sargodha, Pakistan

Salyha Zulfiqar Ali Shah, Assistant Professor, School of Economics, Bahauddin Zakariya University Multan, Pakistan

*Corresponding author's email: sjrbukhari@hotmail.com

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ABSTRACT

Purpose: Education plays a vital role in improving the standard of living of the masses by providing them with better job opportunities and future earnings. This study has attempted to investigate the impact of the literacy rate on poverty in Pakistan.

Methodology: This study is based on secondary data and has employed the Johansen Cointegration and VECM technique for empirical investigation. Headcount ratio is a dependent variable, employed as a proxy for poverty. In the present study, explanatory variables are literacy rate, trade openness, FDI and inflation rate.

Findings: The empirical findings from the study show that literacy rate and trade openness show a negative relationship with poverty in Pakistan. However, inflation shows a positive relationship with poverty.

Policy Implications: The study suggests that policymakers should initiate suitable measures to improve the education system in Pakistan. There is a dire need of increasing the enrolment rate at the primary level and special check on the drop-out ratio in public schools.



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Introduction

Poverty is a multi-dimensional phenomenon, it involves the absence of basic health services, a high scale of illiteracy, inadequate income and deficiency of fundamental rights of life safety (Khan et al., 2009). Eradication of poverty is the leading aim and target of every developing country. Halved the world's population living in absolute poverty was the main target of Millennium Development Goals (MDGs). Elimination of hunger and provision of schooling is

the top planned motivation in Millennium Development Goals (MDGs) [Mahmood et al., 2014]. Poverty in any country of the world reflects the hunger and malnourishment of people, as for Pakistan most people of the country are suffering the disease of poverty which is creating hunger and undernourishment situation (Pervez and Rizvi, 2014). Many factors affect poverty but literacy, corruption, inflation and employment levels are more important factors that affect it.

Education has a prominent role in economic growth and development. Education helps to increase the efficiency and productivity of every nation. Literacy and poverty have become prominent issues for discussion and research since the 1960s (Chaudhry et al., 2010). Literacy, trade openness and a high level of employment have a strong relationship with each other and play a vital role to remove poverty. Education also diminishes income inequalities and poverty and these have strong associations between them (Khan et al., 2015).

Literacy is the basic key for economic development and reduction of poverty. Literacy creates a highly moral and transparent society and provides the chance of a high level of job opportunities. Literacy is an enormous challenge in the world especially in the areas of south and west Asia, the Arab states and sub-Saharan Africa (Mapping the Global Literacy Challenge). Literacy is usually considered the base of society and generally plays a task as a base of humanity, which brings economic achievement, social affluence and political stability (Ahmad and Batual, 2013).

Trade openness is also an important economic variable that brings massive productivity and overall stability to society. Trade openness is the key factor that plays a vital role in the reduction of poverty (Pervez and Rizvi, 2014). Pakistan is a country that has a low level of literacy, low export earnings, massive unemployment and a high rate of inflation along with a soaring level of poverty. Inequality in the distribution of income and poverty has become new issues that economists seek to understand due to shocks, global crises and revolutions in Arab countries (Khemili and Belloumi, 2018). Literacy, trade openness and a low rate of inflation are the main sources of poverty reduction

In the last two decades, many economists have tried to examine the relationship between the above-mentioned variables and poverty empirically. So, there is a strong link between these variables (Gelaw,2009). Education is the most important factor which can diminish poverty. It is observed that if the rank of education is far above the ground, then the level of income inequality will be near to the ground and vice versa (Khan et al., 2015). The objective of the present study is to shed light on the impact of the literacy rate on poverty in Pakistan. In the first section, the introduction of the study has been presented. The review of the literature is present in the second section. Data and methodology are present in the third section. The fourth section presents the results and interpretation. The fifth section presents the conclusion of the study along with the policy implications.

Literature Review

Kausar (2007) examined the link of education with economic progress in Pakistan during 1980-2007. The objective of the study was to investigate the effects of some main macro variables on Pakistan's economic progress. Different levels of school enrollment, basic health unit, exports and overall labor force participation, etc were investigated for empirical results. The study used a simple Ordinary Least Squares (OLS) technique to estimate the growth functions from 1980-to 2007. The result of the study has concluded that the growth of real GDP was completely connected to the initial school enrollment and labor force ratio. The study showed that basic school was an imperative requirement for speeding up growth and building a strong foundation stone for economic development in Pakistan. The study suggests that education has a strong effect on economic prosperity.

Naveed and Islam (2010) analyzed poverty and its determinants in Pakistan. Education, housing, health, assets and access to safe drinking water are major factors that have a strong influence on poverty. The findings of the study concluded that education was the main tool to eradicate poverty. The study used HIES data from 1998 to 2002. The technique of logistic regression model was used by the study for empirical investigation. The study came to the result that there was an opposite relationship between educational attainment and poverty. It also suggested non-conventional ways to increase literacy to eradicate poverty.

Niazi and Khan (2010) investigated the impact of education on multidimensional poverty in various areas of Punjab. The study included both rural and urban regions and employed advanced techniques for the classification of poor in several dimensions. For this purpose, the study used education, health and housing & services for finding out several dimensions of poverty rather than income. The study suggested that Government should frame economic reforms for the improvement of education and health facilities in rural and urban regions along with fair disbursement programs like Zakat. The study suggested that there was a dire need to improve educational facilities for the betterment of the poor and reduction of poverty in Punjab. Improvement in the literacy rate will improve the well-being of the poor class and will give more enjoyment and better livelihood opportunities.

Awan et al. (2011) investigated the contribution of learning in the reduction of poverty. The study has been based on the secondary data collected from the Household Integrated Economic Survey (HIES) and employed the logistic regression technique for the econometric analysis. The data was obtained from the Federal Bureau of Statistics (FBS) for the years 1999 and 2002. The impact of diverse levels of learning on poverty was figured out by the study. The study used different stages of education and experience of skill on poverty. The study concluded that all the learning stages and skills show a negative relationship with poverty. The findings of the study concluded that schooling success and practice were negatively connected with poverty, in both years. That study estimated that selected years individually verify this reality that as schooling achievements increases, the poverty has been diminished. Therefore, that study determined that learning and schooling were the reasons for poverty reduction.

Afzal et al. (2011) investigated the relationship between education, poverty and economic growth in Pakistan from the period of 1971 to 2010. That study used the latest econometrics techniques like ARDL approach for econometric analysis. The study has employed the secondary time series data to investigate various factors like education, real gross domestic product, poverty and physical capital. The result of the study concluded that there existed bi-directional causality between education and real gross domestic product (RGDP). The study suggested that there is a need for the provision of education facilities for the masses in Pakistan.

Chani et al. (2011) examined the role of economic growth and inflation on poverty in Pakistan. The author collected the secondary data during the year 1972-2008 using the ARDL technique for empirical investigation. The results of the study concluded that in the long and short-run inflation shows a negative relationship on poverty and economic growth has a negative effect on poverty. The study investigated the reasons for the high level of the inflation rate and concluded that liberalization policies accelerate the inflation rate in Pakistan. The study suggested that policymakers should not permit the prices to rise beyond certain limits otherwise it will adversely affect the welfare and development of a country.

Cheema and Sial (2012) investigated the relationship between income disparity, poverty and economic development in Pakistan. The authors have collected secondary pooled data from household income and expenditure surveys of different eight years. i.e., from 1992-03 to 2007-08, employed fixed and random techniques. The findings of the study conclude that the growth

elasticity of inequality is higher in urban areas than in rural areas. The findings of the study revealed that growth significantly helps in reducing poverty, keeping inequality constant, then the latter does to increasing poverty, holding the former constant. The study recommended that for reduction of poverty Government should execute strategies especially growth direction and should take special steps towards bettering income distribution.

Ahmad and Batul (2013) explored and analyzed the relationship between poverty, education spending and education status in Pakistan. The authors collected time series secondary data during the year 1961 to 2011 and employed Johanson Cointegration Test, Vector Error Correction Model (VECM) and Wald Test for empirical estimation. The findings of the study concluded that there was a strong causal bi-directional relationship exists between education status and poverty with each other. Moreover, there is no long-run relationship exists between education expenditure and poverty rates. The study suggested increasing budgetary share for the funding of the education sector and poverty reduction. It also stressed that adequate policies should be implemented for the enhancement in the level of adult literacy.

Pervez and Rizvi (2014) examined the determinant of poverty in Pakistan. The authors collected secondary time series data of 31 years from 1980 to 2010 and employed the Johanson Cointegration technique to study the long-run relationship between the variables. The study has also applied an error correction mechanism for the empirical results. The results of the study revealed that agriculture output, trade openness, worker's remittances, agricultural labor force and FDI show a negative relationship with poverty. The study also concludes that inflation shows a positive relationship with poverty. The study suggested that Government should make the policies of social programs relating to microfinance and skill development which can improve education level and reduce the poverty.

Mahmood et al. (2014) examined literacy, educational facilities and food safety in Punjab. It was a district-level analysis. The study observed the association between education, infrastructures, literacy rate and food security in the Punjab province of Pakistan. The authors collected cross-sectional secondary data from various sources for empirical investigation That study suggested that provincial and district governments have to frame structural modification in the education systems by giving attention to school infrastructure to increase literacy rates to achieve the goals of food security.

Pervez (2014) analyzed the effect of education on poverty in Pakistan. The authors collected secondary time-series data during the year from 1972 to 2006. The study employed the ADF unit roots test and Johansen & Juselius co-integration methodology to ensure the existence of the relationship between education and poverty. The result of the study showed that literacy rate and enrollment (secondary) had the opposite effect on poverty in the long run. The results from the study have concluded that education played an essential role in the lessening of hunger and increasing economic prosperity. The study suggested that investment in schooling was the basis for prosperity. Literacy provides support in diminishing hunger and uplifting the socio-economic situation of developing countries like Pakistan

Khan et al. (2015) analyzed the relationship between education, income inequality and poverty in Pakistan. The various dimensional aspects of the education and earning disparity in the country were used by the study. That study explained different types of inequalities like geographical inequality, human capital inequality, agricultural sector inequality, education inequality, gender inequality and feudalism inequality, etc.. The study was based on the different quality of society which explored the various aspects of learning and earning disparity at the national level. The findings of the study concluded that a high level of education (literacy rate) will reduce the poverty and income inequality.

Babaci-Wilhite and Geo-Jaja (2016) analyzed the educational system to market liberalization in Africa. The study illustrated the shortcomings in the education system along with the lack of internal and external efficiency of scholars. The study examined the social realities of contemporary Africa and its challenges. The study concluded that education policy had created inequalities and appalling poverty in Africa due to improper reforms in the continent. The study suggested the need for an adequate education to follow the agenda of human rights, social protection, poverty reduction and social justice.

Khemili and Belloumi (2018) investigated the relationship between growth, inequality and poverty in Tunisia. The study examined the cointegration relationship between growth, inequality and poverty in Tunisia. The study selected the data of the period of 1970-2013. The authors collected time-series data and used the ARDL bound testing approach for cointegration and the Toda Yamamoto approach of the Granger causality test. The findings of the study revealed that in long run, there was a positive relationship between income disparity and poverty. In the short run, it was observed that there was also a positive link between income disparity and poverty.

Data and Methodology

The present study has attempted to investigate the impact of the literacy rate on poverty in Pakistan during the period 1988 to 2018. The secondary data has been collected from various sources including World Development Indicators (WDI). The dependent variable is poverty in the present study. The headcount ratio is used as a proxy of poverty in the model. The independent variables are literacy rate, trade openness, foreign direct investment, and inflation rate.

Variables Justification of the Model

Literacy

As the literacy rate increases, it provides the masses with better chances for job opportunities and future earnings. Literacy helps people to live a life with their freedom. The link between poverty and literacy can be examined at the national and household level. Owing to their illiteracy or lower level of literacy rate, people are forced to live in a low-income and without other necessities of life. Literacy and poverty have a negative relationship and a higher level of education leads to a reduction in poverty (Pervez and Rizvi, 2014). Education brings knowledge and skill that are supportive in getting the advanced level of salaries ultimately which will decrease the poverty.

Higher levels of education are expected to have a strong link with a higher level of job opportunities. Firstly, education leads to the accumulation of skills and experience that make workers more efficient and productive. Secondly, educated workers are more quickly hired than uneducated and illiterate workers. Thirdly, an educated person has more ethical characteristics in his personality. So, these factors come due to literacy which gives more chances for earning and jobs, ultimately it will reduce the poverty in Pakistan.

Trade Openness

Trade openness increases the export and import activities of a country. It will increase the investment within the country. Trade will accelerate the economic activities inside the country. All these will create better earnings and job opportunities for the masses. Ultimately trade openness helps in reducing poverty in the country. Trade openness leads to an increase in domestic technology and productivity and it will increase the production of all sectors of the country. trade openness helps in improving growth rates and reducing poverty (Pervez and Rizvi, 2014).

Inflation Rate

Reduction in inflation is the main objective of every government. It directly affects the

purchasing power of the people, especially the low and middle-income class of the country. The rise in the inflation rate deprives poor people of using the necessities of life. An increase in the inflation rate will reduce the standard of life of the low-income class. Inflation decreases the living standard of the people and it will increase poverty (Pervaz and Rizvi, 2014).

Foreign Direct Investment (FDI)

FDI increase the economic activities in the host country, but ultimately major profit will shift to the mother country. This is the major cause of the outflow of capital from the host country. FDI affects poverty. So, due to its importance, the study selects it as the independent variable.

Table 1: Description of the Variables Utilized in the Present Study

Variables	Description of the Variables:
Dependent Variable	
Poverty (POV)	The headcount ratio is the dependent variable in the present study. It is employed as a proxy for poverty. The data of headcount ratio is obtained from WDI.
Independent Variables	
Literacy Rate (LR)	Literacy rate (%) of the total population from 1988 to 2018.
Trade Openness (TOP)	Data on the trade openness of Pakistan is obtained from World Development Indicators. It is in percentage to the GDP of Pakistan. It is the ratio of imports plus export, divided by GDP (Perviz and Rizvi, 2014).
Foreign Direct Investment (FDI)	Data of FDI as a percentage to GDP of Pakistan obtained from WDI.
Inflation Rate (INF)	Data on the inflation rate of Pakistan is also obtained from WDI.

The econometric model of the present study is as follows;

Operational Model:

$$\text{Pov} = f(\text{LR}, \text{TOP}, \text{INF}, \text{FDI})$$

$$\text{Poverty} = \beta_1 + \beta_2(\text{LR}) + \beta_3(\text{TOP}) + \beta_4(\text{INF}) + \beta_5(\text{FDI}) + \mu_i$$

Result and Discussion

ADF Unit Root Test

Table 2: Results of ADF Unit Root Test
Level

Variable	Test statistic	1%Critical value	5%critical value	10% critical value	P-value	Decision I(d)
Poverty	-1.58	-3.68	-2.97	-2.61	0.491	-
Literacy Rate	-0.59	-3.68	-2.97	-2.19	0.871	-
Trade openness	-7.05	-3.69	-2.97	-2.61	0.443	-
FDI	-1.93	-3.68	-2.97	-2.61	0.316	-
Inflation	-2.49	-3.68	-2.97	2.61	0.117	-

Note: significance at 1%, 5% and 10% using the t-stat approach of ADF.

Table 3: Results of ADF Unit Root Test
First Difference

Variable	Test statistic	1%Critical value	5%critical value	10% critical value	P-value	Decision I(d)
Poverty	-5.35	-3.73*	-2.99	-2.62	0.000	I(d)
Literacy Rate	-6.62	-3.69*	-2.97	-2.62	0.000	I(d)
Trade openness	-6.96	-3.69*	-2.97	-2.62	0.000	I(d)
FDI	-3.86	-3.69*	-2.97	-2.62	0.002	I(d)
Inflation	-7.05	-3.69*	-2.97	-2.62	0.000	I(d)

Notes: significance at 1% using the t-stat approach of ADF

Determination of Lags

The study uses the lowest SBIC values as the primary concern. Table 4 shows the lag-order selection statistics.

Table 4: Lag-order Selection Criterion

Lag	LogL	LR	df	p	FPE	AIC	HQIC	SBIC
0	-378.07	NA			372.53	24.71	24.79	24.94
1	-273.58	208.98	25	0.000	226.23*	19.58	20.03*	20.97*
2	-251.38	44.40	25	0.000	310.67	19.76	20.59	22.31
3	-221.05	60.65	25	0.000	324.71	19.42	20.62	23.12
4	-184.86	72.38*	25	0.000	395.79	18.70*	20.28	22.55

Table 5: Results of Co-integration Test

<i>Maximum rank</i>	<i>Eigenvalue</i>	<i>Trace statistic</i>	<i>Critical value (5%)</i>
0	-0.73	82.28	68.52
1	-0.45	34.44*	47.21
2	-0.34	18.59	29.68
3	-0.12	4.55	15.41
4	-0.007	0.24	3.76

The cointegration rank can be tested with the maximum Eigenvalue and trace statistics. The results from Table 5 show the following hypothesis. The trace statistic either rejects the null hypothesis of no co-integration among the variables or does not reject the null hypothesis that there exists a co-integration relation between variables. Testing starts from H: $r=0$. So, it rejects the null hypothesis. H: $r=1$ so null hypothesis and test is not rejected. The study stops further testing and the value of r is commonly used to estimate the number of co-integrating relations between variables. In the study after testing, H: $r=1$ is not rejected at a 5% level ($34.44^* < 47.21$). It is further explained that in the study, the trace test does not reject the null hypothesis. It shows that all the above five variables in the model are not cointegrated. The number of cointegrated vectors finally is with two lags which is equal to one, (i.e.) rank number is one. When rank is equivalent to one which is more than zero and less than the number of variables, it shows that series in the study have to cointegrate among the variables. It is clear evidence that the study will proceed to estimate the VECM model.

Table 6: Vector Error Correction Model for Long-Run

Identification: beta is exactly identified

Johansen normalization restriction imposed

(Impact of Literacy, Trade Openness, Foreign Direct Investment and Inflation on Poverty)

Variables	Cof.	Std.Err.	z	p>	z	(95% conf. Interval)
Literacy	-1.72	0.42	-4.07	0.000	-2.54	-.89
Trad Openness	-6.64	1.23	-5.37	0.000	-9.07	-4.22
Foreign DI	2.03	3.27	0.62	0.53	-4.37	8.45
Inflation	4.97	0.672	7.39	0.000	3.65	6.28
C	232.16					

Vector Error Correction for Long-Run Model

The presence of cointegration among variables suggests a long-run relationship among the variables. Then the study applied the Vector Error Correction Model. The long-run relationship

among the poverty, literacy, trade openness, foreign direct investment and inflation for one cointegrating vector for Pakistan for the period of 1988-2018 is shown below in the shape of standard errors parenthesis.

$$\text{Poverty} = 232.16 - 1.72(\text{Literacy}) - 6.64(\text{Trade openness}) + 2.03(\text{FDI}) + 4.971669(\text{Inflation})$$

$$(0.000) \quad (0.000) \quad (0.533) \quad (0.000)$$

In the above equation, all the coefficients were significant except foreign direct investment at a 1% level of significance. The coefficient value of the literacy rate is -1.72 and it is showing a negative relationship between poverty and literacy rate, statistically significant. It shows that one percent increase in literacy rate will reduce the poverty by 1.72 percent. These results are similar to the findings of these studies [Khan et al., (2009), Niazi and Khan (2010), Awan et al., (2011) and Erum et al., (2015)]. The value of trade openness is negative and it is -6.64, which states that a one percent increase in trade openness will reduce poverty by 6.64 percent, statistically significant. This result supported the findings of Pervaz and Rizvi (2014). The value of the foreign direct investment coefficient is 2.03. It means that one percent of foreign direct investment increases, then poverty will increase by 2.03 percent. Lastly, the value of the inflation coefficient is 4.97. It means one percent of inflation increases then poverty will increase 4.97 percent and vice versa. Signs of all variables are according to expectation, except foreign direct investment.

Vector Error Correction for Short Run

Table 7: Vector Error Correction Model for Short-Run

Variables	Value of Coefficient	z	P-value
Poverty	0.001	0.03	0.973
Literacy	0.09	0.36	0.722
Trade openness	0.46	1.62	0.106
FDI	-0.13	-2.17	0.30
Inflation	-0.12	-3.2	0.001

The results of model for short run are not according to expectation and P values are not satisfactory but the results of long run about coefficient values of variables of both models along with P value are satisfactory. So, the results of long run are more reliable than short run.

Impulse Response Function (IRF)

As an additional check of the cointegration, the present study uses the Impulse Response Function (IRF) for tests findings. It was firstly used by Order and Fisher (1993). It provides a meaningful interpretation of the model. The recursive structure assumes that variables appearing first contemporaneously influence the latter variables but not vice versa. It is important to order of most important exogenous variables earlier than the most endogenous-looking variables. Impulse Response Function (IRF) is shown in Figure 1. According to the figure, all independent variables have a stronger impact on the dependent variable (poverty) short run and long run and the model is stable.



Figure 1: Impulse-Response Function

Roots of the Companion Matrix

For the fitness of the model, the study applies a diagnostic test for the model. For this purpose, Roots of Companion Matrix is used. Based on Vector Error Correction Model estimations this diagnostic test is very suitable. The figure of this test shows the stability of the model and the fitness of the data. “If the visibility of the dot exists inside the circle” model is stable and fit (Enders 2008). In Figure 2, the dot is in the circle which confirms the stability of the model and fitness of the data. After this, it is specified about VECM and it is not miss specified and co-integrating vector is specified.

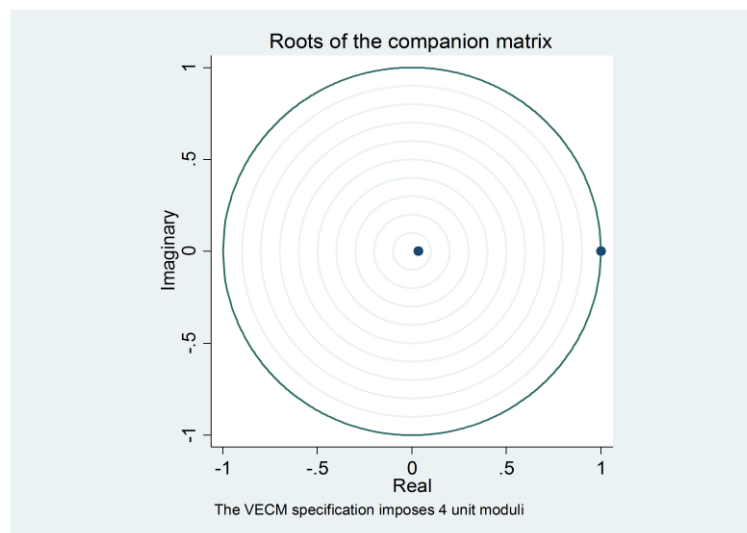


Figure 2: Roots of the Companion Matrix

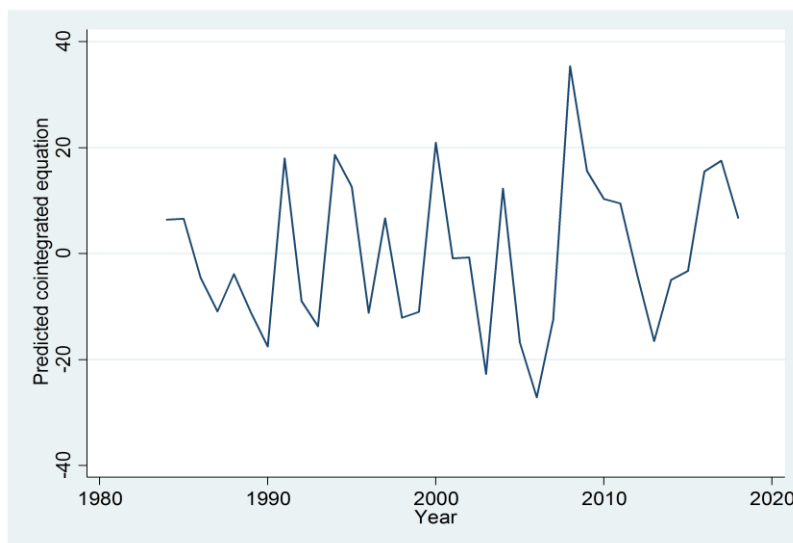


Figure 3: Predicted cointegrated equation

Conclusion and Policy Implication

This study has attempted to investigate the impact of the literacy rate on poverty in Pakistan. Time series secondary data was collected from various sources, during the year 1988 to 2018, using the Cointegration and VECM technique. The study concluded that literacy rate and trade openness are essential for poverty alleviation in Pakistan. An increase in the literacy rate will increase the quality of human capabilities of the economies like Pakistan. A high level of literacy rate is can only be achieved with improved enrollment rates and the completion of schooling. Expenditure on education is like an investment. This investment in education accelerates the process of economic growth. For this purpose, resources must be allocated efficiently for the promotion of the education facilities. This will help us in reducing poverty in Pakistan. Furthermore, it will improve the socio-economic status of the economy. The study suggests that for improvement of literacy rate, budget allocation for education should be increased. In the context of Pakistan, literacy can play a significant role in uplifting and improving the living standard of the people of Pakistan and it will decrease poverty. The study suggests that policymakers must take suitable measures to improve the education system in Pakistan. There is a dire need of increasing the enrolment rate at the primary level and special check on the drop-out ratio in public schools.

References

- Afzal, M., M. E. Malik, I. Begum, K. Sarwar and H. Fatima. (2011). Relation among Education, poverty and Economic Growth in Pakistan: *An Econometric Analysis. Journal of Elementary Education*, 22(1), 23-45.
- Ahmad, Z., & Batul, T. (2013). Relationship among poverty, education expenditure, and education status: empirical evidence from Pakistan. In *Proceedings of the World Congress on Engineering* (Vol. 1, pp. 3-5).
- Aittomäki, A., Martikainen, P., Rahkonen, O., & Lahelma, E. (2014). Household income and health problems during a period of labour-market change and widening income inequalities—a study among the Finnish population between 1987 and 2007. *Social Science & Medicine*, 100, 84-92.
- Awan, M. S., Malik, N., Sarwar, H., & Waqas, M. (2011). Impact of education on poverty reduction.
- Babaci-Wilhite, Z., Geo-JaJa, M. A., & Azaiki, S. (2016). Human Rights in Development Aid for STEM Education in Nigerian Languages. In *Human Rights in Language and STEM Education* (pp. 255-269). Brill Sense.

- Chaudhry, I. S., Faridi, M. Z., & Anjum, S. (2010). The Effects of Health and Education on Female Earnings: Empirical Evidence from District Vehari. *Pakistan Journal of Social Sciences*, 30(1).
- Cheema, A. R., & Sial, M. H. (2012). Poverty, income inequality, and growth in Pakistan: A pooled regression analysis. *The Lahore Journal of Economics*, 17(2), 137.
- Chani, D., Irfan, M., Pervaiz, Z., Jan, S. A., Ali, A., & Chaudhary, A. R. (2011). Poverty, inflation and economic growth: empirical evidence from Pakistan. *World Applied Sciences Journal*, 14(7), 1058-1063.
- Cheema, A. R., & Sial, M. H. (2012). Poverty, income inequality, and growth in Pakistan: A pooled regression analysis. *The Lahore Journal of Economics*, 17(2), 137.
- Erum, M., Mirza, A., Bhutto, M., & Pathan, P. A. (2015). Empirical Impact of Population, Poverty and Public Education Expenditure on Literacy Rate in Pakistan. *Impact Factor*.
- Gelaw, F. (2009). The relationship between poverty, inequality, and growth in the rural Ethiopia: micro evidence (No. 1005-2016-79196).
- Khan, M. Z., Rehman, S., & Rehman, C. A. (2015). Education and income inequality in Pakistan'. *Management & Administrative Science Review*, 4(1), 134-45.
- Khan, S. K., Nassr, M., & Hamdani, N. (2008). Impact of education and health on poverty in Pakistan: A critical study.
- Khemili, H., & Belloumi, M. (2018). Cointegration relationship between growth, inequality and poverty in Tunisia. *International Journal of Applied Economics, Finance and Accounting*, 2(1), 8-18.
- Mahmood, H. Z., Khan, M., ul Husnain, M. I., & Iftikhar, S. (2014). Education Infrastructure, Literacy and Food Security Matrix in Pakistani Punjab: A District Level Analysis. *Journal of Social Science for Policy Implications*, 2(2), 253-265.
- Naveed, A., & Ul-Islam, T. (2010). Estimating multidimensional poverty and identifying the poor in Pakistan: An alternative approach.
- Niazi ,M.I. and A.U.Khan.(2010). *The Impact of Education on Multidimensional poverty across the regions in Punjab. Journal Of Elementary Education, Vol. 21, No.1 pp 77-78.*
- Nolan, B., Salverda, W., Checchi, D., Marx, I., McKnight, A., Tóth, I. G., & van de Werfhorst, H. (2014). Changing Inequalities and Societal Impacts in Rich Countries, Thirty Countries' Experience.
- Pervez, S. (2014). Impact of education on poverty reduction: A co-integration analysis for Pakistan. *Journal of Research in Economics and International Finance*, 3(4), 83-89.
- Pervez, S., & Rizvi, S. U. H. (2014). Determinants of poverty in case of Pakistan. *International Research Journals*, 5(6), 192-201.
- Samiullah. (2014). *Relationship between Education, Health and Employment. A Time Series Analysis of Pakistan. Journal of Economics and Sustainable Development.*
- Schultz, T. P. (2002). Why governments should invest more to educate girls. *World development*, 30(2), 207-225.
- Tariq, M. A. H. A. M., Idrees, A. S. M. A., Abid, M. U. Z. A. M. I. L., & Samin, T. A. N. Z. I. L. A. (2014). Rationale effects of poverty in Pakistan. *IMPACT IJRBM*, 2(6).



Nexus between Economic Factors and Practice of Child Marriage: A Case Study of District Mohmand Khyber Pakhtunkhwa

Syed Haroon Shah, Ph.D. Scholar Department of Sociology, University of Peshawar, Pakistan

Niaz Muhammad, Professor, Department of Sociology, University of Peshawar, Pakistan

***Aman Ullah**, Lecturer Department of Sociology, University of Swabi, Pakistan

*Corresponding author's email: aman@uoswabi.edu.pk

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ABSTRACT

Purpose: This study aims to examine the economic factor as a stimulant behind the phenomena of child marriage in District Mohmand Khyber Pakhtunkhwa

Methodology: For this purpose, 200 sample respondents were selected through quota sampling from the selected Tehsil of Mommand agency. Furthermore, a chi-Square test was performed for measuring the association between study variables at Bivariate and Multivariate levels of analysis.

Findings: Findings of the study unveil that economic factor significantly contributed to the phenomena of child marriage practices for both genders

Implications: Based on study findings it has been recommended that efforts on micro and macro levels should be made to decrease the level of poverty, particularly in rural areas where the practice of child marriage is more prevalent than in urban areas. By providing social alternatives to marriage, such as education, skill, and technical development opportunities, especially for young girls, and the provision of loans to the poor families for entrepreneurship, the unfortunate practice of child marriage can be significantly overcome.



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Introduction

Marriage is a culturally endorsed union between individuals of the opposite sex which sets specific obligations and rights for them, their offspring, and extended family members such as their in-laws. Marriage can involve a formal, legally recognized partnership between consenting adults, which legalises sexual encounters and legitimises any progeny (Dillingham & Isaac, 2011; Stirnitzke, 2011; Talukder et al., 2020; Ullah et al., 2020). Child marriage, on the other hand, occurs when one or both couples are minors It can occur both with or without legal registration, and under religious, civil, or customary rules (Efevbera & Bhabha, 2020; Nour, 2006; Parsons et al., 2015; Schaffnit et al., 2021; Wahi et al., 2019).

Child marriage subjects its participants to a life of dreadful expectations, putting them in greater danger of exploitation, violence, bad health, and/or early mortality. Despite the fact that males get married at a young age as well, child marriage has a greater detrimental impact on girls, with costs that may be shocking for their well-being and health (Davis et al., 2013; Godha et al., 2013; Wodon, 2016). Because children rarely express free and informed agreement or understand the long-term consequences of marrying at a young age, child marriage is sometimes referred to as forced marriage. Parents may force their children to marry, while children may choose to marry if they believe it will improve their circumstances (Gangoli et al., 2009; Myers, 2013).

Frequency of Child Marriage

Child marriage is a global issue, with almost 700 million women alive now who were married as youngsters, with 15 million more marryings every year (Fatusi, 2016; Petroni et al., 2017). Hundreds of millions more are at risk, and the number will only grow as the world's population grows. If the current trend continues, an estimated 280 million girls will be forced to marry as children. By 2050, this figure will have risen to 320 million due to population increase. By 2030, the total number of females married as children would have risen to over 950 million, and by 2050, it will have risen to around 1.2 billion. Each year, the number of females under the age of 18 who marry will increase from 15 million presently to 16.5 million in 2030 and above 18 million in 2050 (Ahmed, 2015; Chalasani et al., 2021; UNICEF, 2014; Vogelstein, 2013).

Situation in Pakistan

Sindh has the highest rate of child marriage in Pakistan, at 43.1 percent, followed by the Northwest Frontier Province (now Khyber Pakhtunkhwa) at 29 percent, Balochistan at 21.6 percent, and Punjab at 29.9 percent. In Pakistan the practice of registering the marriage is very low, it's difficult to quantify the exact frequency of child marriages. The fact that most births in Pakistan's rural areas are also unregistered exacerbates the problem, making it difficult to determine a child's age at the time of their marriage. Though, it is indisputable that the phenomena of marriages of children are practiced throughout Pakistan (Sotirova et al., 2020; Zafar, 2021).

Economic Factors

Economic factors have a huge impact on many parts of people's lives, including family decisions about the age at which their girls should marry (Smock et al., 2005). Female economic liberty has a significant impact on their marriage age. The existing literature also points out that the practice of child marriage is triggered by a low level of economic status (Bunting, 2005; Hotchkiss et al., 2016), whereas improving women's economic freedom is the primary cause of late marriage (Oppenheimer, 1997; Smith et al., 2012) Child marriage is common in poor communities, with the greatest rates in the world's poorest regions (Bank, 2017; Lemmon & ElHarake, 2014). Moreover, poor socioeconomic situations generally encourage the practice of child marriage, and its frequency is linked to home income. Child marriage decreases as affluence rises (Davis et al., 2013; Misunas et al., 2021). Between the poorest and wealthiest families, there has been a considerable difference in the frequency of child marriage. In each of the 49 nations studied, the practice of child marriage was most prevalent among girls aged group of 20 to 24 years in the lowest twenty percent of households (Godha et al., 2013; Yaya et al., 2019; Yount et al., 2016). In 2014, Pakistan's headcount poverty rate was 29.5 percent, with Pakistani women, who make up about 40% of the population, bearing the brunt of this high poverty (Bank, 2020). Empirical findings of Bhanji and Punjani (2014) and Winkvist and Akhtar (2000) demonstrated that in rural areas of Pakistan, daughters are seen as an economic liability, and their marriages are frequently scheduled before those of sons, who are expected to help sustain the family's finances particularly (Atif et al., 2016), it is the primary cause for child marriage is observed. Bagahl et al. (2016) stated that in Sindh females are sold for financial benefits or to pay their loans and that this is a common practice amongst the impoverished. In Pakistan's Baluchistan province, poverty

is a direct contributor to the rise of underage marriages (Umer et al., 2017). Most Pakhtun households in Pakistan's Khyber Pakhtunkhwa are eager to marry their children at a young age in order to alleviate the family's financial burden (Daraz et al., 2014; Hashami, 2018). In addition, Daraz et al. (2014) conducted study in Dir Lower, Pakistan and explored that parents married their female offspring at a younger age due to financial pressure. According to the report, 85 percent of respondents feel that financial insecurity encourages the practise of underage marriage. Poverty is a major factor in child marriage, most of the parents' view that marrying their daughters will protect their upcoming life. More precisely poverty largely intensifies the financial and social constraints placed on females and their parents in the context of deep ingrained gender inequality, which explains why child marriage is so common (Bunting, 2005; Paul, 2019; Raj et al., 2009).

Statement of the Problem

Child marriage is most prevalent in FATA (Federally Administered Tribal Area), which has since been integrated into the province of Khyber Pakhtunkhwa as a result of the 18th amendment to Pakistan's constitution. Pakistan's tribal areas have not received the same level of assistance as other sections of the country. Mohmand Agency, which is part of FATA, has a slew of socioeconomic issues, including an alarming rate of underage marriage. The government and humanitarian organisations have paid little attention to the problem, which is causing various problems in the lives of youngsters who marry before they reach the age of 18. Thus the present study will ascertain the relationship between economic factors and child marriage practice in the study area.

Methodology

Universe of the Study, Sampling Procedure and Sample Size

The study was carried out in Mohmand agency. In addition, Mohmand Agency has seven Tehsils, from which Ambar Prang ghar, Utman Khel, Pindilai, Safi, Halimzai, were selected as a universe of the current study. Moreover, the participant was selected with equal representation on the basis of Tehsil and gender (See Table 1). Since, the exact number of the target population in the research area was unknown, thus non-probability sampling methodology while using quota sampling strategy was adopted.

Table 1: Sample Composition and Selection Procedure

s.no	Sample Respondents	Sample Size From each Tehsil				Total
		Ambar Utman Khel	Prang ghar	Pindilai	Halimzai	
1	Male practitioners of child marriage	25	25	25	25	100
2	Female practitioners of child marriage	25	25	25	25	100

Tools for Data Collection and Analysis of Data

A comprehensive questionnaire covering the study objectives was developed. Moreover, primary data was collected through well-trained interviewers. Besides, Data was analyzed at uni-variate, bivariate and multivariate levels. Moreover, information about the demographic profile of the participants was analyzed through univariate analysis. To correlate and obtain the relationship of the variables Bivariate and Multivariate analysis was carried out. All of the aforementioned analysis was done on SPSS 25.

Results

Table 2 unveils that, 39% were in the age group of 16-27 years, and about half of the sample respondents i.e. 49.5% were illiterate. Besides, one-fourth 25% of the participants were laborers, 8.5% and only 10.5% of the respondent were students. About one-third of the sample size (29%) of the child marriage practitioners was employed in low-paid government/private sectors.

Likewise, their father's occupation was farming stated by 36.5% of the respondents and their family monthly income were between 11,000 to 20,000 disclosed by more than one-fourth of the respondents.

Table 2: Respondents' Demographic Information

Item	Frequency	Percent
Age (Years)		
16 to 27	78	39.0
28 to 37	43	21.5
38 to 47	52	26.0
48 to 57	18	9.0
58 to 67	05	3.0
68 to 77	04	2.0
Total	200	100.0
Respondents' Educational Level		
Illiterate	99	49.5
Primary	42	21.0
Under Matric	24	12.0
Matriculate	18	09.0
F.A/F.Sc	10	05.0
Graduate	04	02.0
Post Graduate	03	01.5
Total	200	100.0
Spouse Educational Level		
Illiterate	170	85.0
Primary	22	11.0
Under Matric	03	1.5
Matriculate	02	1.0
FA/F.Sc	02	1.0
Graduation	01	0.5
Total	200	100.0
Respondents' occupation		
Farming	45	22.5
Labourer	50	25.0
Govt./Private Servant	58	29.0
Student	17	8.5
Businessman	21	10.5
Any other	09	4.5
Total	200	100.0
Respondents' Father Occupation		
Farming	73	36.5
Labourer	66	33.0
Govt./Private Servant	25	12.5

Businessman	25	12.5
Any Other	11	5.5
Total	200	100.0
Family Type		
Joint Family	127	63.5
Extended Family	15	7.5
Nuclear Family	58	29.0
Total	200	100.0
Monthly Family Income in PKR		
5,000-10,000	26	13.0
10,001-20,000	54	27.0
20,001-30,000	54	27.0
30,001-40,000	26	13.0
40,001-50,000	17	8.5
51,000-60,000	6	3.0
60,000 and above	17	8.5

Association of Economic Factors with Child Marriage Practice (Controlling Gender)

Table 3 represents multivariate analysis which unveils the correlation of economic factors as contributing factors for child marriage in the prevalent society. Results of the descriptive statistics depict that more than half of the female respondents (57.1%) agreed with economic incompetence as contributing factor of child marriage practice. In addition, more than two-thirds (78%) of the male respondents were agreed with economic incompetence as determining factor of child marriage practice in the study area. Furthermore, for the female participant, the chi-square value derived from the statistical analysis among economic factors and child marriage shows a highly significant ($p = 0.000$). Besides, for male respondents, the aforementioned variables were found only significant ($p = 0.001$). Likewise, the table as a whole disclosed that economic factors significantly contributed to the phenomena of child marriage practices ($p = 0.000$). Thus, it could be inferred from the aforementioned findings obtained from the chi-square statistic that disclosed a spurious correlation for both genders.

Table 3: Association of Economic Factors with Child Marriage Practice (Controlling Gender)

Gender Control Variable	Economic Factors	Child Marriage Practice				Statistics	Level of significance for the entire table
		Agree	Disagree	Don't know	Total		
Female	Agree	36(57.1%)	14(41.2%)	0(0%)	50(50%)	$x^2 = 21.489$ $p = 0.000$	$x^2 = 37.810$ $p = 0.000$
	Disagree	17(27%)	17(50%)	0(0%)	34(34%)		
	Don't know	10(15.9%)	3(18.8%)	3(100%)	16(16%)		
	Total	63(100%)	34(100%)	3(100%)	100(100%)		
Male	Agree	32(78%)	46(79.3%)	0(0%)	78(78%)	$x^2 = 18.545$ $p = 0.001$	
	Disagree	4(9.8%)	11(19%)	0(0%)	15(15%)		
	Don't know	5(12.2%)	1(1.7%)	1(100%)	7(7%)		
	Total	41(100%)	58(100%)	1(100%)	100(100%)		

Discussion

The main theme of the present study reveals around economic incompetence is a contributing factor for early child marriage practice in District Mohmand Khyber Pakhtunkhwa, Pakistan. The

findings of the study show that about half of the study participants were illiterate. Low literacy in the study area is attributable to the scarcity of schools or long-distance educational institutions in the research site. Besides the prevailing culture is also one of the hinders to getting an education as the normative system mainly emphasizes earning rather than educational attainment. Moreover, in tribal areas of Pakistan female education is considered against the honor of the family. Thus the ignorance of the local community contributed to the practice of child marriage in these communities. These findings are also supported by Davis et al. (2013) that education broadens choices and surge employment opportunity for the individual as well as increases human rational and cognitive skills for taking decision for their comfort. Some previous studies disclosed that majority of the young bride is not enrolled in schools and most of them are ignored in decision making which significantly decreases their financial skills (Malhotra et al., 2011; Vogelstein, 2013). Besides, the findings of the study also demonstrated that farming is one of the dominant professions in the research area because of inaccessibility to other business activities and main dependency on agricultural land. Moreover, majority of the study participant was living in the joint family system. Taking together the above results it could be concluded that people having the responsibility of large family and low family income along with limited sources of business are mostly wed their children in their early ages for lighting the economic liability. Slimier findings are also explored by Parsons et al. (2015) that child marriage is mostly practiced for financial transactions. Furthermore, the relationship between economic factors and child marriage was found highly significate. These findings are closely in line with the previous work of Senderowitz (1995) that majority of Pakhtun families in Pakistan's Khyber Pakhtunkhwa are eager to marry their children at a young age in order to alleviate the family's financial burden.

Conclusions and Recommendation

Child marriage is a worldwide challenge that jeopardizes the human rights, lives, and health of children, especially among girls and their children. In South Asia and Africa, it is fairly frequent. Child marriage is a serious issue in Pakistan, as it is in many other nations. Like other parts of the former FATA, the Mohmand tribe's lineages and clans administer their affairs according to customary rules and unwritten codes. The socio-economic indicators in the Mohmand area, which is the focus of the current study, are severely poor as a result of the aforementioned issues. The study discovered that young children, predominantly females, are victims of child marriage in the study area. Due to a multitude of economic difficulties, child marriage continues to exist in the study universe. In addition, participants in the research region highlighted economic dependency of young children, family economic difficulties, and marriage offers from richer households as economic reasons for child marriage. Child marriage is more common among labourers and landless farmers, as well as the poorest households, than among the wealthy, and in larger homes than in smaller ones, as per the respondents say in this regard. Poverty is a major contributor to child marriage, as well as a poverty cycle that has been carried down through generations. Based on the previously mentioned stance, early marriage has a detrimental impact on boys' and girls' education, skills, and knowledge, and they have limited career opportunities and talents to assist their families in breaking the poverty cycle. As a matter of fact, efforts should be made to decrease the level of poverty in the study area, particularly in rural areas where child marriage is more prevalent than in urban areas, by providing alternatives to marriage, such as education, skill development opportunities, particularly for girls, and the provision of soft loans and cash transfer programs.

References

Ahmed, T. (2015). Child marriage: a discussion paper. *Bangladesh Journal of Bioethics*, 6(2), 8-14.

- Atif, K., Ullah, M. Z., Afsheen, A., Naqvi, S. A. H., Raja, Z. A., & Niazi, S. A. (2016). Son preference in Pakistan; a myth or reality. *Pakistan journal of medical sciences*, 32(4), 994.
- Bagahl, G. U., Khaskhelly, N., Shaikh, E. K. Z., & Sheikh, M. A. (2016). Empirical Analytical Study on Socio-Economic Factor of Early Marriages: A Case Study of Badin District, Sindh, Pakistan. *The Government-Annual Research Journal of Political Science.*, 5(5).
- Bank, W. (2017). *Uganda Economic Update, December 2017: Accelerating Uganda's Development, Ending Child Marriage, Educating Girls*. World Bank.
- Bank, W. (2020). Islamic Republic of Pakistan: Leveling the Playing Field. In: World Bank.
- Bhanji, S. M., & Punjani, N. S. (2014). Determinants of child (early) marriages among young girls: a public health issue. *J Women's Health Care*, 3(3), 1-3.
- Bunting, A. (2005). Stages of development: marriage of girls and teens as an international human rights issue. *Social & Legal Studies*, 14(1), 17-38.
- Chalasanani, S., Maksud, N., Cappa, C., Finnie, A., & Casey, J. (2021). Tracking progress and sharing learning: data and evidence dissemination as a critical contribution to ending child marriage. *Journal of Adolescent Health*, 69(6), S6-S7.
- Daraz, U., Naz, A., & Khan, W. (2014). Early Marriage: A Developmental Challenge to Women in Pakhtun Society. *FWU Journal of Social Sciences*, 8(1).
- Davis, A., Postles, C., & Rosa, G. (2013). *A girl's right to say no to marriage: Working to end child marriage and keep girls in school*. Plan Limited.
- Dillingham, B. W., & Isaac, B. L. (2011). *Defining marriage cross-culturally*. De Gruyter Mouton.
- Efevbera, Y., & Bhabha, J. (2020). Defining and deconstructing girl child marriage and applications to global public health. *BMC public health*, 20(1), 1-11.
- Fatusi, A. O. (2016). Young people's sexual and reproductive health interventions in developing countries: Making the investments count. *Journal of Adolescent Health*, 59(3), S1-S3.
- Gangoli, G., McCarry, M., & Razak, A. (2009). Child marriage or forced marriage? South Asian communities in north east England. *Children & Society*, 23(6), 418-429.
- Godha, D., Hotchkiss, D. R., & Gage, A. J. (2013). Association between child marriage and reproductive health outcomes and service utilization: a multi-country study from South Asia. *Journal of Adolescent Health*, 52(5), 552-558.
- Hashami, M. F. (2018). Early age marriage: A barrier for women's development in khyber pakhtunkhwa society. *IMPACT: International Journal of Research in Humanities, Arts and Literature*.
- Hotchkiss, D. R., Godha, D., Gage, A. J., & Cappa, C. (2016). Risk factors associated with the practice of child marriage among Roma girls in Serbia. *BMC international health and human rights*, 16(1), 1-10.
- Lemmon, G. T., & ElHarake, L. S. (2014). *Child brides, global consequences: how to end child marriage*. Council on Foreign Relations.
- Malhotra, A., Warner, A., McGonagle, A., & Lee-Rife, S. (2011). Solutions to end child marriage. *Washington, DC: International Center for Research on Women*.
- Misunas, C., Erulkar, A., Apicella, L., Ngô, T., & Psaki, S. (2021). What influences girls' age at marriage in Burkina Faso and Tanzania? Exploring the contribution of individual, household, and community level factors. *Journal of Adolescent Health*, 69(6), S46-S56.
- Myers, J. (2013). Untying the knot. Exploring early marriage in fragile states. *World Vision*.
- Nour, N. M. (2006). Health consequences of child marriage in Africa. *Emerging infectious diseases*, 12(11), 1644.
- Oppenheimer, V. K. (1997). Women's employment and the gain to marriage: The specialization and trading model. *Annual review of sociology*, 23(1), 431-453.
- Parsons, J., Edmeades, J., Kes, A., Petroni, S., Sexton, M., & Wodon, Q. (2015). Economic impacts of child marriage: a review of the literature. *The Review of Faith & International Affairs*, 13(3), 12-22.

- Paul, P. (2019). Effects of education and poverty on the prevalence of girl child marriage in India: A district-level analysis. *Children and Youth Services Review, 100*, 16-21.
- Petroni, S., Steinhaus, M., Fenn, N. S., Stoebenau, K., & Gregowski, A. (2017). New findings on child marriage in sub-Saharan Africa. *Annals of global health, 83*(5-6), 781-790.
- Raj, A., Saggurti, N., Balaiah, D., & Silverman, J. G. (2009). Prevalence of child marriage and its effect on fertility and fertility-control outcomes of young women in India: a cross-sectional, observational study. *The lancet, 373*(9678), 1883-1889.
- Schaffnit, S. B., Urassa, M., Wamoyi, J., Dardoumpa, M., & Lawson, D. W. (2021). "I have never seen something like that": Discrepancies between lived experiences and the global health concept of child marriage in northern Tanzania. *PloS one, 16*(4), e0249200.
- Senderowitz, J. (1995). Adolescent health: reassessing the passage to adulthood.
- Smith, C. A., Stone, R. P., & Kahando, S. (2012). A model of women's educational factors related to delaying girls' marriage. *International Review of Education, 58*(4), 533-555.
- Smock, P. J., Manning, W. D., & Porter, M. (2005). "Everything's there except money": How money shapes decisions to marry among cohabitators. *Journal of Marriage and Family, 67*(3), 680-696.
- Sotirova, A., Koster, W., Miedema, E., Ajaz, N., Zaal, K. v., Durrani, W., . . . Kakal, T. (2020). *Child marriage in Pakistan: evidence from three development programs.*
- Stirnitzke, A. C. (2011). Transsexuality, marriage, and the myth of true sex. *Ariz. L. Rev., 53*, 285.
- Talukder, A., Hasan, M. M., Razu, S. R., & Hossain, Z. (2020). Early marriage in Bangladesh: a cross-sectional study exploring the associated factors. *Journal of international women's studies., 21*(1), 68-78.
- Ullah, A., Liqat Ali, H. A., Ali, H., Gul, S., & Tariq, M. (2020). The Ubiquitous Phenomena Of Dowry Practice And Its Relation With Women Prestige In District Swabi-Pakistan. *PalArch's Journal of Archaeology of Egypt/Egyptology, 17*(6), 14176-14189.
- Umer, S., Othman, Z., & Hassan, K. (2017). Traditional Marriages in Rural Balochistan: The Voice of Baloch Women.
- UNICEF. (2014). *Ending Child Marriage.*
- Vogelstein, R. B. (2013). *Ending child marriage: How elevating the status of girls advances US foreign policy objectives.* Council on Foreign Relations.
- Wahi, A., Zaleski, K. L., Lampe, J., Bevan, P., & Koski, A. (2019). The lived experience of child marriage in the United States. *Social work in public health, 34*(3), 201-213.
- Winkvist, A., & Akhtar, H. Z. (2000). God should give daughters to rich families only: attitudes towards childbearing among low-income women in Punjab, Pakistan. *Social Science & Medicine, 51*(1), 73-81. [https://doi.org/https://doi.org/10.1016/S0277-9536\(99\)00440-2](https://doi.org/https://doi.org/10.1016/S0277-9536(99)00440-2)
- Wodon, Q. (2016). Early childhood development in the context of the family: the case of child marriage. *Journal of Human Development and Capabilities, 17*(4), 590-598.
- Yaya, S., Odusina, E. K., & Bishwajit, G. (2019). Prevalence of child marriage and its impact on fertility outcomes in 34 sub-Saharan African countries. *BMC international health and human rights, 19*(1), 1-11.
- Yount, K. M., Crandall, A., Cheong, Y. F., Osypuk, T. L., Bates, L. M., Naved, R. T., & Schuler, S. R. (2016). Child marriage and intimate partner violence in rural Bangladesh: a longitudinal multilevel analysis. *Demography, 53*(6), 1821-1852.
- Zafar, M. (2021). Makran on top for under-18 girls' marriages. *The Express Tribune.*



The Determinants of Convexity in the Flow-Performance Relationship: A Study of Pakistani Mutual Funds

Saleh Nawaz Khan, Visiting Lecturer, Institute of Business Management and Administrative Sciences, The Islamia University of Bahawalpur, Pakistan

Javed Iqbal, Instructor, Govt. Sadiq Graduate College of Commerce, Bahawalpur, Pakistan

Shahid Amin, Assistant professor, Department of Commerce, The Islamia University of Bahawalpur, Pakistan

Atif Rafique, PhD Scholar, Institute of Business Management and Administrative Sciences, The Islamia University of Bahawalpur, Pakistan

*Corresponding author's email: sallehkhan@yahoo.com

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ABSTRACT

Purpose: This paper aims to study the potential sources of convexity in the flow-performance relationship curve in the Asian region.

Design/Methodology/Approach: The sample for this study includes 75 mutual funds from three broader investment categories: stock funds, balanced funds, and asset allocation funds. The data is collected from the financial reports of the respective funds from 2011 to 2020. The study employs the ordinary least square method on unbalanced panel data.

Findings: The findings show that the fund flows are positively associated with fund performance in the Pakistani mutual fund market. The result also confirmed that the shape of the relationship is convex. The fund size and marketing expenditures are positively associated with convexity. However, fund age does not affect the convexity. The Result also confirmed that fund rating is not an appropriate proxy for fund size.

Practical Implication- In period of low performance mutual fund management can retain their investors by increasing their marketing expenditures and fund size.

Originality/Value: This paper fulfills an identified need to study the sources behind non-linear flow-performance relationship curve in the Asian region. This study also aims to resolve the conflict in literature relating to the fund size on the convexity of the flow performance relationship.



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Introduction

Mutual fund flow and its relationship with performance remain the hot debate in the finance literature. The broad agreement is that the flow-performance relationship curve is convex. Chavelier & Elision (1997) and Siri & Tuffano (1998) were the first who observe the non-linear relationship between fund flow and performance. They found that good-performing funds get a substantial inflow in the subsequent period, whereas poor-performing funds suffer from minimal outflow in the subsequent period. But unfortunately, very few researchers paid attention to the sources behind this convex relationship. Only a few studies have identified potential sources behind this convexity in the flow-performance relationship. But some of the results of earlier studies are conflicting in nature. Siri & Tuffano (1998) and Huang et al. (2007) argued that fund size is an essential determinant of convexity in the flow-performance relationship curve. They argued that fund size is positively related to the convexity of the flow-performance relationship.

On the contrary, Jun et al. (2014) examined the flow performance relationship in the Chinese mutual fund market. They found no significant impact of fund size on the convexity of the flow-performance relationship. There is inconsistency in the literature relating to the size of mutual funds, which needs to be investigated further. So this study aims to resolve this inconsistency in literature by reexamining the role of fund size.

Besides this, most of the earlier studies have been done in developed countries. Ferreira et al. (2012) argued that we could not apply the research implications of the US to other regions of the world because of different investor sophistication levels. Siri & Tufano (1998) discussed the role of search cost and argued funds that spend substantially on marketing experience a more non-linear flow performance relationship. Marketing diverts the investors' attention from performance to other fund services and makes investors less sensitive about performance. So, according to them, high marketing positively impacts the flow-performance relationship.

Similarly, Huang et al. (2007) argued that high marketing reduces the participation cost for investors and makes investors less sensitive to performance. These high marketing expenditures make the flow-performance relationship convex. Navone et al. (2012) also argued that fund marketing expenditures are positively associated with the non-linearity of the flow-performance relationship curve. So, according to these authors, high marketing positively relates to the flow-performance relationship. Similarly, Chevalier & Elision (1997) and Huang et al. (2007) discussed fund age that is highly associated with the convexity of the flow-performance relationship. But unfortunately, these findings are only limited to developed countries. Thus, it is essential to re-interrogate the effect of fund marketing and fund age on the convexity of the flow-performance relationship in some developing countries. We hope that our findings will provide further empirical support to Chevalier & Elision (1997), Siri & Tuffano (1998), Huang et al. (2007), and Navone et al. (2012).

The paper is arranged as follows. The literature review is presented in the second section. The third section delves into the data and technique. Section four presents the study's findings, while section five concludes the study.

Literature Review

Chevalier and Elision (1997) were the first who tried to explore the reason behind this convexity. They selected a sample of 393 mutual funds obtained directly from Morningstar. They divided the funds into two categories: young and old. The Mutual fund between 2 and 5 years was categorized as a young fund, whereas funds with more than six years of age were classified as old funds. Their setting allowed them to study the associations between fund flow and performance in younger and older funds. They found a significant convex shape association between fund flow and performance. The fund increases its riskiness due to this convex relationship. They

found that fund manager increases risk in the fourth quarter to attain higher returns. They employed the semi-parametric model and found that the non-linearity in the relationship is associated with the fund's age. They found that fund flows in younger funds are more sensitive to performance. Investors in older funds are less sensitive to performance and stay with funds even in a period of low performance. It results in a non-linear flow-performance relationship. Howell (2001) argued that younger funds have more failure risk than older funds. This makes investors less sensitive about performance and wants to stick with older funds even in low performance.

Huang et al. (2007) present a coherent model that sheds light on the sensitivity of fund flows to past performance. They obtained the data from the CRSP database and found an asymmetric flow-performance relationship. While investigating the role of age on the sensitivity of fund flows, they also found a positive relationship. They argued that fund age is highly associated with the shape of the relationship. Navone et al. (2012) argued that older age funds are more visible to investors than younger age funds. They also found that fund age is positively associated with the non-linearity of the flow-performance relationship curve.

Sirri and Tuffano's (1998) contribution to this strand of literature is phenomenal. They put effort to shed light on the reasons behind this asymmetric flow-performance relationship. They explore several aspects behind this convex flow-performance relationship, and fund size is one of them. They selected 690 US equity funds and obtained this data from the investment company data institute (ICDI). They studied 20 years' time period from 1971 to 1990. They applied piecewise linear regression and measured relative fund returns. They thought that investors readily accessed rudimentary performance measures. Most of their analysis used crude consumer returns and risk measures. They argued that larger funds received a more significant flow and flow-performance relationship that is more pronounced in these funds. Larger funds are highly visible and more famous as compared to smaller funds. Larger funds offer higher services to their investors, diverting investors' attention from fund performance to these services.

Huang et al. (2007) examined the actively managed funds in three categories, namely aggressive growth, moderate growth, and fixed income. They classified funds into low, medium, and high performance and measured performance using a four-factor alpha model. They showed that information barriers are the important reason behind this convexity. Funds that have a lower information barrier observed a less convex flow-performance relationship. They argued that funds that are larger in size are usually highly visible and decrease the information barrier. Investor in larger funds bears no information cost, which increases in the case of smaller funds. When investors consider the information cost, they want to stick with larger funds even in low performance. On the contrary, Jun et al. (2014) investigate the flow-performance relationship in the Chinese mutual fund market. They used star funds as the proxy of fund size. Star funds usually have highly experienced management, so they become stars. They argued that star funds are generally more significant in size, so they can be used as a proxy of fund size. They employed the PLR regression estimation technique and found no significant impact of rating on the sensitivity of the flow-performance relationship.

Marketing also plays a key role in the investment decisions of the investors. Spitz (1970) was the first that highlight the role of sales and marketing in investing decisions. He studied the relationship between net flows and net performance in load and no-load funds. They studied 20 mutual funds from the period 1960 to 1967. Load funds were those that charge fees from the investors, and no-load funds do not charge fees. He applied a simple correlation test on current flow and current performance and found no correlation between them. He again took the first difference of both variables and found the same result. However, when he applied the multiple correlation test, he found three "no-load" funds were correlated, and one "load" fund was correlated. When he applied multiple correlations on current flow and current disposable income

to lagged net performance, he found four "no-load" funds were correlated, and two "load" funds were correlated. His findings showed that there are weak associations between fund flows and performance in load funds. This indicates that performance does not matter for investors in load funds, whereas in no-load funds, performance matters to some extent. A rational explanation for this behavior is that load funds sell their shares through sales organizations or underwriters and charge commission for selling them. Due to their marketing campaign and advice, people invest in those funds. Salesmen are prone to pushing certain funds and swaying potential investors' decisions. He concludes that fund sales and marketing influence the investor behavior more toward mutual fund investments rather than sole performance. Cupon et al. (1996) also argued that investors in load funds are usually less informed about their funds as compared to those who made the purchase directly from respective funds.

Sirri and Tuffano (1998) argued that mutual fund investors chase returns and flock to funds with the highest recent return while failing to leave the poor performance. This makes the flow-performance relationship convex. According to them, differential search cost is an essential reason behind this non-linearity. They argued that car sales do not solely depend upon the model and manufacturing. Some other factors also play an important role, such as brand name, advertisement, and distribution ability. Economists acknowledged that consumer purchasing decisions, whether for a car or for a fund, are complicated by the phenomena of costly search. Mutual funds that belong to larger families and get more media considerations usually grow more quickly as compared to others. The flow performance relationship is more visible in funds with greater marketing efforts. This substantial marketing reduces the search cost borne by the investors. However, the investor faces this search cost in funds with less marketing effort. They measured fund marketing effort by using a proxy of fund expense ratio. They assumed that higher expenses are usually charged for higher fund marketing. They found a positive coefficient on the interaction term (high total fees * low performance). This indicated that marketing effort makes investors less sensitive to performance. Thus, higher fee funds are less performance-sensitive due to their higher marketing efforts.

Similarly, Huang et al. (2007) discussed the role of participation cost in explaining the convexity of the flow-performance relationship. They showed funds that reduce their participation cost make investors less sensitive to performance, and only a medium level of performance is sufficient to attract new inflows. They argued that investors faced participation costs while searching for investment companies and funds that reduced their participation cost, making investors less sensitive about performance. Investors bear two types of participation costs: (1) Information cost and (2) transaction cost. Funds that spend a substantial amount on marketing can reduce the information cost. For example, a high-profile, well-known fund (such as Fidelity Magellan) has no information barrier, and the most investor wants to stay in the fund even with mediocre performance. On the other hand, a small no-name fund has a very high information barrier, especially for unsophisticated investors. Thus, investors in these funds are more performance-sensitive. Funds can reduce participation costs through sales and marketing. They found that funds with more significant marketing and distribution efforts enjoy greater investor recognition, and lower performances are required for attracting new investors.

On the contrary, funds that spend the minimum on marketing require higher performance to attract new investors. Korkeamaki et al. (2007) examined the impact of advertisement on the mutual fund flows in the Finnish mutual market. Their unique data set allowed them to measure advertisement in monetary spending instead of using expense ratio. They found that neither past performance nor advertisement alone produced increased cash flows. However, they both together significantly affect the cash flows. Fund families that spend proportionally more on advertising receive higher cash flows and make investors less sensitive about past performance. Gallaher (2005) examined the effect of mutual fund family's strategic decisions on investor flow

into the family. He found that mutual fund cash inflows are a function of fund performance. He also observed that this relationship is convex and increasing for top-performing fund complexes. He reported a positive association between fund family flow and its relative levels of advertisement expenditure. Fund flows to mutual fund families are highly associated with load and 12b-1 fees. He showed that strategic fund decisions significantly affect the investor's flows to the fund family besides portfolio management decisions. Navone et al. (2012) also examined the role of marketing on the sensitivity of the flow-performance relationship. To measure the impact of marketing expenditures, they decomposed fees into two groups: marketing and non-marketing. They obtained data from the CRSP database from period 1992 to 2005. They also found that marketing expenditures are positively associated to the non linearity of the flow-performance relationship.

Data

Data is obtained directly from the financial statements of the respective funds covering the period from 2011 to 2020. The geographical location covered in this study is Pakistan. There are three main reasons for selecting this geographical location. First, many studies have been done in European countries, but our knowledge about this area is very limited in Asian countries, which needs to be investigated. Secondly, Pakistani mutual funds have shown tremendous growth in the last two decades. It was only 0.31 billion of net assets in 2001, which are 662 billion in 2020 (ICI factsheet, 2020). A lot of Pakistani mutual funds are in the top 100 mutual funds. In 2013, out of 42 Asian mutual funds, 15 were from Pakistan in the list of the world's top 100 best performing funds (Thomson Reuters Lipper, 2013). Thirdly, the Pakistani equity market is interrelated with many emerging markets, particularly Nepal, India, Sri Lanka, and Bangladesh (Kapoor et al. 2013; Narayan et al., 2004). So, this can prove the best representative of emerging countries in Asia. The sample comprises 75 mutual funds divided into three broader fund categories: equity fund, asset allocation fund, and balanced fund. To evade the impact of outliers, we have deleted funds that have aged less than one year. We have also deleted funds whose asset under management is less than 100 million and more than 10000 million in our sample.

Empirical Methodology

Several performance measures have been used by academic researchers. But most of the studies used relative performance measures by using raw returns. Patel et al. (1994) argued that investors focus more on raw returns as compared to risk-adjusted returns and care more about ranking rather than absolute performance. We also used relative performance measures in our study. To measure fund performance ($RK_{i,t-1}$), we computed percentile using raw return. Percentile return represents fund performance relative to other funds, ranging from 0 to 1. One represents the top-performing fund, and zero represents the poor-performing fund. We also compute the square performance return measure ($SQRK_{i,t-1}$) by taking the square of the percentile return ($RK_{i,t-1}$).

In the literature, fund flows are measured in a similar manner. Sirri & Tuffano (1998) defined fund flow as a net change in total net assets adjusted for fund returns over a year. Many researchers have adopted the method of Sirri & Tuffano (1998) to date. It is estimated as follows:

$$(I) \quad Flow_{i,t} = NTA_{i,t} - NTA_{i,t-1} \times (1 + R_{i,t})$$

Equation one measures a net capital flow and is defined as a rupees change in net total assets net of realized return. The left-hand side of equation one represents net flow to fund i in year t . $NTA_{i,t}$ is the net total assets of fund i in year t . $NTA_{i,t-1}$ is the previous year net total asset of fund i . $R_{i,t}$ is an annual return of fund i in year t . The second measure is percentage flow, which is the net flow measured in equation one divided by the net total asset at the end of the year $t - 1$.

$$Flow_{i,t} \% = Flow_{i,t} / NTA_{i,t-1} \quad (II)$$

$Flow_{i,t} \%$ is the percentage flow for the i^{th} fund in year t , $NTA_{i,t-1}$ is net total asset of fund i in previous year ($t - 1$). $R_{i,t}$ is the return of fund i in year t . We study the sources of the flow-performance relationship with two main specifications. In first specification we adopt a linear model:

$$Flow_{i,t} = \alpha_i + \beta_1(High) + \beta_2(High_RK_{i,t-1} * Dmv_Cvx_{k,i,t-1}) + \beta_3(Low_RK_{i,t-1} * DMV_Cvx_{k,i,t-1}) + \beta_{3-6} X_{i,t-1} + \mu_{i,t} \quad (III)$$

Where high and low are dummy variables, *High* (*Low*) takes the value 1 if the i^{th} fund is ranked in the top (below) 50 percent based on its performance in the year ($t-1$) and 0 otherwise. The term *Dmv* is the dummy variable it includes: *Older* is dummy variable that takes the value 1 if the fund age exceeded more than 5 years; otherwise, it takes 0, *Big* is a dummy variable that takes the value 1 if the fund asset under management NTA (as a proxy for fund size) is above than median and 0 otherwise, *High** is dummy variable that takes the value 1 if the fund rating (as a proxy for fund size) is above the median and 0 otherwise. *Large* is a dummy variable that takes the value 1 if the fund marketing is above the median and 0 otherwise. The term *Cvx* includes fund age, fund size, Fund rating (as a proxy for fund size), and marketing expenditure. Fund marketing expenditures are measured as expense ratio plus 1/7th of the front-end load ratio (Sirri and Tuffano, 1998 and Huang et al., 2007). Our primary interest is in the coefficient of term ($Low_RK_{i,t-1} * DMV_Cvx_{k,i,t-1}$). Suppose the coefficient is found to be positive and significant. In that case, it shows that funds flow is less sensitive to performance, and *Cvx* factor is an essential determinant of convexity in the flow performance relationship. We adopt the quadratic regression model in the second specification by following Navone et al., 2012. This model introduces the square performance term in the regression model. Then we interact *Cvx* factor with square performance rank to capture the effect of *Cvx* on the sensitivity of the flow-performance relationship curve. It is estimated as follows:

$$Flow_{i,t} = \alpha_i + \beta_1(RK_{i,t-1} * Cvx_{k,i,t-1}) + \beta_2(SQRK_{i,t-1} * Cvx_{k,i,t-1}) + \beta_{3-6} X_{i,t-1} + \mu_{i,t} \quad (IV)$$

Here we are interested in the coefficient of the term ($SQRK_{i,t-1} * Cvx_{k,i,t-1}$), which measures the sensitivity of fund flows with fund age, fund size, fund rating, and fund marketing expenditures. If the coefficient is found positive and significant, then it shows *Cvx* factor is an essential determinant of convexity in the flow-performance relationship

Result & Discussion

Table 4.1: Convexity in the flow performance relationship

Dependent Variable:	Flow % (1)		Flow in million (2)	
	Coefficients (1)	Coefficients (2)	Coefficients (3)	Coefficients (4)
$Rk_{i,t-1} * High_{i,t-1}$	3.12 * (0.94)(3.29)		1415 (567)(2.49)	
$Rk_{i,t-1} * Low_{i,t-1}$	0.89** (0.53)(1.67)		1154* (694)(1.66)	
$\beta_1 - \beta_2 = 0$ (Wald test)	2.23 (0.78)(2.85)		261 (815)(0.31)	

SQRK_{i,t-1}		0.55** (0.24)(2.22)		530** (268)(1.97)
Front end load X₁	-0.04 (0.05)(-0.92)	- 0.08 (0.05)(-1.39)	-9.23 (39.2)(-0.23)	-40.24 (41.02)(-0.98)
Expense Ratio X₂	-0.10*** (0.03)(-3.33)	-0.09*** (0.02)(-3.34)	-26 (18.4)(-1.42)	-5.93 (17.13)(-0.34)
Management fee X₄	0.19 (0.22)(0.86)	0.40*** (0.15)(2.62)	55.1 (149)(0.36)	400*** (103)(3.86)
Total Net assets X₆	0.0001*** (3.07)(3.53)	9.01*** (2.96)(3.04)	0.36*** (0.06)(5.90)	0.34*** (0.06)(5.63)

Note: Dependent variable is fund net flow. $Rk_{i,t-1}$ is fund fractional rank which is based on fund performance relative to other funds. $SQRK_{i,t-1}$ is the square return performance that turns the relationship from linear to quadric. High and low are dummy variables in our regression model. High takes the value of 1 if the fund is in top 50 percent who perform well otherwise 0. Low takes the value of 1 if the fund is in bottom 50 percent who perform poor otherwise 0. X_1 to X_6 are control variables. *** represents 1 percent significant level, ** represents 5 percent significant level and * represent 10 percent probability level. The number reported in first parentheses is standard error and number reported in second parentheses is t-statistics.

Table 4.1 exhibits the relationship between fund flow and performance. We interact fund performance measure $Rk_{i,t-1}$ with dummy variable high and low. The interacting variable $Rk_{i,t-1} * High$ measures sensitivity of flow to fund performance in a good performing fund. Similarly, the interacting variable $Rk_{i,t-1} * low$ measures flow sensitivity to fund performance in poor-performing funds. We can clearly see that the investors in poor-performing funds are less sensitive to performance. One percent increase in return increases net flow to 0.89 percent, which is significant at a five percent probability level. However, investors in good-performing funds care more about performance. One percent increase in return increases net flow to 3.12 percent. But here, our main concern is in the difference between the coefficients ($\beta_1 - \beta_2$) of interacting variables. So, this study applied the Wald test and tested the proposition $\beta_1 - \beta_2 = 0$.

The Wald test rejects the proposition $\beta_1 - \beta_2 = 0$. It shows that investors do not respond to fund performance linearly for good and poor-performing funds. The difference between the coefficients β_1 and β_2 is positive. This implies that investors in good-performing funds are more performance-sensitive, whereas investors in poor-performing funds are less performance-sensitive. This indicates funds that perform well will get a larger net flow in the subsequent periods, whereas fund that performs poorly will suffer from smaller outflow in the subsequent period. This makes the flow-performance relationship curve convex.

We reexamine the convexity with the square performance return measure and find the same results for robustness. The coefficient of square performance measure ($SQRK_{i,t-1}$) is positive and significant at a 5 percent probability level. These results indicate that the flow-performance relationship curve is also convex in the Pakistani mutual fund market. Our findings are very similar to the developed countries (Smith, 1978; Ippolito, 1992; Chevalier & Elision, 1997; Siri and Tuffano, 1998; Fant and Neal, 2000; Guercio et al., 2002; Berk & Green, 2004; Ferreira et al., 2012; Bellando & Tran Dieu, 2011; Brborovic & Posedel, 2014; Mazur et al., 2017).

Table 4.2: Sources of the convexity in the flow performance relationship

Dependent Variable:	Fund Flow in Percentage %
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Independent Variable	Coefficients (1)	Coefficients (2)	Coefficients (3)	Coefficient (4)
<i>High_RK_{i,t-1}*Older_Age_{i,t-1}</i>	-0.02 (0.01)(-1.29)			
<i>Low_RK_{i,t-1}*Older_Age_{i,t-1}</i>	-0.05 (0.03)(-1.61)			
<i>High_RK_{i,t-1}* Big_Siz_e_{i,t-1}</i>		0.001** (5.76)(2.02)		
<i>Low_RK_{i,t-1}* Big_Size_{i,t-1}</i>		0.004*** (0.001)(4.23)		
<i>High_RK_{i,t-1}* high*_Rating_{i,t-1}</i>			0.096** (0.035)(2.74)	
<i>Low_RK_{i,t-1}* high*_Rating_{i,t-1}</i>			0.048 (0.028)(3.42)	
<i>High_RK_{i,t-1}* Large_MktExp_{i,t-1}</i>				0.02* (0.05)(0.41)
<i>Low_RK_{i,t-1}* Large_MktExp_{i,t-1}</i>				0.17*** (0.09)(1.91)
Front end load X ₁	-0.05 (0.05)(-0.98)	0.04 (0.04)(0.98)	-0.09** (0.16)(0.56)	-0.02* (0.06)(0.17)
Expense Ratio X ₂	-0.11*** (0.03)(-3.34)	-0.11*** (0.03)(-3.59)	-0.15** (0.08)(1.87)	-0.15*** (0.04)(-3.75)
Management fee X ₃	0.31 (0.22)(1.39)	0.22 (0.21)(1.04)	0.27 (0.15)(1.8)	0.29 (0.22)(1.30)
Total Net assets X ₄	8.63*** (2.95)(2.92)	9.01*** (2.96)(3.04)	7.45** (3.62)(2.05)	8.93*** (2.81)(3.18)

Note: Dependent variable is fund net flow in percentage. $Rk_{i,t}$ is fund fractional rank which is based on fund performance relative to other funds. High and low are dummy variables, *High* (*low*) takes the value of 1 if the *ith* fund is ranked in the top (below) 50 percent based on its performance in the year (*t*) and 0 otherwise. *Older* is dummy variable that takes the value of 1 if the fund age exceeded more than 5 years otherwise it takes 0. *Large* is a dummy variable which takes the value 1 if the fund marketing expenditures are above the median and 0 otherwise. X₁ to X₄ are control variables. *** represents 1 percent significant level, ** represents 5 percent significant level and * represents 10 percent probability level.

Table 4.2 presents the effects of some potential sources on the convexity of the flow-performance

relationship. The two interacting variables measure the flow sensitivity to fund performance with fund age effect, fund size effect, and fund marketing effect. First, interacting variables measure flow sensitivity to high-performing funds that are older in age, bigger in size, and have larger marketing expenditures. The second interacting variable measures flow sensitivity to low-performing funds that are older in age, bigger in size, and have larger marketing expenditures. Here our primary interest is in the coefficient of the second interacting variable. The coefficient of the term ($Low_RK_{i,t-1} * Older_Age_{i,t-1}$) is negative and non-significant, indicating that fund age does not make investors less sensitive to performance in the Pakistani mutual fund market. Contrary to the literature, we find a negative relationship between fund age and fund flow. This indicates older funds get smaller flow as compared to younger funds in the Pakistani mutual fund market (Chevalier & Elision (1997), Navone et al. (2012) and Huang et al. (2007). Younger funds usually have a larger growth opportunity that's why they receive larger flow as compared to older funds that have limited growth opportunities.

The coefficient of the term ($Low_RK_{i,t-1} * Big_Size_{i,t-1}$) is positive and significant. This indicates that funds with low performance but bigger in size still get fund flows in subsequent periods. This shows investors in low-performing funds that are larger in size are less sensitive to performance. But when we measured fund rating as a proxy for fund size, we could not find any significant relationship between fund size and convexity of the flow-performance relationship. The coefficient of term ($Low_RK_{i,t-1} * high_rating_{i,t-1}$) is positive but non-significant. Our findings support the argument put forward by Sirri & Tuffano (1998) and Huang et al. (2007). However, our finding does not provide support to the findings of Jun et al. (2014). This is because Jun et al. (2014) measured fund rating as a proxy for fund size, which is inconsistent in the literature.

The coefficient of the term ($High_RK_{i,t-1} * High_MktExp_{i,t-1}$) is positive, indicating that funds that have high performance and high marketing expenditures get positive flows in the subsequent period. This shows that high-performance funds spend a substantial amount on marketing to get larger flows in the subsequent periods. But here, our main concern is in the second interacting variable ($Low_RK_{i,t-1} * High_MktExp_{i,t-1}$), which is also positive and significant at a 5 percent probability level. This shows funds that have low performance but high marketing expenditures still enjoy larger flows in the subsequent periods. Thus indicating high marketing expenditure makes investors less sensitive about performance. Our findings support the argument put forward by Siri and Tuffano (1998), Huang et al. (2007), and Navone et al. (2012). They argued that higher marketing diverts investors' attraction from performance to other fund characteristics. This makes investors less sensitive to performance, and this is the sufficient condition behind this convexity.

Table 4.3: Sources of the convexity of the flow performance relationship: Robustness

Dependent Variable:		Fund Flow in percentage %		
Independent Variable	Coefficients (1)	Coefficients (2)	Coefficients (3)	Coefficient (4)
$RK_{i,t-1} * Age_{i,t-1}$	-0.006 (0.05)(-0.01)			
$SQRK_{i,t-1} * Age_{i,t-1}$	0.03 (0.05)(0.56)			
$RK_{i,t-1} * Size_{i,t-1}$		0.28**		

		(0.21)(1.31)		
$SQRK_{i,t-1} * Size_{i,t-1}$		0.001*** (6.90)(2.57)		
$RK_{i,t-1} * Rating_{i,t-1}$			0.56** (0.38)(1.47)	
$SQRK_{i,t-1} * Rating_{i,t-1}$			0.69 (0.84)(0.82)	
$RK_{i,t-1} * MKTExp_{i,t-1}$				0.27*** (0.11)(2.49)
$SQRK_{i,t-1} * MKTExp_{i,t-1}$				0.32 *** (0.13)(2.45)
Front end load X_1	-0.06 (0.07)(-0.98)	0.07 (0.08)(0.98)	-0.12** (0.13)(0.92)	-0.03* (0.06)(0.51)
Expense Ratio X_1	-0.10*** (0.03)(-3.39)	-0.11 *** (0.03)(-3.56)	-0.18** (0.08)(2.25)	-0.13*** (0.04)(-3.25)
Management fee X_3	0.32 (0.22)(1.44)	0.24 (0.21)(1.10)	0.26 (0.15)(1.73)	0.27 (0.22)(1.18)
Total Net assets X_4	8.78*** (2.90)(3.03)	9.01*** (2.96)(3.04)	6.48** (3.62)(2.05)	8.93*** (2.81)(3.18)

Note: Net Flow is the dependent variable. $SQRK_{i,t}$ is the square return performance thus, turns the relationship from linear to quadric. X_1 to X_4 are control variables. *** represents 1 percent significant level, ** represents 5 percent significant level and * represents 10 percent probability level. The number reported in first parentheses is standard error and number reported in second parentheses is t-statistics

Table 4.3 exhibit the robust results of some potential sources of non-linearity. For robustness, this study interacts square return with fund age, size, and marketing expenditures to capture the effect on non-linearity. The coefficient of the interacting term ($SQRK_{i,t-1} * Age_{i,t-1}$) is positive but insignificant. This also reconfirms that fund age does not turn the relationship into a quadric in the Pakistani mutual fund market. On the contrary, the coefficient of an interacting term ($SQRK_{i,t-1} * Size_{i,t-1}$) is found positive and significant. This implies that fund size turns the flow-performance relationship into a quadric in the Pakistani mutual fund market. But when we measured fund rating as a proxy for fund size, then this relationship was found linear. This also confirms that fund rating is not a correct proxy for fund size. The coefficient of an interacting term ($SQRK_{i,t-1} * MKTExp_{i,t-1}$) is also positive and significant. This also indicates that fund marketing expenditures turn the relationship into a quadric in the Pakistani mutual fund market. This confirms that marketing expenditures are an important determinant of convexity in the flow-performance relationship in the Asian region.

Conclusion

The mutual fund flow-performance relationship remains a hot debate in the academic literature.

The broad agreement is that this relationship is not linear in nature. The reason behind this convexity is still unclear. Few researchers have identified some potential sources of this convexity but the results are conflicting and also limited to the developed countries. This paper aims to study the flow-performance relationship in the Asian region. So, Pakistani mutual funds have been selected as a case study to represent this region. Pakistani mutual funds are growing at a rapid pace in the Asian region. It was only 0.31 billion of net assets in 2001, which are 662 billion in 2020. Most of the equity markets are also interrelated with the Pakistani equity market, so they can become the best representative of emerging countries. The sample comprises 75 mutual funds from three categories: equity funds, asset allocation funds, and balanced funds. The results exhibit that fund size is positively associated with convexity in the flow-performance relationship curve (Sirri & Tuffano, 1998; Huang et al., 2007). However, our findings do not provide support to Jun et al., 2014. This is because Jun et al., 2014 measured fund rating as a proxy for fund size, which is inconsistent in the literature. This study also found that fund marketing expenditures are positively associated with the convexity of the flow-performance relationship curve. This indicates fund marketing diverts investor attention from performance to other fund services. This makes investors less sensitive to fund performance. Finally, contrary to the literature on developed countries, this study does not find any effect of fund age on the convexity of the flow-performance relationship in the Pakistani mutual fund market.

Practical Implication for the Industry

1. The results indicated that fund size is an important determinant of convexity in the flow performance relationship. The study found that investors in larger funds are less performance sensitive. This means bigger size funds still get positive flows even in case of low performance. So asset management companies can retain their investors or attract new investors in period of poor performance by increasing the fund size. On contrary, smaller size funds only gets fund flows if they perform well because investors in smaller size funds are more performance sensitive.

2. Fund marketing is another important determinant of convexity in the flow performance relationship. The study found that funds that spend substantial amount on marketing make investors less sensitive to performance. Marketing diverts investor attention from performance to other fund services. The study found that funds that perform poorly but spend larger amount on marketing get positive flows in subsequent periods. Fund marketing reduces search cost borne by investors in case of smaller unknown funds. So asset management companies can retain their investors or attract new investors in period of poor performance through excessive marketing.

References

- Ahmed, Y., Sun, G. and Khan, W. (2018). The impact of Fund characteristic on Performance: Evidence in equity mutual funds in Pakistan. *City University Research Journal*, 8(2), 209-218.
- Barber, B. M., Huang, X. and Odean, T. (2016). Which factors matter to investors? Evidence from mutual fund flows, *Review of Financial Studies*, 29, 2600-2642.
- Bellando, R. and Dieu, L. (2011). Fund flow/performance relationship: A case of French equity market. *Revue économique*, 62(2), 255-275.
- Bergstresser, D. and Poterba, J. (2002). Do after-tax returns affect mutual fund inflows? *Journal of Financial Economics*, 63(3), 381-414.
- Berk, J. and Green, R. (2004). Mutual fund flows and performance in rational markets. *Journal of Political Economy*, 112(6), 1269-1295.
- Berk, J. and Tonks, I. (2007). Return persistence and fund flows in the worst performing mutual funds. *National Bureau of Economic Research*, Working Paper (w13042).
- Brborovic, D. and Posedel, P. (2014). The Relation between Performance and Flows of Mutual Funds: Case of the Croatian Fund Market. *Applied Mathematics*, 5(1), 3067-3078.

- Brown, S. and Goetzmann, W. (1995). Performance persistence. *Journal of Finance*, 50(2), 679-698.
- Chen, Q., Goldstein, I. and Jiang, W. (2008). Director ownership in US Mutual fund Industry. *The Journal of Finance*, 6, 2629-2677.
- Chevalier, J. and Ellison, G. (1997). Risk taking by mutual funds as a response to Incentives. *Journal of Political Economy*, 105(6), 1167-1200.
- Guercio, D. and Tkac, P. (2002). The determinants of the flow of funds of managed portfolios: Mutual funds vs. pension funds. *Journal of Financial and Quantitative Analysis*. 37(4), 523-558.
- Ferreira, M., Keswani, A., Miguel, A. and Ramos, S. (2012). The flow-performance relationship around the world. *Journal of Banking and Finance*, 36(6), 1759-1780.
- Gallaher, S., Kaniel, R. and Starks, L. (2006). Madison avenue meets wall street: Mutual fund families, competition and advertising. *Duke University*, Working paper 44.
- Gruber, M. (1996). Another puzzle: The growth in actively managed mutual funds. *The Journal of Finance*, 51(3), 783- 810.
- Guercio, D. D. and Tkac, P. (2002). The determinants of the flow of funds of managed portfolios: Mutual funds versus pension funds. *Journal of Financial and Quantitative Analysis*, 37(4), 523-558.
- Huang, J., Wei, K. and Yan, H. (2007). Participation costs and the sensitivity of fund flows to past performance. *The Journal of Finance*, 62(3), 1273-1311.
- Ippolito, R. A. (1992). Consumer reaction to measures of poor quality: Evidence from the mutual fund industry. *Journal of Law and Economics*, 35(1), 45-70.
- Jun, X., Li, M. and Shi, J. (2014). Volatile Market condition and investor clientele effects on mutual fund flow performance relationship. *Pacific-basic finance journal*, 29(1), 310-334.
- Khan, S. N. and Noor, A. (2020). Flow performance relationship: Evidence from Pakistani mutual funds. *Journal accounting and Finance in emerging economies*, 6(1), 145-154.
- Mazur, M., Shoshan, G. and Zagonov, M. (2017). Comparing performance sensitivity of retail and institutional mutual funds' investment flows, *Finance research letters* , 2017, 66-73.
- Nanda, V., Wang, Z. J. and Zheng, L. (2004). Family Values and the Star Phenomenon: Strategies of Mutual Fund Families. *Review of Financial Studies*, 17(3), 667–698.
- Sirri, E. R., and Tufano, P. (1998). Costly search and mutual fund flows. *Journal of Finance*, 53(5), 1589-1622.
- Spitz, E. (1970). Mutual fund performance and cash inflows. *Applied economics*, 2(2), 141-145.
- Zheng, L. (1999). Is money smart? A study of mutual fund investors' fund selection ability. *The Journal of Finance*, 54(3), 901-933.
- Zitzewitz, E. (2006). How widespread late trading in mutual funds? *American Economic Review*, 96(2), 284-289.



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Women Empowerment Policy-2017 of Khyber Pakhtunkhwa, Pakistan; Formation, Annual Funds Allocation, and Implementation Gap Analysis

Shabana Gul, Assistant Professor, IMSciences, Peshawar, Pakistan

***Javed Iqbal**, Assistant Professor, IMSciences, Peshawar, Pakistan

Adnan Javed, Lecturer, University of Houston Downtown

*Corresponding author's email: Javed.iqbal@imsciences.edu.pk

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ABSTRACT

Purpose: The government of Khyber Pakhtunkhwa (KP) launched Women Empowerment Policy (WEP) in 2017, the policy was based on the Women Empowerment Policy Framework (WEP-Framework) of 2014. Several policy interventions were planned to be achieved during the five-year implementation of WEP-2017.

Approach: This study aimed to analyze WEP-2017 from three distinct perspectives: 1) the formation of WEP-2017 as a strategic policy document focusing on the analysis of the identified key performing areas, the designed objectives, and the planned interventions/activities, 2) the linkage of WEP-2017 as a policy document with the annual fund's allocation of the govt. through annual development on gender mainstreaming interventions and 3) the implementation gap analysis of WEP-2017 by reviewing and comparing the post-2017 sectoral strategies of Agriculture, Education, Health, and Industry sectors with that of WEP-2017.

Findings: The study concluded that WEP-2017 objectives are non-quantifiable and specific, similarly no linkage between govt. funds allocation with WEP-2017 schemes was determined.

Value: The mentioned factors along with lack of advocacy and awareness within the govt. departments led to the non-achievement of the intended objectives of WEP-2017.



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Introduction

political, and social conditions and grow faster. If empowered to lead and become part of the formal economy, women make the institutions that they represent more effective. As a result, women's empowerment has become an important issue in the contemporary world (Bushra & Wajiha, 2015). Considering the effective role of women in the socio-economic development of countries, Governments and non-governmental bodies (UN Women, ILO, World Bank, etc.) both

develop policies for ensuring to provide the required conducive environment where women can play the expected effective role. Women constitute 51 percent of Pakistan's population, with a 22.7 percent representation in the labor force. The Constitution of Pakistan, Article 25 (2), makes it binding that there will be no discrimination based on sex. The government of Pakistan independently and in collaboration with international partners has developed several policies for improving the role and participation of women in its socio-economic development. The first national policy for the development and empowerment of women was launched in 2002, the same was followed up by a number of provincial and federal level policies e.g., Prevention of Anti-Women Practices Act, 2011, Prevention of Electronic Crimes Act, 2016, Punjab Women Empowerment Package 2016 (PWEP) and Punjab Women Development Policy, 2018, etc. These policies consider women's empowerment as a *process*, which is not fixed and non-linear, to achieve several directly and indirectly measurable outputs (Eyben, 2011). The women empowerment policies of Pakistan have divided the term "empowerment" into four dimensions i.e economic, political, social, and legal. Within each dimension, several interventions are planned e.g., institutional capacity building, awareness, and advocacy, revisions in sectoral policies, etc. aligned with the same national rhythm, the Government of Khyber Pakhtunkhwa (KP) developed a provincial level policy, "Women Empowerment Policy Framework" (WEP-Framework) in 2014. WEP-2014 was designed to empower women in all possible domains varying from politico-economic spheres, to socio-cultural and personal life domains. The stated goal was subdivided into economic empowerment, social empowerment, legal empowerment, access to justice, and political empowerment. In 2017, Women Parliamentary Caucus, Khyber Pakhtunkhwa (WPC-KP) reviewed the progress of the WEP framework-2014 to assert the policy's progress and identify gaps that lead to non-implementation of the policy. A consultative Pritt was access whereby stakeholders from civil society, development partners, legislative entities, administrative departments, and political representatives were taken on board for their respective inputs. After consultation, two major points were highlighted i.e lack of an implementation framework and lack of general awareness about gender mainstreaming and gender equity concepts and initiatives. The mentioned recommendations were taken into account and an implementation framework was designed that included inherent monitoring and reporting mechanics to keep track of all the advised interventions and targets for a period of three to five years. The revised document was titled "Women Empowerment Policy-2017" and was to be implemented from 2017 to 2022. The goal and major policy objectives remained the same as given in WEP-Framework 2014.

Objectives of the Study

This study aimed to analyze WEP-2017 from three distinct perspectives: 1) the formation of WEP-2017 as a strategic policy document focusing on the analysis of the identified key performing areas for ensuring women empowerment, the designed objectives and the planned interventions (activities), 2) the linkage of WEP-2017 as a policy document with the annual spending of the govt. on gender mainstreaming interventions and 3) the implementation gap analysis of WEP-2017 by reviewing and comparing the post-2017 sectoral strategies of Agriculture, Education, Health, and Industry sectors with that of WEP-2017. Thus, in simple words the study was designed to achieve the following objectives:

1. Analyze the formation and design of WEP-2017, focusing on its intended objectives, designed activities, and key performing areas (dimensions).
2. Analyze the provincial annual development plans (ADP) post-2017 for tracking the women empowerment schemes in the four prioritized departments i.e Agriculture, Education, Health, and Industry. The aim was to develop a link between WEP and departmental budget allocation, keeping ADP schemes as an indicator.
3. Analyze the Post 2017 sectoral strategies/policies of four prioritized areas i.e Agriculture, Education, Health, and Industry were reviewed. The aim of including the sectoral policies

was to assess the gender inclusivity in objectives and interventions in post-2017 sectoral policies and to assess the implementation gaps of WEP-2017.

Methodology

WEP-2017 has designed its major interventions for agriculture, health, education, and industry sectors therefore, the aforementioned sectors were shortlisted for analysis. For objective-I, Professor Robert S. Rubin's SMART goal setting criterion was used for analyzing WEP-2017.

For objective II, the study utilized secondary data extracted from annual development plans (ADP 2017 – 2021) for analysis. Apart from ADPs WEP-2017, sectoral policies of the four prioritized sectors were also reviewed. Whereas for objective-III sectoral strategies of the four prioritized sectors along with data on the completion of the assigned targets/tasks (in WEP-2017 to each of the four sectors) was collected from gender focal persons (appointed in each of the four prioritized sectors). A simple nominal scale form based on the assigned targets/tasks for each sector was developed for collecting the data from gender focal persons.

Women Empowerment Policy-2017: Formation and Design

WEP-2017 is an extension of WEP framework-2014 with an addition of the much-needed and well-elaborated implementation framework. There are four objectives of WEP-2017 that are further divided into four policy components; social empowerment, economic empowerment, political empowerment, legal empowerment, and access to justice. Each of the components is supported by respective policy prescriptions. Following is the summary of the objectives and policy components:

Table-1: Overview of WEP-2017 Objectives and Policy Components

Policy Objectives	Policy Components	
1. Create gender conducive socio-cultural, economic, political and legal environment 2. Inclusion of women empowerment policy into strategic planning and project cycle 3. Building and strengthening stakeholders' participation and partnership 4. Strengthening monitoring, evaluation, audit, data system and reporting to bridge the gaps.	Social Empowerment a. Access to quality health care to all women in rural and urban areas b. Maternal, Neonatal and Child Health (MNCH) and family counseling. c. Access to Quality educational improving d. Review the role of women in society for understanding their contribution and taking positive steps to promote their recognition. e. Affirmative action through advocacy f. Ensure women's citizenship rights	
	Economic Empowerment a. Employment and income generation opportunities for women in the formal and informal sector b. Remove inequalities and imbalances in all sectors of socio economic development	
	Political Empowerment a. Equal participation of women in all political processes b. Increase women's representation in all elective bodies and governance structures.	
	Legal Empowerment and Access to Justice a. Strengthen the legal systems to eliminate all forms of discrimination and violence against women and girls b. Ensure equitable laws and policies and their effective implementation for women and girls along with presence of affordable legal systems.	

Strategic planning requires setting S.M.A.R.T (Specific, Measurable, Attainable, Relevant, and Time-Bound) goals/objectives. S.M.A.R.T criteria of strategic planning ensure that goals are concrete and geared towards execution within the given period of time. The objectives of WEP-2017 are too broad and oftentimes overloaded. They aren't measurable either as no metric, or number, is assigned that could identify when the objective is achieved. Specific refers to a clear description of what needs to be accomplished whereas WEP-2017 activities are too generic and may qualify as general guidelines only e.g., amendment of prevailing laws in the light of prevailing circumstances via understanding the local culture and tradition and formulation of the ethics committee that will look into a number of issues e.g., corruption, whistleblowers, conflict of interest, etc. Few but not all the activities in WEP-2017 can be measured against its given

achievement marker/metric or a number e.g., ensuring women's political representation by increasing the political quota to 33 percent from 22 percent by the end of 2019 and extending of women harassment bill-2010 to the provincial assembly by 2018-2022, yet many rather almost all the activities given in the implementation framework are not assigned any quantifiable marker. However, the objectives are relevant to the broader concept of women empowerment yet lack relevance to particular areas of priority or focus.

Similarly, none of the WEP objectives are time bound as no end date is assigned rather are generically assumed to be completed within five years (2018 – 2022). The timeframe allocated to the majority of the activities is not realistic e.g., Engagement of the Gender Coordinator and the Monitoring and Reporting coordinator to support P&D in a frame of 06 months i-e from January 2018 – to June 2018, given the fact that the WEP implementation frame was finalized in the winters of 2017. Even to date i-e after 04 years a number of departments have not engaged gender focal persons. Some departments have assigned the Gender focal person positions to exist employees as an additional task. Similarly, very few know in concrete terms what are their TORs.

There are issues of departmental relevancy in the assigned activities/interventions e.g., the inclusion of a chapter in the nursing staff syllabus (chapter title-women protection at the workplace) is considered Health Department's responsibility as per WEP-2017, whereas it is not relevant to the health department but is covered by Pakistan Nursing Council, which is federal subject.

Furthermore, the implementation framework of WEP-2017 has listed several activities/interventions that were to be achieved within a specified period (2018 – 2022) by assigning respective departmental and provincial responsibilities. The framework is divided into five parts; Institutional Capacity Building for Policy Implementation, Social Empowerment, Economic Empowerment, Political Empowerment & Legal Empowerment, and access to justice. The five components are further divided into several priority areas and sub-divided into activities and interventions as follows.

Table-2: Number of Dimensions and Sub-Activities of WEP-2017

WEP-2017 Component	Dimensions	Activities and Interventions
Institutional Capacity Building for Policy Implementation	4	10
Social Empowerment	3	10
Economic Empowerment	4	11
Political Empowerment	3	13
Legal Empowerment and Access to Justice	8	18
Total	22	62

The five components are subdivided into a total of twenty-two dimensions i-e institutional capacity and policy implementation are further sub-divided into four distinct sub-categories/dimensions, social into three, economic into four, political empowerment has three sub-categories/dimensions, and legal has eight. The number of activities given in the third column represents the total number of interventions to be implemented across the respective five WEP components. Institutional capacity and policy implementation components' four dimensions are represented via ten interventions or activities, meaning ten activities spelled out in the implementation framework were designed to achieve the targeted four distinct dimensions of institutional capacity and policy implementation.

The given division of WEP-2017 components generates a paradoxical debating point, on one hand, each of the identified empowerment components is very comprehensive by nature,

therefore its division into three, four, or even eight sub-categories seem to be an under-representation, yet on the other hand, a total of twenty-two sub-dimensions in a single policy document seems to be a very broad scope from implementation and coordination perspective. Similarly, the under-representation of each sub-category into five, six, or even thirteen activities is under-representation categorically, but in totality completing 62 different interventions/activities over five years (policy implementation period) appears to be a challenge in its own given space. At first glance, the division of the dimensions and planned interventions/activities seem to be very crisp but once the responsibilities of the planned 62 activities are looked into the entire picture loses its clarity. The planned 62 activities were to be achieved by a total of nineteen (19) departments and autonomous bodies (including the provincial parliament). Coordination among 19 departments and autonomous bodies about the infant concept was the biggest challenge of WEP-2017.

All the activities/interventions of WEP-2017, can be divided into five Key Result Areas (KRAs) i-e the respective 62 activities under the given five (05) components of WEP-17 correspond to the following key result areas:

- Capacity Building
- Operational Level Interventions
- Policy Level interventions (Revisions in objectives)
- Advocacy and Awareness of WEP
- Assessment Studies for identifying challenges and key important areas for WE

The activities/interventions that focused on the capacity building of the govt. officials/aligned departments, and other stakeholders are clubbed together under the theme of the capacity building e.g., “Stakeholder’s consultation for developing an understanding of policy documents, capacity building of gender focal persons in all administrative departments and skill development of women farmers, etc. Activities and interventions that focused on taking actions were labeled as operational activities e.g., appointments of gender focal persons in all departments, appointments of ombudsperson for the ‘protection against harassment of women at workplace act 2010’, and allocation of a reasonable amount of human and financial resources to meet revised policy goals and targets, etc. Activities and interventions that were aimed at improving the general awareness about women empowerment and gender mainstreaming were put together under advocacy and awareness e.g. Awareness and advocacy campaigns for the public to orient them about governments policies, laws, and programs that are designed for women, and similar campaigns for orienting the general public about the role of women and their respective rights in both public and private spheres etc. whereas all the planned activities/interventions of WEP-2017 that pinpointed towards the conduct of assessment studies/ baseline assessments were labelled as assessment Studies for identifying challenges and key important areas for Women Empowerment e.g. “Conduct assessment studies in priority sectors to identify priority areas for service delivery to women, critical to improve their status in development process” and “Review all sectoral policies to identify gaps and integrate women empowerment guidelines with clear objectives and indicators” etc. The division of WEP-2017 activities/interventions within each theme provides an understanding of the primary focus of WEP-2017. The following table summarizes the number of activities/interventions within each theme

Table-3: Key Results Areas of WEP-2017

WEP-2017 Key Result Areas (KRAs)	Activities and Interventions	Representation %age
Capacity Building	04	06%
Operational Level Interventions	28	45%
Policy Level interventions (Revisions in objectives)	16	26%
Advocacy and Awareness of WEP	11	18%

Assessment Studies for identifying challenges and key important areas for Women Empowerment	03	5%
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For a country like Pakistan, where a comprehensive national-level policy on women empowerment is yet to be developed and general awareness about terms like women empowerment, gender equality and gender mainstreaming are in its infancy, WEP-2017 designed only 6% of its total activities on capacity building interventions and a meager 18% on advocacy and awareness. Majority of planned interventions i.e. 45% were at the operational level. Operational level interventions require financial allocation in addition for them to being time-bound. In the case of the WEP-2017 implementation frame, none of the planned activities or interventions is backed up by specific financial resources exclusively allocated for a particular activity or intervention. Operational level activities ideally, should stem from assessment and research studies. So, the need for an intervention, available resources, and prioritization of interventions is rooted in ground realities. In the case of WEP-2017, only three (03) planned activities were related to research studies.

Analysis of Provincial Annual Development Plans (ADP) (2018-2021)

The Annual Development Programme (ADP) is the instrument through which the Government of Khyber Pakhtunkhwa plans, executes, and monitors a significant proportion of development spending in the province (ADP Policy, 2019-2023). The 1st amendment in the ADP Policy of the Govt. of KP (2019-2023) considers ADP as “a reflection of the short-term vision and priorities of the Government of Khyber Pakhtunkhwa” (page1). Thus, ADP can be considered a quantifiable image of the government’s approved strategies and policies. As mentioned in the review of WEP-2017, almost 45% (28 activities of the total 62) of WEP activities are at the operational level, demanding action. Since any and every action (schemes/projects) requires financial allocations for completion therefore it was considered essential to review post-2017 ADP schemes to generate evidence on Govt. of KP’s seriousness in mainstreaming women's development agenda. Since the approval of WEP-2017, Govt. of KP has successfully launched three ADPs; 2018-2019, 2019-2020, and 2020-2021. The ADP review aims to understand the nature of government funding in the context of WEP-2017. Therefore, post-2017 new projects and fund allocation in four priorities sectors (Agriculture, Education, Health, and industries) are analyzed. Following is a quick review of the new projects and fund allocation post-2017:

Table-4: Number of New and Ongoing KP-ADP Projects (2018-2021)

Year	Projects	Agriculture	Elementary & Secondary Education	Health	Industries	Total ADP Projects
2018-2019	Ongoing Projects	30	62	86	13	1384
	New Projects	10	8	18	4	
	Sectoral Total	40	70	104	17	
2019-2020	Ongoing Projects	28	52	73	13	1356
	New Projects	15	15	44	12	
	Sectoral Total	43	67	117	25	
2020-2021	Ongoing Projects	125	120	141	48	2462
	New Projects	8	40	42	16	
	Sectoral Total	133	160	183	64	

Whereas the allocation of funds is detailed as follows:

Table-5: Fund Allocation of New and Ongoing KP-ADP Projects (2018-2021)

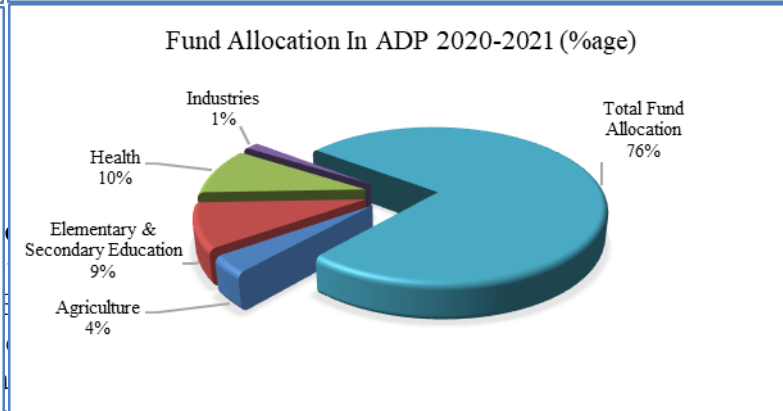
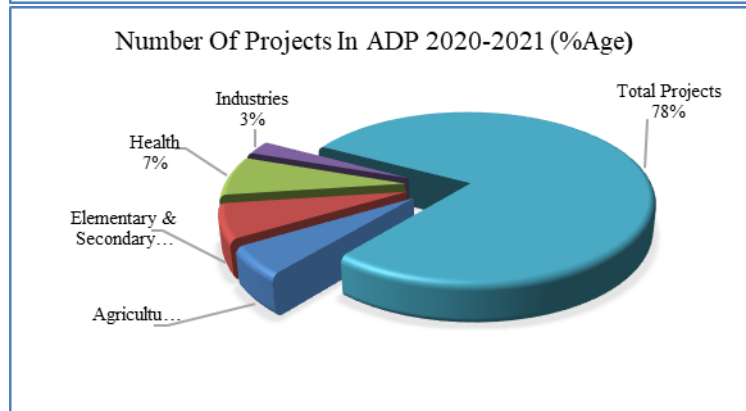
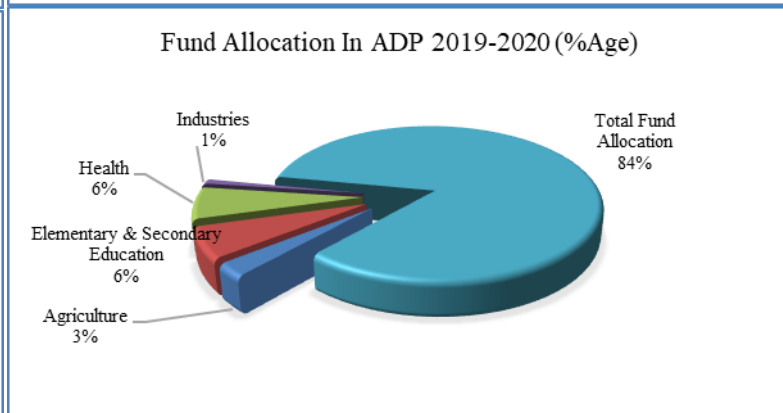
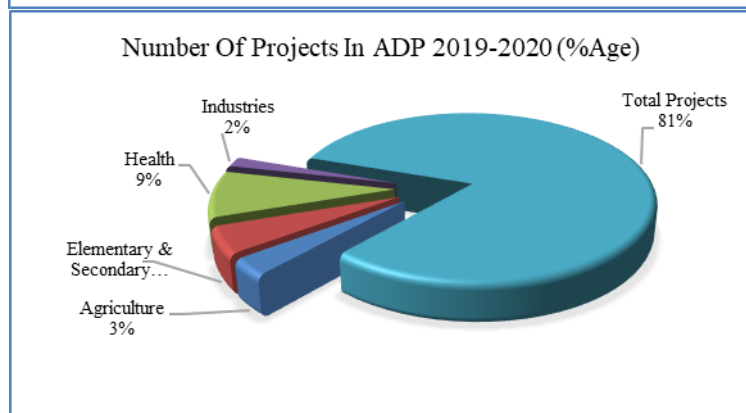
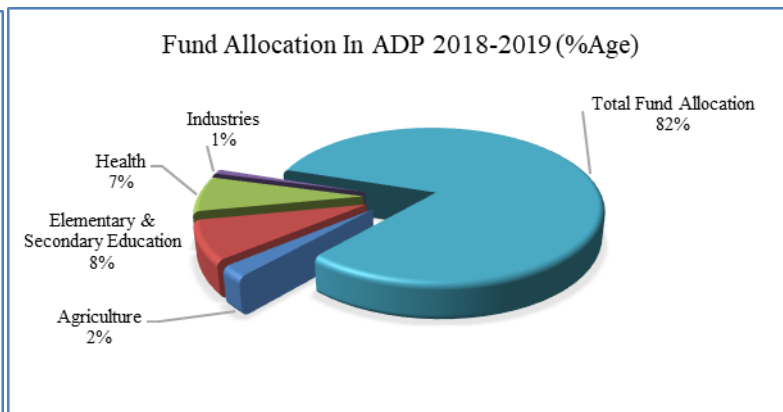
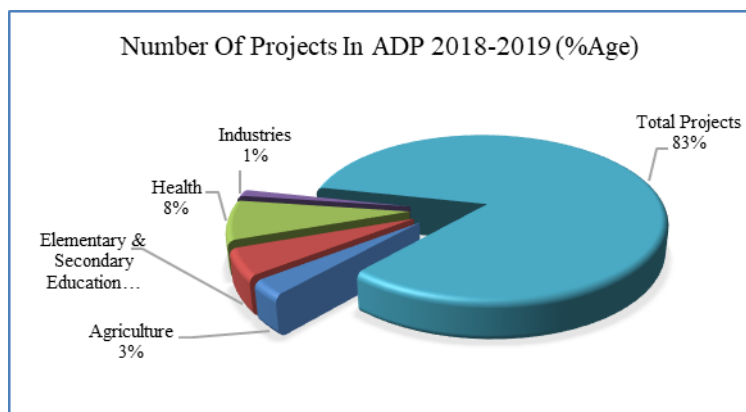
Year	Projects	Agriculture	Elementary & Secondary Education	Health	Industries	Total ADP Allocation
2018-2019	Ongoing Projects	2179.999	8466.977	7098.335	9	108900.000
	New Projects	355.001	260.003	779.665	22.499	
					105.501	

	Sectoral Total	2535.000	8727.000	7878.000	1028.000	
2019-2020	Ongoing Projects	1812.999	8606.520	8275.982	681.551	154000.000
	New Projects	2387.001	1091.480	1727.018	796.449	
	Sectoral Total	4200.000	9698.000	10003.000	1478.000	
2020-2021	Ongoing Projects	7500.998	18533.649	17429.442	2579.972	231857.000
	New Projects	719.002	2638.351	4751.558	763.028	
	Sectoral Total	8220.000	21172.000	22181.000	3343.000	

The following figures provide an overview of the table given above

Figure-3: Sectoral number of Projects in ADP Projects out of Total ADP (2018-2021)

Figure-4: Sectoral Funds Allocation in ADP Projects Out of Total ADP (2018-2021)



allocations with that of WEP-2017 sectoral objectives.

Agriculture Sector

WEP-2017 has comprehensively discussed the role of the agriculture sector in the economic empowerment of women and as a result, had designed several operational level activities/interventions. Following is the snapshot of the agriculture sector’s operational level activities/interventions extracted from WEP-2017

Table-6: Agriculture Sector's Operational Activities and Interventions in WEP-2017

Dimension	Activities	Time Frame
Integration of WEP'17 into policies and actions	Programs/projects initiated and designed to build skills of women farmers	2018 -2022
	Programs designed and initiated for women farmers for access and provision to information and technology	2018 -2022
	Programs designed and initiated for women farmers to connect women, farmers, to market channels	2018 -2022
	Programs designed and initiated to ensure easy availability of inputs (fertilizers/seeds etc.) for women farmers	2018 -2022
	Assessment studies were conducted to identify priority areas for service delivery to women, critical to improving their status in the development process	2018 - 2019

Source: Extracted from the Implementation Framework of WEP-2017

These identified activities give an overall direction for what needs to be done, for empowering women related to the agriculture sector, in a time frame of 05 years. The following extract from Agriculture Sector's ADPs (2018-2021) shows that 3 new projects have been started in the 2019-21 period. Projects dealing exclusively with women empowerment are a mere 1.5% of the total agriculture sector projects in 2020-21.

Table-7: Gender-Based Agriculture Sector No. of Schemes for Women Empowerment (WE)

Agri. Sector Number of Projects/Schemes in ADP	2018-2019	2019-2020	2020-2021
New Projects	10	15	8
WE Based projects	0	1	2
% of WE projects out of new projects	0	6.67%	25%
% of WE projects out of total Sector Projects	0	2.32%	1.5%
% of WE projects out of total ADP Projects	0	0.073%	0.081%

Out of the total new allocations over the three ADPs, there is a stark increase in allocations for women empowerment projects. Yet out of the total sector allocations, these projects amount to only 4.17%.

Table-8: Gender-Based Agriculture Sector Funds Allocation for Women Empowerment (WE)

Agri. Sector Funds Allocation in ADP	2018-2019	2019-2020	2020-2021
New Allocation (Million Rs.)	335	2387	719
WE Based Allocation (Million Rs.)	0	70	343
% allocation for WE out of new projects	0	2.93%	47.71%
% allocation for WE out of Total Sector Allocation	0	1.66%	4.17%
% Allocation for WE out of Total ADP	0	0.045%	0.147%

There is a consistent increase in the past three ADPs for newer schemes to have women empowerment embedded into them while allocations show an upward direction.

Elementary and Secondary Education (E&SE)

For the E&SE department, the WEP proposes the inclusion of material in textbooks related to the protection of women against gender-based violence and assessment studies to identify service delivery to women. Table 12 suggests that 8 new projects have a clear link to these two prescriptions of WEP. In terms of financial allocations, new women empowerment projects have been allocated 7.7%, 6.2%, and 2.7% respectively for 2017-18, 2018-19, and 2020-21 (table 13), showing a declining trend.

Table-9: E&SE Sector's Operational Activities and Interventions in WEP-2017

Dimension	Items	Time Frame
Integration of	The department has included the women protection against violence	2018 – 2019

Women Empowerment policy into policies and actions	chapter in Grade 9-12 of the KP Text Book Board	
	The department is working on including the women's protection against violence chapter in Grade 9 12 of the KP Text Book Board	
	Assessment studies were conducted to identify priority areas for service delivery to women, critical to improving their status in the development process	2018 - 2019
	The department has integrated WEP based activities and interventions into its plans/ policies /strategies developed post-2018	

Table-10: Gender-Based E&SE Sector Number of Schemes for Women Empowerment (WE)

E&SE Sector Number of Projects/Schemes in ADP	2018-2019	2019-2020	2020-2021
New Projects	08	15	40
WE Based projects	02	03	03
% of WE projects out of new projects	25%	20%	7.5%
% of WE projects out of total Sector Projects	2.85%	4.47%	1.87%
% of WE projects out of total ADP Projects	.0144%	0.22%	0.121%

Table-11: Gender-Based E&SE Sector Funds Allocation for Women Empowerment (WE)

E&SE Sector Funds Allocation in ADP	2018-2019	2019-2020	2020-2021
New Allocation (Million Rs.)	260.003	1091.48	2638.351
WE Based Allocation (Million Rs.)	20.00 (Grant not included i-e. 1796.020/-)	67.24 (Grant not included i-e. 1862.450/-)	72 (Grant not included i-e. 12.00/-)
% allocation for WE out of new projects	7.7%	6.2%	2.7%
% allocation for WE out of Total Sector Allocation	0.23%	0.69%	0.34%
% Allocation for WE out of Total ADP	0.018%	0.044%	0.031%

Health

Table-12: Health Sector's Operational Activities and Interventions in WEP-2017

Dimension	Items	Time Frame
Integration of Women Empowerment policy into policies and actions	Included women protection against violence chapter in the syllabus of nursing staff	2018 – 2019
	Assessment studies were conducted to identify priority areas for service delivery to women, critical to improving their status in the development process	2018 - 2019

Table-13: Gender-Based Health Sector No. of Schemes for Women Empowerment (WE)

Health Sector Number of Projects/Schemes in ADP	2018-2019	2019-2020	2020-2021
New Projects	18	44	42
WE Based projects	3	5	7
% of WE projects out of new projects	16.67%	11.36%	16.67%
% of WE projects out of total Sector Projects	2.88%	4.27%	3.83%
% of WE projects out of total ADP Projects	0.22%	0.37%	0.28%

Table-14: Gender-Based Health Sector Funds Allocation for Women Empowerment (WE)

Health Sector Funds Allocation in ADP	2018-2019	2019-2020	2020-2021
New Allocation (Million Rs.)	779.665	1727.018	4751.558
WE Based Allocation (Million Rs.)	80	50.001	1923.557
% allocation for WE out of new projects	10.26%	2.90%	40.48%
% allocation for WE out of Total Sector Allocation	1.02%	0.50%	8.67%
% Allocation for WE out of Total ADP	0.07%	0.03%	0.83%

Industries

Table-15: Industries Sector’s Operational Activities and Interventions in WEP-2017

Dimension	Items	Time Frame
Integration of Women Empowerment policy into policies and actions	Business incubation programs initiated at the micro-level (including in rural areas) to provide opportunities for women to engage in home-based cottage industries	2019-2020
	Assessment studies were conducted to identify priority areas for service delivery to women, critical to improving their status in the development process	2018 - 2019

Table-16: Gender-Based Industries Sector No. of Schemes for Women Empowerment (WE)

Industries Sector Number of Projects/Schemes in ADP	2018-2019	2019-2020	2020-2021
New Projects	4	12	16
WE Based projects	0	02	02
% of WE projects out of new projects	0	16.67%	12.50%
% of WE projects out of total Sector Projects	0	8%	3%
% of WE projects out of total ADP Projects	0	0.15%	0.08%

Table-17: Gender-Based Industries Sector Funds Allocation for Women Empowerment (WE)

Industries Sector Funds Allocation in ADP	2018-2019	2019-2020	2020-2021
New Allocation (Million Rs.)	105.501	796.449	763.028
WE Based Allocation (Million Rs.)	0	200	200
% allocation for WE out of new projects	0	25%	26%
% allocation for WE out of Total Sector Allocation	0	14%	6%
% Allocation for WE out of Total ADP	0	0.13%	0.09%

Multi-Sectoral Development Projects

WEP-2017 has proposed several assessment studies for developing an understanding of the challenges faced in the empowerment process and strengthening institutional capacity (refer to table-5). Since a major portion of R&DD is covered in Multi-Sectoral Development (MSD) projects, thus, it was considered necessary to evaluate the multi-sectoral schemes given in ADP 2018-2019, 2019-2020, and 2020-2021. Following is the summary of WEP proposed MSD projects:

Table-18: Summary of WEP Proposed MSD Projects

Content	Description
No. of WEP-2017 Proposed MSD Projects	22
Nature of Proposed MSD projects	1. Awareness and Advocacy 2. Capacity Building 3. Assessment & Empirical Studies
Responsible Authorities, Departments & Partners (combination)	1. Govt. of KP 2. P&D, KPCSW, SW WED, and media and information department 3. KPEZDC and Labor department 4. Financial institutions, P&D, and the Government of KP 5. Labor department in coordination with relevant line departments 6. NADRA, Local government, Interior Ministry 7. ACS, P&D; Gender Coordinator

MSD sections of ADP 2018-2019, 2019-2020, and 2020-2021 were evaluated to analyze the

alignment of the ADP MSD section with that of WEP-2017. The following tables provide a summary;

Table-19: List of MSD Projects

Content		2018-2019	2019-2020	2020-2021
Total Number of New Projects		8	19	24
Total Allocation (Rs. in Millions; Foreign Funding Included)		521.916	22,312.899	3,881.245
Sub-Sector within MSD	No. of MSD Projects	4	5	11
	No. of R&DD	4	14	13
MSD Projects/Schemes related to Agriculture, Health, E&SE, and Industries		0	0	0
MSD Projects/Schemes aligned or inferred from WEP-2017		0	0	0

New projects within each ADP year were compared with that of WEP-2017 to understand the alignment between ADP and WP 2017. The analysis shows that a healthy 25% of the new schemes in 2018-19 may be termed as women empowerment schemes. However, there is a declining trend noted in 2019-20 and 2020-21 MSD schemes focusing on the women empowerment components as shown in the table below.

Table-20: Gender-Based MSD No. of Schemes for Women Empowerment (WE)

MSD Number of Projects/Schemes in ADP	2018-2019	2019-2020	2020-2021
New Projects	08	19	24
WE Based projects	02	04	03
% of WE projects out of new projects	25%	21%	12.5%

Table-21: Gender-Based MSD Funds Allocation for Women Empowerment (WE)

MSD Number of Projects/Schemes in ADP	2018-2019	2019-2020	2020-2021
New Allocation (Rs. in Millions; Foreign Funding Included)	521.916	22,312.899	3,881.245
Projects covering WE aspect Allocation (Million Rs.)	231.505	1,127.262	450.25
% allocation for WE aspect out of new projects	44%	5%	11.6%

Departmental Sectoral Strategies Analysis- the WEP Perspective

WEP-2017 in its “Institutional Capacity Building for Policy Implementation” component had assigned all departments the task of revising their respective existing and futuristic policies/strategies. The task was to include women empowerment indicators to the objectives and thematic areas of the sectoral scopes by 2018 and ensure that the revised women empowerment policies are converted/translated into Annual Development Program’s schemes. This section aims to review the sectoral policies of the four prioritized sectors to track the subscribed revisions. Overall, all four departments have shown considerable focus on women empowerment in their strategies yet we may conclude that most of the strategies are gender-neutral and need refinement in terms of a specific bent toward women empowerment. The following table shows the list of sectoral policies that govern the operations of the four prioritized sectors;

Table-22: Prioritized Sectors Sectoral Policies

Sectors	Policies List
Agriculture	Agriculture Policy Khyber Pakhtunkhwa, A Ten Year Perspective (2015-2025)
Elementary and Secondary Education	Education Blueprint 2018-2023
Health	Khyber Pakhtunkhwa Health Policy (2018-2025)
Industries	Industrial Policy 2020-2030 “Revised Industrial Policy for Khyber Pakhtunkhwa” Revival, Rehabilitation, Growth and Competitiveness (RRGC)

The review of the aforementioned strategies shows that none of the policies have included any exclusive gender mainstreaming or women empowerment-related objective and/or indicator.

Health Policy approved in 2020, however, has included a number of gender-inclusive indicators in its devised outcomes. The health policy included the provision of health services to the poor and vulnerable as one of the outcomes. The outcome is divided into 33 action points, 02 focusing on newborn survival; birth spacing and contraceptives supply, and availability of staff (especially female staff) for service delivery particularly in primary health care facilities in rural areas. Whereas, under the improved human resource management outcome, several initiatives were designed e.g. creating a women-friendly workplace in all departments and institutions that provide health facilities; specialized training about workplace harassment, violence at the workplace, workplace ethics, etc. the training was made mandatory for all employees; capacity development of nurses, LHVs and midwives were also prioritized. It may be summarily deduced that the health policy is generally gender-aware and attentive toward women's empowerment across different themes. Education Blue Print (2018-2023) chose seven key areas: 1) Reforming Primary Education; 2) Closing the gap in Secondary Education; 3) Partnering with the Private Sector; 4) Improving Education Management in the Districts; 5) Engaging the Community; 6) Special Reforms for the newly merged districts, and 7) Selected Special Initiatives. None of the given areas provides exclusive coverage to girls' education as issues related to access and quality appear to be seen from a gender-neutral perspective. The education blueprint's special initiative of sports, IT, and green school programs to appear gender-neutral.

Khyber Pakhtunkhwa Industrial policy (2020-2030) is divided into sixteen (16) objectives. "Break stereotypes about labor as a male activity and actively encourage women to participate in the industrial activities, workforce and benefit from the rewards and output of industrial activity" and "Direct efforts to encourage women and those from marginalized groups to participate in the workforce and contribute to the industrial growth" are the only objectives that appear to have an economic women empowerment angle.

Agriculture Policy Khyber Pakhtunkhwa, A Ten Year Perspective (2015-2025), has set three objectives: enhance sector productivity and competitiveness by activities such as improving the supply chain, technology dissemination, and trade promotion; address food security and incomes needs of the vulnerable sections of the population and targeted actions are needed to improve food security, reduce poverty and enhance the role of women; and Improve national resource management, adaptation to climate change and disaster risk management. The strategy is attentive to both economic and political mainstreaming of the women population as is clear from a paragraph under the "Addressing food security and needs of the vulnerable groups" section. The mentioned paragraph draws attention to the importance of gender mainstreaming but falls short of providing explicit, quantifiable steps for ensuring women's empowerment or mainstreaming.

Implementation Gap Analysis

A departmental level secondary data collection instrument based on the Key Result Areas (KRAs) of WEP-2017 was designed and data from 04 selected government departments were collected. Descriptive analysis was carried out to map the current implementation status of the KRAs of WEP-2017. A self-explanatory table given below provides details of the implementation of the targets.

Table-23: Overall WEP-Targets Response of Departments

Dimension	Task	Health	E&SE	Industries
Institutional Capacity Building	Gender Coordinator	No	No	No
	Monitoring and Reporting coordinator	No	No	No
	Number of Stakeholders workshops (policy understanding)	0	0	0

	Guidelines for integrating WEP	NONE	NONE	YES
	Capacity Building Programs	NONE	NONE	NO
Integration of Women Empowerment policy into policies and actions	Number of sector-specific reviews conducted to identify gaps and integrate women empowerment guidelines with clear objectives and indicators	Not Aware	None	None
	Number of revised women empowerment policies converted/translated into projects/actions in Annual Development Plans (ADPs)	None	None	None
	Several workshops were conducted or led by Gender Focal Points to guide and give input to the monitoring and reporting on the progress made on women's integration in sector-specific plans, resources allocation, progress, and achievement.	None	None	None
	List the Gender Impact Assessment (GIA) guidelines developed/integrated into projects	Not Aware	Not Aware	None
	List the number of women empowerment indicators added to the Objectives and thematic areas of the Strategic Development Partnership Framework	None	None	None
	List assessment studies conducted to identify priority areas for service delivery to women, critical to improving their status in the development process	Not Aware	None	None
Special Women Empowerment Initiatives Within the Department	The department has a functional workplace harassment committee operating under the 'Protection Against Harassment of women at workplace act 2010'	No	No	yes
	The department has implemented a policy with reference to the right to privacy at work in the department	No	No	Yes
	The department orients staff (all staff) regularly about the right to privacy at work	No	No	No
	The department has integrated WEP based activities and interventions into its plans/ policies /strategies developed post-2018	No	No	yes

Final Remarks

In the backdrop of the detailed review and analysis, the study has reached the following conclusive points:

- WEP-2017 lacks quantifiable objectives (comparison with S.M.A.R.T. criteria)
- WEP-2017 objectives are more of guidelines that may assist in devising a gender mainstreaming strategy but as objectives of a policy, the objectives are too broad and generic.
- The departmental responsibilities assigned to several activities in the implementation framework are overlapping within the defined functions of the assigned departments. Some of the activities in the implementation framework are assigned to irrelevant departments.
- None of the activity/intervention is backed up by financial resources exclusively allocated for that particular activity even though most of the designed activities are operational-level activities. The focus of the policy is on operational activities, ignoring the much-needed awareness and advocacy.
- Provincial ADPs that were developed post-2017 are not aligned with WEP-2017, thus the planned activities/interventions of WEP-2017 are not reflected in post-2017 ADP schemes.
- The concerned govt. departments are not aware of their respective responsibilities as assigned to them by WEP-2017. Labor Department has worked on a few of the assigned tasks and has completed them but not as per the assigned timelines.

References

- Agriculture Department Government of Khyber Pakhtunkhwa. (2015). *Agriculture Policy, Khyber Pakhtunkhwa, A Ten Year Perspective (2015-2025)*.
- Bushra, A., & Wajaha, N. (2015). Assessing the Socio-economic Determinants of Women Empowerment in Pakistan. *Procedia - Social and Behavioral Sciences*, 177, 3-8.
- Elementary & Secondary Education Khyber Pakhtunkhwa. (2018). *Education Blue Print (2018-23)*. Government of Khyber Pakhtunkhwa.
- Eyben, R. (2011). *Supporting Pathways of Women's Empowerment: A Brief Guide for International Development Organisations*. Brighton: Pathways of Women's Empowerment, IDS.
- Government of Khyber Pakhtunkhwa. (2017). *Women Empowerment Policy Khyber Pakhtunkhwa*. Zakat Ushr, Social Welfare, Special Education and Women Empowerment Department, Khyber Pakhtunkhwa.
- Government of Khyber Pukhtunkhwa. (2020). *Industrial Policy 2020-2030 "Revised Industrial Policy for Khyber Pakhtunkhwa" Revival, Rehabilitation, Growth and Competitiveness (RRGC)*.
- Health Department Khyber Pakhtunkhwa. (2018). *Khyber Pakhtunkhwa Health Policy (2018-2025)*. Government of Khyber Pakhtunkhwa.
- Planning and Development Department. (June 2018). *Annual Development Program 2018-19*. Government of Khyber Pakhtunkhwa.
- Planning and Development Department. (June 2019). *Annual Development Program 2019-20*. Government of Khyber Pakhtunkhwa.
- Planning and Development Department. (June 2020). *Annual Development Program 2020-21*. Government of Khyber Pakhtunkhwa.



Impact of Internal Corporate Governance Mechanism on Social Performance of Microfinance Institutions in Pakistan

Zahid Imran, PhD Scholar, Institute of Business, Management and Administrative Sciences (IBMAS), The Islamic University of Bahawalpur, Bahawalpur, Pakistan

* **Owais Shafique**, Assistant Professor and In-charge, Centre of Excellence in Inclusive and Sustainable Finance, Department of Islamic and Conventional Banking, Institute of Business, Management and Administrative Sciences, The Islamia University of Bahawalpur, Pakistan

*Corresponding author's email: owais.shafique@iub.edu.pk

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ABSTRACT

Purpose: The purpose of this research is to examine the impact of internal corporate governance mechanisms on the social performance of microfinance institutions of Pakistan.

Design/Methodology/Approach: A survey questionnaire was used to collect data. Data were collected manually and online (Google survey form). The data collected were analyzed through Smart PLS.

Findings: The results showed that board of directors, board meetings and frequency of board meetings as components of internal corporate governance mechanism have a positive and significant impact on the social performance of microfinance institutions of Pakistan.

Implications/Originality/Value: The originality and contribution of this study is that this is the first study that analyzed the impact of board of directors, board meetings and frequency of board meetings as a component of internal corporate governance mechanism on the social performance of microfinance institutions of Pakistan.



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Introduction

Microfinance institutions emerged five decades ago to empower the poor via microcredits in Bangladesh. Since then, microfinance intuitions have been increasing globally and offering various products and services to eradicate poverty and social development to achieve their financial and social goals. Now microfinance institutions have started to provide non-financial services to their clients and financial services. These non-financial services are children's schooling, agricultural education, health care services, technical aid, and specialized training to improve the environment and individual development. Provision of these non-financial services

is now part of microfinance institutions' environmental, social, and governance (ESG) performance.

The United Nations (UN) in 2015 launched SDGs (Sustainable Development Goals) that are total of 17 in numbers and out of the one goal is to reduce poverty to zero till 2030 (United Nations 2021b). The goal of poverty reduction also included eliminating dangerous poverty for all the people by ensuring equal access to financial and economic resources (United Nations 2021a). According to (World Bank 2020), extreme poverty has been defined as earning less than 1.90 Dollars daily.

According to Czura et al. (2022), the microfinance sector has served up to 140 million poor household borrowers worldwide who have been deprived of borrowing from the traditional banking system. According to Zamore et al. (2019), microfinance institutions are socially focused organisations committed to providing non-collateralized micro-credit to people of low income and SMEs who do not have access to finance in the formal banking system. According to Hevia and Neumeyer, 2020; and Loayza and Pennings, 2020, the literature shows that firms working in poor and developing countries have limited access to financial marketplaces.

According to Sulimany et al. (2021), a good corporate governance mechanism can play a vital role in the performance of microfinance institutions and in improving financial sustainability and share value of microfinance institutions. Corporate governance has become a topic of attention of educators, administrators and researchers over the many years. The literature revealed scant studies on corporate governance and its relation with share price and financial sustainability and microfinance institutions' financial, social and environmental performance. Therefore, in this study, different components of internal corporate governance mechanisms like the board of directors, board meetings and frequency of board meetings have been used to measure the social performance of microfinance institutions of Pakistan which have not been measured before.

Research Gap

Microfinance institutions have played a vital role in eradicating poverty, providing health and education to the deprived class of the community, and enhancing their standard of living. Few studies have been conducted in Pakistan to evaluate the performance of microfinance institutions. Still, no study has been made to examine the impact of internal corporate governance mechanisms on the social performance of MFIs in Pakistan.

The literature review found that there is a rare presence of literature on components of internal corporate governance like board education, board meetings, and CEO tenure and frequency of board meetings. Only one paper was found during the review, which mainly focused on board education, board meetings, and CEO-chairmanship duality. The focus of the internal governance mechanism is to enhance the internal monitoring and control of microfinance institution boards.

In addition, microfinance institutions have been studied widely regarding financial performance, but they gained little attention regarding social performance. According to CGAP (2013), the social performance of microfinance institutions is vital for achieving the social objectives of MFIs. Because of the scanty literature on the social performance of microfinance institutions, this study aims to measure the impact of internal corporate governance mechanisms (board of directors, board meetings and frequency of board meetings) on the social performance of MFIs of Pakistan.

Significance of the Study

This study is helpful for the regulators of MFIs to protect the rights and interests of shareholders of MFIs. First, this study makes an addition to the existing literature of corporate governance

mechanisms by discussing corporate governance mechanisms, their challenges and strategies for ameliorating corporate governance mechanisms in MFI's of Pakistan. Second, this study contributes to the literature by examining the board of directors, board meetings and frequency of board meetings as elements of internal corporate governance, which already have not been discussed. Third, according to the best of my knowledge, this is the first study investigating the impact of internal corporate governance mechanisms (Board of Directors, Board Meetings and Frequency of Board Meetings) on the social performance of microfinance institutions in Pakistan. Fourth, methodologically, this is the first study to examine the impact of internal corporate governance mechanisms on the social performance of microfinance institutions in Pakistan through primary data.

Literature Review

Internal Corporate Governance Mechanism

The internal mechanism of corporate governance includes characteristics of internal board directors, board independence, the board size, board committees, ownership types, gender diversity, CEO-chairmanship Duality internal stakeholders, chief executive officers, capital structure and internal auditing (Augustine et al., 2016; Dato et al., 2018). This study will include board of directors, board meetings, and frequency of board meetings as components of internal corporate governance.

Many studies have been carried out from the past few years related to finance, such as corporate governance mechanisms. So, ownership structure, corporate directors, board meetings, board diversity are the major issues regarding the corporate governance ([Fu, 2019](#); [Murtaza, Noor-Ud-Din, Aguir, & Batool, 2020](#)). A good corporate governance mechanism increases the shareholders' interest and boosts firm performance.

Board of Directors

Furthermore, Ehugbo (2021) investigated the relationship between corporate governance board features and the performance of microfinance institutions, concluding that board independence and the yield on MFI assets have a close and favourable relationship. The study also found a link between gender diversity and microfinance institution performance that is both unfavourable and substantial. The study also found that liquidity, board independence, and gender diversity of microfinance institutions have a positive and relevant association. It is also observed that in the board of microfinance institutions, the representation of women is deficient.

From the past studies, research by ([Tejerina-Gaite & Fernández-Temprano, 2021](#)) examined the role of board characteristics and firm performance of Spanish listed firms for the period 2005-2015. Findings of the study depicted that internal and external directors have a significant difference impact on firm performance. Whereas, inside directors' age has no significant impact and outsider's generation has a negative effect on firm performance. The following hypothesis is proposed based on the literature.

Hypothesis 1: The board of directors influences the social performance of MFIs in Pakistan.

Board Meetings

The corporate governance measures have been classified as traditional measures like non-executive board members, percentage of independent members and true board true measures like board independence, number of board meetings, board attendance, financial expertise of the directors, and age of directors. The researchers found that traditional board measures do not affect company performance, whereas true governance measures positively affect firm performance.

The literature demonstrates that board meetings can enhance the board's effectiveness, leading to control and monitoring of the team. Board effectiveness is examined by board meetings frequency. From the arrangement of corporate meetings, the board members can take many well-developed strategic and corporate decisions to increase the board's efficiency. It is stated that the numerous arrangements of the board meeting can control and monitor the team in a better way and minimise the operating liquidity. In contrast, the cost for the arrangement of board meetings is high as well as it also consumes more time of firms ([J. Khan & Rehman, 2020](#)). According to the literature, the following other hypothesis is proposed.

Hypothesis 2: The board meetings influence the social performance of MFIs in Pakistan.

Frequency of Board Meeting

Eluyela et al. (2018) investigated the link between the frequency of board meetings and the firm's performance. They discovered a link between the frequency of board meetings and company performance. The study also found a positive and negligible association between board size and firm performance, but a negative and significant relationship between firm size and company performance. The study also recommended that to make corporate governance effective, the management of the microfinance institutions should have to increase their frequency of meetings. There should be four meetings per annum. The study also argued that companies, success, efficiency and effectiveness are the results of the decisions of the corporate board of directors taking in their frequency of meetings.

There are mixed results of the board meeting and firm performance. Some studies find a positive relationship with Field (Francis, Hasan, & Wu, 2012), a study by Field (Jackling & Johl, 2009) finds an insignificant relationship between a board meeting and firm performance. While another study by ([Fich & Shivdasani, 2005](#)) find an inverse relationship between the frequency of board meetings and firm performance. The large number of frequencies of board meetings may lead to a decrease in the attendance of meetings by directors. Based on the literature on the frequency of board meetings, the following hypothesis is proposed.

Hypothesis 3: The frequency of board meetings influences the social performance of MFIs in Pakistan.

Corporate Governance and MFI Performance

There are mixed results about the corporate governance mechanism and MFI performance. Studies like (Thrikawala et al., 2016a, 2017; Wamba et al., 2018; Dato et al.2018) showed that the governance structure has a positive impact on the performance of microfinance institutions. Studies like (Van Damme et al., 2016) revealed that governance structure has both positive and negative impacts on MFI performance. On the other hand, studies like (Hartarska, 2009; Siwale and Okoye, 2017) found that there is no association between governance structure and microfinance institutions' performance.

Social Performance of MFI

According to (Agrawal & Hockerts 2021), one of the dimensions of measuring social performance is social outreach, which is how well microfinance institutions reach the base of poor clients. According to (Aslam et al. 2019; Laher & Proffitt 2020), better outreach can be achieved by having access to poorer clients that demand small loan sizes. It is the innovation that enables microfinance institutions to provide financial services to the poor who have been neglected by the traditional financial system (Milana & Ashta 2020).

In light of the literature mentioned above, it can be inferred that different governance dimensions significantly influence microfinance institutions' performance. South Asian countries are affected

by extreme poverty, but there is no association between governance and MFIs performance of Asian countries in the existing literature. In this study, we seek to fill the literature gap by using internal corporate governance mechanisms to determine the social performance of microfinance institutions in Pakistan.

Hypothesis 4: Internal corporate governance influences the social performance of MFIs in Pakistan.

Conceptual Framework

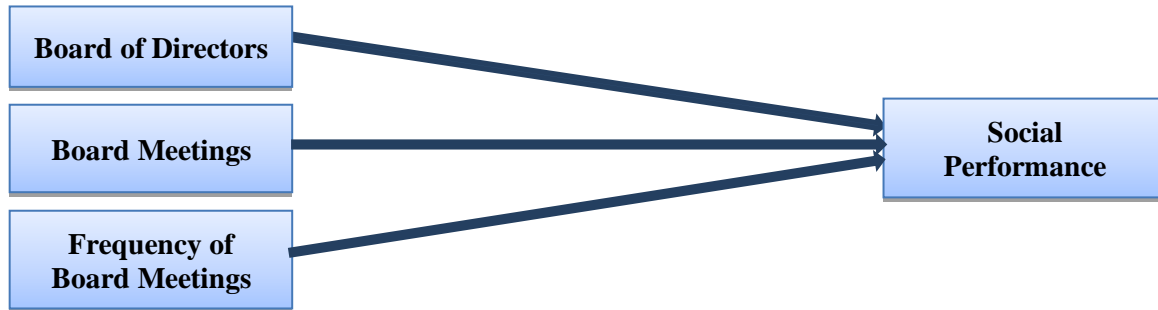


Figure 1 Model 1



Figure 2 Model 2

Methodology

Population

The study aimed to investigate the impact of internal corporate governance mechanisms on the social performance of microfinance institutions in Pakistan. So the population of this research was the staff of microfinance institutions working at top-level management, middle-level management, and lower-level management and at the non-managerial level of microfinance institutions of Pakistan.

Table 1: Variables and their Definitions

Abbreviations	Terms	Definitions
ICG	Internal Corporate Governance Mechanism	The internal mechanism of corporate governance includes characteristics of internal board directors, board independence, board size, board committees, ownership types, gender diversity, CEO-chairmanship Duality internal stakeholders, chief executive officers, capital structure and internal auditing (Dato et al., 2018; Mersland and Strøm, 2008)
BoD	Board of Directors	Board of Directors are responsible for monitoring and controlling of corporate affairs and are also responsible for strategic decision making of the organization.
BM	Board Meetings	According to Adams & Ferreira (2009), board meeting is the source of getting information about the company affairs that enable directors to use this information for performing of effective controlling and monitoring role.
FoBM	Frequency of Board Meeting	Firth & Rui (2012) described that directors activeness is perceived by the higher number of meetings held in a year.

SP	Social Performance	Social Performance is the effective translation of an institution's social goals into practice in line with accepted social values; these include sustainably serving increasing numbers of poor and excluded people, improving the quality and appropriateness of financial services, improving the economic and social conditions of clients, and ensuring social responsibility to clients, employees and the community they serve.
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Data Collection, Sample size and instrument

The data was collected through survey technique to investigate the hypothesized relationship among the variables as stated in the research model of the study. The data was collected through distributing questionnaires and through Google form. A total of 150 questionnaires were distributed manually, and only 117 responses were received. The response rate of respondents remained 78%. All other responses have been recorded through Google survey form. The sample size of 372 responses has been used for analysis. A sample size of 372 observations fulfill the both conditions of Cochran's sample size formula (i.e. 390) for unknown population and an average sample size of N=207 for PLS-SEM studies.

The questionnaire was based on six questions of board of directors and six questions of board meetings taken from the work of Ssekiziyivu et al. (2018); five questions of frequency of board meetings taken from the work of Jackson Ngure Wanjau (2007), and seven questions of social performance taken from the work of Garcia Perez et al. (2018).

Table 2: Construct and No of items

Construct	No of items in this research	References
Internal Corporate Governance		
Board of Directors	06	Ssekiziyivu et al. (2018);
Board Meetings	06	
Frequency of Board Meetings	05	Jackson Ngure Wanjau (2007)
Social Performance	07	Garcia Perez et al. (2018)

Data Analysis and Results

Data Analysis

The data collected was analysed by using Smart PLS software.

Results

Descriptive Statistics

Descriptive statistics provide information about gender, age, number of years in service, marital status, job position and educational level. The results showed that 76.4 % of respondents are male and 23.6% are female. 76.5% of respondents were married, and 23.5% were unmarried. 38.1% of respondents are up to 30 years of age, 42.6% are between 31 to 40 years, 13.2% are between 41 to 50 years, and 6.1% are 51 and above. Moreover, 20.8% of respondents have less than five years of work experience, 46.1% have between 6 to 10 years of work experience, 26.4% have between 11 to 20 years of work experience, and 7.2% have more than 21 years of work experience. 10.1% of respondents were top-level managers, 23.9% were middle-level managers, 31.1% were supervisory level employees, and 34.6% were non-managerial level employees. An analysis of the educational level of respondents revealed that 1.9% of respondents have an intermediate level education, 30.7% have bachelor's degree, 52.6% have master's degree, and 14.8% have M.Phil. and Ph.D.

Validity and Reliability of the Construct

Loadings, Cronbach's Alpha and Composite Reliability and average variance extracted (AVE) tests are used to measure the validity and reliability of the construct of the study. The minimum value of reliability for acceptance of the research construct is 0.70 for loadings, Cronbach's Alpha and Composite Reliability. While for the average variance extracts (AVE), the value should be 0.5 and above. If the values of the variables of the research construct are more than 0.70, then the research construct is accepted for study.

Table 3 shows that values of the loadings, Cronbach's Alpha and Composite Reliability of all variables are above 0.7 and the value of AVE for all variables are above 0.5.

Table 3: Validity and Reliability for Constructs

Model 1				
	Loadings	AVE	CR	Cronbach's Alpha
ICGBM		0.533	0.820	0.707
ICGBM1	0.679			
ICGBM2	0.746			
ICGBM3	0.764			
ICGBM4	0.727			
ICGBOD		0.526	0.816	0.701
ICGBOD1	0.647			
ICGBOD4	0.768			
ICGBOD5	0.739			
ICGBOD6	0.742			
ICGFBM		0.529	0.848	0.776
ICGFBM1	0.666			
ICGFBM2	0.750			
ICGFBM3	0.793			
ICGFBM4	0.747			
ICGFBM5	0.674			
SP		0.510	0.862	0.808
SP1	0.689			
SP2	0.718			
SP3	0.722			
SP4	0.752			
SP5	0.690			
SP6	0.710			
Model 2				
	Loadings	AVE	CR	Cronbach's Alpha
ICGBOD		0.523	0.845	0.772
ICGBM3	0.612			
ICGBOD1	0.765			
ICGBOD2	0.747			
ICGBOD3	0.715			
ICGBOD4	0.766			
SP		0.509	0.861	0.808
SP1	0.676			
SP2	0.716			
SP3	0.730			
SP4	0.767			
SP5	0.674			
SP6	0.712			

Table 4: Discriminant Validity (Fornell-Larcker Criterion)

Model 1				
	ICGBM	ICGBOD	ICGFBM	SP
ICGBM	0.730			
ICGBOD	0.526	0.726		
ICGFBM	0.357	0.403	0.728	
SP	0.426	0.472	0.419	0.714

Model 2		
	ICG	SP
ICG	0.723	
SP	0.422	0.713

Table 5: Cross Loadings

Model 1				
	ICGBM	ICGBOD	ICGFBM	SP
ICGBM1	0.679	0.436	0.244	0.281
ICGBM2	0.746	0.354	0.224	0.329
ICGBM3	0.764	0.397	0.261	0.304
ICGBM4	0.727	0.360	0.312	0.325
ICGBOD1	0.342	0.647	0.306	0.307
ICGBOD4	0.396	0.768	0.351	0.373
ICGBOD5	0.352	0.739	0.218	0.340
ICGBOD6	0.435	0.742	0.294	0.346
ICGFBM1	0.302	0.300	0.666	0.294
ICGFBM2	0.285	0.308	0.750	0.280
ICGFBM3	0.209	0.278	0.793	0.314
ICGFBM4	0.254	0.320	0.747	0.342
ICGFBM5	0.255	0.258	0.674	0.282
SP1	0.263	0.340	0.290	0.689
SP2	0.266	0.355	0.310	0.718
SP3	0.333	0.352	0.323	0.722
SP4	0.307	0.368	0.298	0.752
SP5	0.322	0.261	0.306	0.690
SP6	0.331	0.339	0.266	0.710

Model 2		
	ICG	SP
ICGBM3	0.612	0.306
ICGBOD1	0.765	0.311
ICGBOD2	0.747	0.236
ICGBOD3	0.715	0.255
ICGBOD4	0.766	0.377
SP1	0.252	0.676
SP2	0.300	0.716
SP3	0.341	0.730
SP4	0.347	0.767
SP5	0.229	0.674
SP6	0.311	0.712

Table 6: Discriminant Validity (Heterotrait-Monotrait Ratio (HTMT))

Model 1	
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	ICGBM	ICGBOD	ICGFBM	SP
ICGBM				
ICGBOD	0.753			
ICGFBM	0.485	0.547		
SP	0.562	0.625	0.527	
Model 2				
	ICG	SP		
ICG				
SP	0.511			

Table 7: Goodness of Fit (GoF)

	Index	
	Model 1	
	AVE	R Square
ICGBM	0.533	
ICGBOD	0.526	
ICGFBM	0.529	
SP	0.510	0.312
Model 2		
	AVE	R Square
ICGBOD	0.523	
SP	0.509	0.178

Discriminant Validity

The Discriminant Validity was established through the Fornell-Larcker Criterion, cross loadings and HTMT. According to this criterion the diagonal values of the all the variables of the construct must be greater than 0.50. And according to HTMT criterion if the value of HTMT is below 0.90 then discriminant validity is established between the two reflective constructs. According to the said criteria the table 4, 5, and 6 illustrate that the diagonal values of all variables of the research constructs are greater than 0.50 and HTMT values are also below 0.90 and values of cross loadings are also within acceptable limits.

Goodness of Fit (GoF) Index

The value of Goodness of Fit varies from 0 to 1 and Akhter et al. (2012) took 0.36 as a cut off value for acceptance of model. The values of AVE and R square are given in table 7 and the values of Goodness of Fit index has been calculated and checked and all values are greater than the cut off criteria of 0.36 and values of AVE and R Square have been tested with both methods i.e. algorithm and bootstrapping and base on the results as given in the tables below, research model is fit for study.

R Square

The R Square explains the proportionate change in the dependent variable due to change in the independent variable. These are the values of R Square, which describe the association between dependent variables and independent variables of the construct. The decision criteria about the values of R square as given by the Henseler, Ringle, and Sinkovics (2009) is as follows. If the value of R square is 0.25, then the association between the dependent variable and independent variables is weak, if the value of R square is 0.50, then the relationship between the variables of the constructs is moderate, and if the value of R square is 0.75, then this is the significant value for acceptance of the construct. According to Chin (1998), the value of 0.19, 0.33, 0.67 described a weak, moderate and substantial predictive accuracy. According to Falk and Miller (1992), the value of R square should be equal to greater than 0.10 to deem the construct adequate.

According to table 7, and figure 3, 4, 5 and 6, the values of R square showed that there is a positive and significant relationship between internal corporate governance mechanism (Board of Directors, Board Meetings and Frequency of Board Meetings) and social performance of Microfinance institutions of Pakistan. The R square value is acceptable and supports hypotheses No H1, H2 and H3.

The Model of the Construct

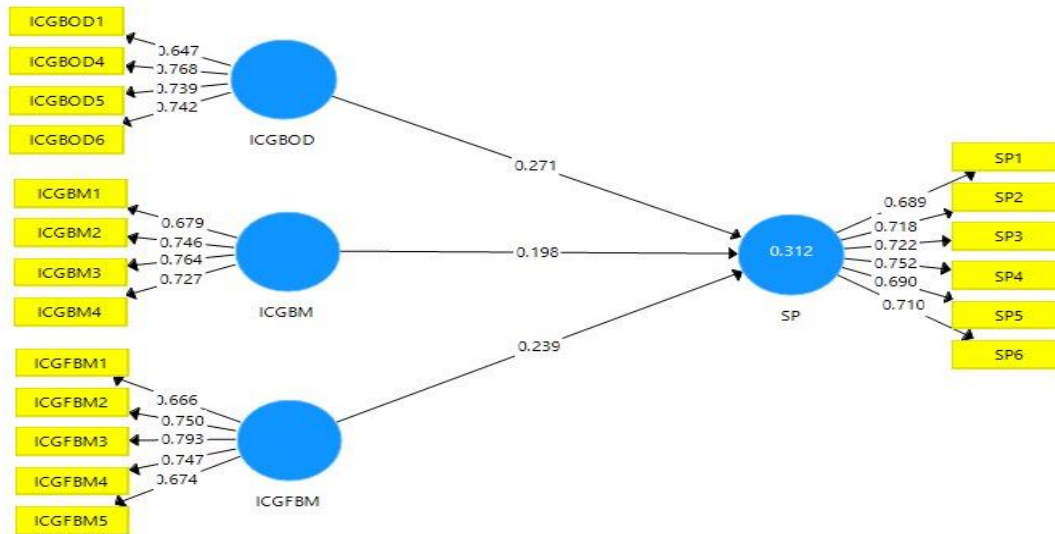


Figure 3: Results of PLS SEM for Model 1

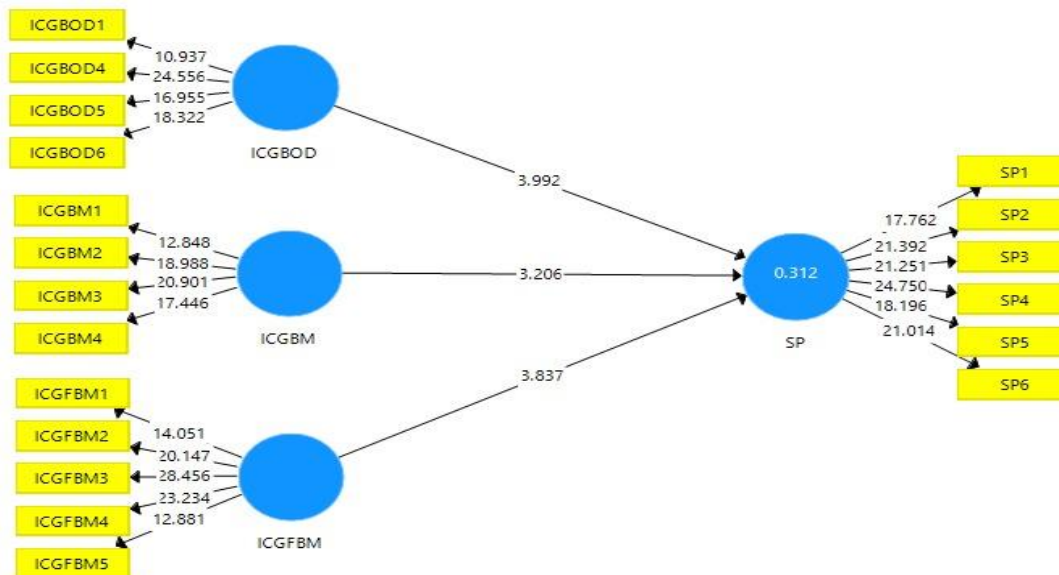


Figure 4: Bootstrapping Results of PLS SEM for Model 1

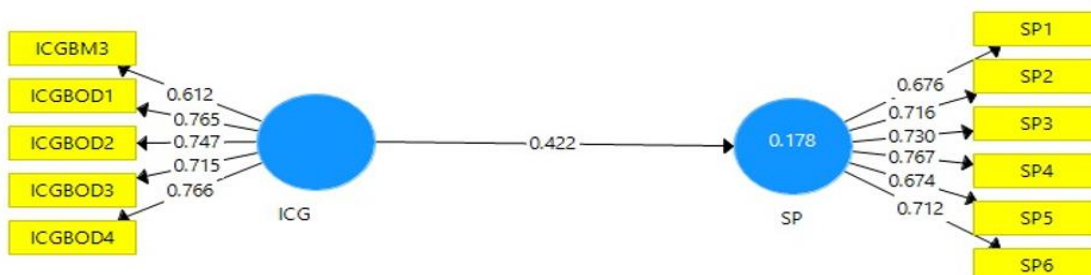


Figure 5: Results of PLS SEM for Model 2

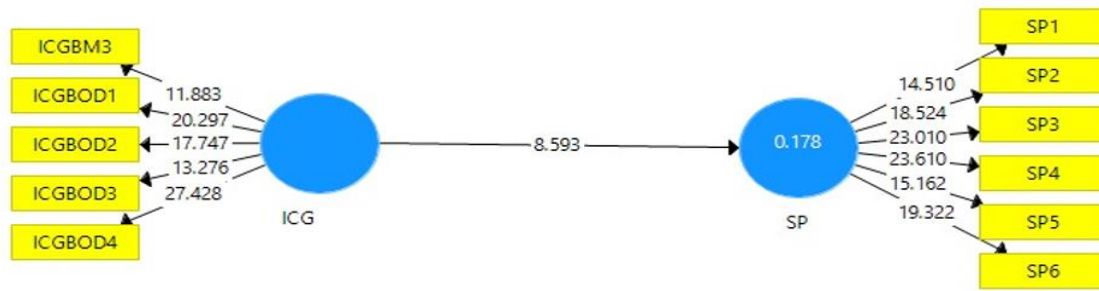


Figure 6: Bootstrapping Results of PLS SEM for Model 2

Hypotheses Testing

Table 8 shows that the p-value of all relations is less than 0.5; therefore, based on the p values, all hypotheses are accepted.

Table 8: Structural Estimates (Hypothesis Testing)

Model 1					
Hypothesis		Original Sample (O)	T Statistics (O/STDEV)	P Values	Result
H1	ICGBM -> SP	0.198	3.206	0.001	Accepted
H2	ICGBOD -> SP	0.271	3.992	0.000	Accepted
H3	ICGFBM -> SP	0.239	3.837	0.000	Accepted
Model 2					
		Original Sample (O)	T Statistics (O/STDEV)	P Values	
H4	ICG -> SP	0.422	8.593	0.000	Accepted

Discussion

In this section, a detailed discussion about the proposed hypothesis, their acceptance and rejection, and the kind of relationships among different variables are made.

Hypothesis 1: The board of directors influences the social performance of MFIs in Pakistan.

The first hypothesis hypothesised a favourable and significant association between the board of directors of microfinance banks in Pakistan and their social performance. The results reveal a positive and substantial association between the board of directors and the social performance of microfinance institutions in Pakistan, therefore hypothesis 1 is approved, and the result is also consistent with the findings of Thrikawala et al. (2016a, 2017); Wamba et al. (2018); Dato et al. (2018); Pascal et al. (2017); and [A. W. Khan & Abdul Subhan, \(2019\)](#). Because the board of directors has a positive and significant impact on the social performance of microfinance institutions in Pakistan, they can improve their performance by strengthening and improving their board of directors to improve the internal corporate governance framework.

Hypothesis 2: The board meetings influence the social performance of MFIs in Pakistan.

The second hypothesis proposed a favourable and significant link between board meetings and the social performance of Pakistani microfinance institutions. The findings revealed a positive and significant link between board meetings and the social performance of Pakistani microfinance companies. Microfinance institutions can improve their performance by improving their board meetings, which have a favourable and significant effect on social performance.

Hypothesis 3: The frequency of board meetings influences the social performance of MFIs in Pakistan.

The third hypothesis hypothesised a positive and significant link between the frequency of board meetings and the social performance of Pakistani microfinance companies. The findings

demonstrated a favourable and substantial association between board meeting frequency and the social performance of Pakistani microfinance institutions. Microfinance institutions can enhance their performance by increasing number of meetings on an annual basis. According to the researchers, it is suggested that there should be at least four meetings annually on a quarterly basis.

Moreover, the research construct has been analysed by taking the sub-variables of internal corporate governance collectively and separately using algorithms and bootstrapping. The findings demonstrated that the board of directors, board meetings, and board meeting frequency all had a favourable and significant impact on the social performance of Pakistani microfinance organisations. While measuring the impact of internal corporate governance mechanism's components, namely board of directors, board meetings and frequency of board meetings, collectively, the results showed that items of board meetings and frequency of board meetings were removed because of having less factor loading and only items of the board of directors remained with acceptable factor loading and results also showed that board of directors have a positive and significant relationship with social performance of microfinance institutions of Pakistan.

Hypothesis 4: Internal corporate governance influences the social performance of MFIs in Pakistan.

The fourth hypothesis proposed a favourable and significant link between internal corporate governance and the social performance of Pakistani microfinance institutions. The findings revealed a positive and significant link between internal corporate governance and the social performance of Pakistani microfinance institutions. Microfinance institutions can improve their social performance by improving their internal corporate governance.

Conclusion

The study aims to investigate the impact of internal corporate governance mechanisms (Board of Directors, Board Meetings and Frequency of Board Meetings) on the social performance of microfinance institutions in Pakistan. The results revealed that internal corporate governance mechanism (board of directors, board meeting and frequency of board meetings) has a positive and significant impact on social performance, and the results are in accordance with the results of (Thrikawala et al., 2016a, 2017; Wamba et al., 2018; Dato et al., 2018). Based on the results, it is concluded that the proposed hypothesis 1, 2, 3 and 4 are true and accepted.

Implications of the Study

This study will open a new horizon for researchers in the field of microfinance and its relationship with corporate governance mechanisms. This research fulfils the research gap because this is the first research highlighting the impact of internal corporate governance mechanisms on the social performance of microfinance institutions in Pakistan. The components of internal corporate governance, i.e. board of directors, board meetings and frequency of board meetings have not been studied before in microfinance institutions of Pakistan.

The findings of the study have vital importance not only for the policymakers but also for the stakeholders of microfinance institutions. The policymakers can improve and strengthen corporate governance by making the boards of directors more effective and streamlining and fruitfulness of board meetings and evaluating decisions taken in the board meeting and their implementation. The internal corporate governance can be improved by improving and regulating the frequency of board meetings. It is recommended that for efficient corporate governance and board meeting, there should be four meetings annually, and every meeting should be held every quarter. By improving the internal corporate governance, the social performance of microfinance

institutions can improve because the finding of the study showed that internal corporate governance (board of directors, board meetings, frequency of board meetings) has a positive and significant impact on the social performance of microfinance institutions in Pakistan.

Recommendations.

After analysing the theoretical and practical implications of the study following recommendations are made to strengthen the microfinance sector.

- The microfinance institutions working in Pakistan should be registered with the State Bank of Pakistan.
- It is recommended that the board of directors should be independent and qualified and their number should not be too low or too high, nine to ten members are suitable.
- It is recommended that the board meeting should be effective, and all decisions taken during the meetings should be implemented and evaluated.
- It is also recommended that the frequency of board meetings should be at least four meetings per annum.

If the above recommendations should be considered and implemented, then the internal corporate governance mechanism can become an effective one and can improve the social performance of microfinance institutions.

Limitations and Potential for Future Research

In Pakistan, there is a lack of transparent and single corporate governance of microfinance institutions. Therefore, there is a dire need to develop a single and transparent corporate governance structure for all types of microfinance institutions in Pakistan. It is the responsibility of the policymakers of Pakistan who should have to take the initiative to improve guidelines and legislations and corporate governance structure, which should be applied equally to all types of microfinance institutions working in Pakistan. In a similar way, as all other financial institutions are regulated and controlled by the State Bank of Pakistan, all microfinance institutions should be controlled and regulated by the State Bank of Pakistan.

In this study, a sample size of 390 was used, but in future research, scholars can enhance the number of responses. Board of directors, board meetings, and frequency of board meetings have been used as a component of internal corporate governance mechanisms. In future, the researchers can use other variables like firm age, qualification of directors, firm size, remuneration of the board of directors, dependency and independence of the board of directors as a new variable of the study.

References

- Adams, R. B., & Ferreira, D. (2009). Women in the boardroom and their impact on governance and performance. *Journal of financial economics*, 94(2), 291-309.
- Agrawal, A., & Hockerts, K. (2021). Impact investing: review and research agenda. *Journal of Small Business & Entrepreneurship*, 33(2), 153-181.
- Aslam, M., Kumar, S., & Sorooshian, S. (2019). Social Versus Financial Performance of Microfinance: Bangladesh Perspective. *Research in World Economy*, 10(3), 263-272.
- Chin, W. W. (1998). Commentary: Issues and opinion on structural equation modeling. *MIS quarterly*, vii-xvi.
- Czura, K., Englmaier, F., Ho, H., & Spantig, L. (2022). Microfinance loan officers before and during Covid-19: Evidence from India. *World development*, 105812.
- Dato, M. H., Mersland, R., & Mori, N. (2018). Board committees and performance in microfinance institutions: Evidence from Ethiopia. *International journal of emerging markets*.
- Ehugbo, I. (2021). Effect of Corporate Governance Board Characteristics on Performance of

- Microfinance Banks in Nigeria. *International Journal of Academic Research in Accounting Finance and Management Sciences*, 11(2), 27-46.
- Eluyela, D. F., Akintimehin, O. O., Okere, W., Ozordi, E., Osuma, G. O., Ilogho, S. O., & Oladipo, O. A. (2018). Board meeting frequency and firm performance: examining the nexus in Nigerian deposit money banks. *Heliyon*, 4(10), e00850.
- Falk, R. F., & Miller, N. B. (1992). *A primer for soft modeling*. University of Akron Press.
- Fich, E. M., & Shivdasani, A. (2005). Are Busy Boards Effective Monitors?. Available at SSRN 677463.
- Firth, M. A., & Rui, O. M. (2012). Does one size fit all? A study of the simultaneous relations among ownership, corporate governance mechanisms, and the financial performance of firms in China. In *Corporate Governance* (pp. 29-57). Springer, Berlin, Heidelberg.
- Francis, B. B., Hasan, I., & Wu, Q. (2012). Do corporate boards affect firm performance? New evidence from the financial crisis. *New Evidence from the Financial Crisis (April 12, 2012)*. Bank of Finland Research Discussion Paper, (11).
- Fu, Y. (2019). The value of corporate governance: Evidence from the Chinese anti-corruption campaign. *The North American Journal of Economics and Finance*, 47, 461-476.
- Galema, R., Lensink, R., & Mersland, R. (2012). Governance and microfinance institutions. *Research Handbook on International Banking and Governance*.
- García-Pérez, I., Muñoz-Torres, M. J., & Fernández-Izquierdo, M. Á. (2018). Microfinance institutions fostering sustainable development. *Sustainable Development*, 26(6), 606-619.
- Germidis, D., Kessler, D. C., & Meghir, R. C. (1991). *Financial systems and development: what role for the formal and informal financial sector* (No. 332.1 D594f Ej. 1). OECD.
- Hartarska, V. (2009). The impact of outside control in microfinance. *Managerial Finance*.
- Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. In *New challenges to international marketing*. Emerald Group Publishing Limited.
- Hevia, C., & Neumeyer, P. A. (2020). A perfect storm: COVID-19 in emerging economies. *COVID-19 in developing economies*, 1(1), 25-37.
- Jackling, B., & Johl, S. (2009). Board structure and firm performance: Evidence from India's top companies. *Corporate Governance: An International Review*, 17(4), 492-509.
- Khan, A. W., & Abdul Subhan, Q. (2019). Impact of board diversity and audit on firm performance. *Cogent Business & Management*, 6(1), 1611719.
- Khan, J., & Rehman, S. U. (2020). Impact of corporate governance compliance and board attributes on operating liquidity in pre-and post-corporate governance reforms. *Corporate Governance: The international journal of business in society*.
- Laher, D., & Proffitt, D. (2020). Conflicting goals in the management of microfinance institutions: an agency theory approach. *Enterprise Development & Microfinance*, 31(2), 113-125.
- Loayza, N., & Pennings, S. M. (2020). Macroeconomic policy in the time of COVID-19: A primer for developing countries. *World Bank Research and Policy Briefs*, (147291).
- Mersland, R., & Strøm, R. Ø. (2009). Performance and governance in microfinance institutions. *Journal of Banking & Finance*, 33(4), 662-669.
- Milana, C., & Ashta, A. (2020). Microfinance and financial inclusion: Challenges and opportunities. *Strategic Change*, 29(3), 257-266.
- Murtaza, S., Noor-Ud-Din, A., Aguir, A., & Batool, S. (2020). The role of ownership concentration and dividend policy on firm performance: Evidence from an emerging market of Pakistan. *SEISENSE Journal of Management*, 3(2), 1-13.
- Plumridge, G., Redwood, S., Greenfield, S., Akhter, N., Chowdhury, R., Khalade, A., & Gill, P. (2012). Involving interpreters in research studies. *Journal of health services research & policy*, 17(3), 190-192.
- Rahman, A. (1999). Micro-credit initiatives for equitable and sustainable development: who

- pays?. *World development*, 27(1), 67-82.
- Ran, B., & Weller, S. (2021). An Exit Strategy for the Definitional Elusiveness: A Three-Dimensional Framework for Social Entrepreneurship. *Sustainability*, 13(2), 563.
- Siwale, J., & Okoye, N. (2017). Microfinance regulation and social sustainability of microfinance institutions: The case of Nigeria and Zambia. *Annals of Public and Cooperative Economics*, 88(4), 611-632.
- Ssekiziyivu, B., Mwesigwa, R., Bananuka, J., & Namusobya, Z. (2018). Corporate governance practices in microfinance institutions: Evidence from Uganda. *Cogent Business & Management*, 5(1), 1488508.
- Sulimany, H. G., Ramakrishnan, S., Chaudhry, A., & Bazhair, A. H. (2021). Impact of Corporate Governance and Financial Sustainability on Shareholder Value. *Studies of Applied Economics*, 39(4).
- Tejerina-Gaite, F. A., & Fernández-Temprano, M. A. (2021). The influence of board experience on firm performance: does the director's role matter?. *Journal of Management and Governance*, 25(3), 685-705.
- Thrikawala, S., Locke, S., & Reddy, K. (2016). Board structure-performance relationship in microfinance institutions (MFIs) in an emerging economy. *Corporate Governance: The International Journal of Business in Society*.
- Thrikawala, S., Locke, S., & Reddy, K. (2017). Dynamic endogeneity and corporate governance-performance relationship: Lessons from the microfinance sector. *Journal of Economic studies*.
- United Nations (2021a) End poverty in all its forms everywhere. <<https://sdgs.un.org/goals/goal1>>, retrieved 1.3.2021.
- United Nations (2021b) The 17 goals. <<https://sdgs.un.org/goals>>, retrieved 1.3.2021.
- Van Damme, P., Wijesiri, M., & Meoli, M. (2016). Governance and efficiency of microfinance institutions: empirical evidence from Sri Lanka. *South Asia Economic Journal*, 17(2), 236-247.
- Wamba, L. D., Bengono, I. B., Sahut, J. M., & Teulon, F. (2018). Governance and performance of MFIs: the Cameroon case. *Journal of Management & Governance*, 22(1), 7-30.
- Wanjau, J. N. (2007). A survey of relationship between corporate governance and performance in microfinance institutions in Kenya (Doctoral dissertation, University of Nairobi).
- World Bank, & World Bank. (2014). *Global monitoring report 2014/2015: Ending poverty and sharing prosperity*. The World Bank.
- World Bank. (2020). *Poverty and shared prosperity 2020: Reversals of fortune*. The World Bank.
- Zamore, S., Beisland, L. A., & Mersland, R. (2019). Geographic diversification and credit risk in microfinance. *Journal of Banking & Finance*, 109, 105665.



Corporate Social Responsibility Moderates the Relationship of Corporate Governance and Investment Decisions: New insight from Emerging Markets

Khatiba Asmat Zahra, Lecturer, Department of Economics GSCWU Bahawalpur, Pakistan

Quratulain Benish, Lecturer, IMS Bahauddin Zakariya University, Multan, Pakistan

Muhammad Umer, M.Phil Scholar, Bahauddin Zakariya University, Multan, Pakistan

***Muhammad Sadiq Shahid**, Associate Professor, Bahauddin Zakariya University, Multan, Pakistan

*Corresponding author's email: sshahidmalik@bzu.edu.pk

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Purpose: This paper examines the relationship between Corporate Governance, Corporate Investment, and Financial Performance of firms with moderating relationship of Corporate Social Responsibility in emerging markets of Asia (Pakistan, China, Malaysia, and India).

Design/Methodology/Approach: To examine the impact, the panel data of 214 non-financial listed firms from 2014–to 2019 was collected.

Findings: We documented a new insight that CSR and CG are significantly associated with CI and FP. Results also show that the quality of CG and CSR enriches the CI decisions that improved FP. Findings also show that CSR moderates the relationship between CG and CI decisions, and between CG and firms' FP. The board directors and ownership concentration have a positive relationship with CI decisions and FP. Overall CSR moderates the relationship between CI and CP.

Implications/Originality/Value: These findings are beneficial to the management of corporations working in emerging markets to improve CSR activities. This research also contributes to existing literature, on how CSR moderates the relationship between CG and CI decisions in the given contexts.



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Introduction

An emerging body of researchers used CSR as a useful research area for all businesses, academicians, managers, and practitioners and existing theoretical viewpoints and debates that explained the concept of CSR (McWilliams & Siegel, 2011). Recently, literature found one most

prominent corporate abuse scam is the Enron scandal in which Special Purpose Vehicles were used very badly by management to disguise assets losing value and informed the prospective investors that in the future stock price of the firm would continue to rise, whereas covertly started getting back then shares. As the analysts began to ask whether Enron stock was overvalued, the price of Enron stock decreased. In this connection, practitioners have already suggested some solutions to safeguard the stakeholder, and the Oxley Act 2002 is one of those arrangements. As one of the major purposes of the Oxley Act 2002 was to convey information among internal and external stakeholders. With the globalization of the world economy along with the increased competition and rapid technological advancements, CG plays an important role in financial decision-making and CSR. CG moderates the agency problems like separation of management and ownership, conflict of interest between controlling and non-controlling shareholders, and self-interested managers acting against the best interest of shareholders. Agency theory describes solutions for agency problems through a corporate governance system, which plays important role in the sustainability of a firm.

CSR is very important for shareholders; firms should also report their social, economic, and environmental actions to their stakeholders. CSR is an open and transparent business practice based on ethical values and respect for the community, employees, environment shareholders, and stakeholders. CSR delivers sustainable value to society and supports triple bottom line reporting, social and environmental bottom lines, and firms benefiting from their CSR activities. Elliott et al. (2014) argue that when investors are given CSR information, they consider firms' CSR performance, while investment-related decisions making. So, our study investigates whether investment decisions are affected by CSR activities or not?

As Asian emerging markets have different political circumstances, economic conditions, and differences from developed economies; it should be examined whether the firms' CSR activities affect the investment decisions or not. Henceforth; these elements commonly influence firms' CSR practices. Existing literature regarding the relationship between CSR and CI decisions is very rare. Therefore, this study investigates whether CSR moderates the relationship between CG and investment decisions. The results of this study help to identify factors affecting investment decisions and formulate a policy regarding state-owned corporations. Lins et al. (2017) explicated that firms having better CSR had higher stock returns as compared to those companies that had a low CSR. Existing literature documented that higher CSR shows that firm is highly committed to ethical standards and its accounting information quality (Kim, 2017; Zuliarni, 2013). As some studies documented the nexus of CSR, since there is an invalid record to ascertain CSR practices within the firm to contribute to the betterment of society. In this regard, the regulator in emerging markets initiated some methods to confirm that CSR recipients are protected from bad practices and that expenditure in all areas of CSR is being properly monitored. CG is a combination of human relationships and processes. As argued in existing literature, opportunistic managerial behavior can be prevented through good corporate governance mechanisms (Alkurdi et al. 2019).

In emerging markets, a lot of researchers explored the relationship between CG and CSR disclosures, few studies certified that the board of directors plays a significant role relating to CSR (Harjoto et al. 2015; Muttakin & Subramaniam, 2015); however, the relationship between CSR and board diversity is relatively not yet adequate (Chang et al. 2017; Hoang et al. 2018; Ibrahim & Hanefah, 2016); no study has been conducted to examine the effect of board diversity on the degree of CSR in emerging markets (Khan et al. 2019). In emerging markets, CG has become a foremost subject of debate (Ayuso & Argandona, 2009) and one of the most significant mechanisms of controlling the activities of the executive managers is the firm's board of directors (Frias et al. 2012). Among members of the board of directors, a higher diversity would bring a larger set of expertise, information, and resources (Harjoto et al. 2015); improve firms' operations, and expand their strategic understandings (Post & Byron, 2015). The firms consider

the interest of stakeholders is improved by the degree of diversity in the board of directors (Ferrero et al. 2013); the firm's ability to disclose valued information is increased through the board's diversity (Chang et al. 2017); voluntary/non-voluntary information's disclosures of firm improved (Katmon et al. 2017).

The CI decision relates to how the firm invested funds into various assets to earn a return. Investment decisions do not involve only a large amount of funds permanently. Myers & Majluf (1984) state that firms having opportunities that outstrip operating cash flows and which have used up their strategy to issue low-risk debt, may get good investment rather than issue risky securities for financing them. Ali & Sial (2020) examine the relationship between CG and FP; some other researchers struggled to examine the nexus between CG-CSR and CG- CI decisions. However, the moderating role of CSR between CG-financial performance and CSR-CI is not studied yet according to the best knowledge of researchers. So, to comprehend the consequence of corporate governance on the firm's investment decisions is moderated through CSR of a firm or not. The objectives of this research are;

1. To examine the nexus between CSR and CI.
2. To examine the nexus between CG and CI of the firm.
3. To examine the nexus between FP and CI of firms.
4. To investigate whether CSR moderates the nexus between CI and FP.

The results of the paper revealed the importance of CG for managing CI and FP, making several contributions. Insights from the paper will be relevant for international and expected investors who are thinking to invest in emerging markets.

Literature Review

Existing literature shows that the agency fight exists between management and shareholders. Jensen & Meckling (1976) argue that agency problems may occur when firm management makes corporate decisions that do not prevent the objectives of shareholders. Further, "over-investment" arises conflict when management neglect to maximize the wealth of shareholders (Jensen, 1986). Empirically, a positive relationship between CG and quality of decision-making is documented, however, mixed evidence is found between CG and quality of corporate decisions. Jensen (2001) intimate that boards of directors must give incentives to management to maximize the long-term innovation and value of the firm. Further, Eccles et al. (2012) realized that other constituents, such as behaving irresponsibly with shareholders are very important which may lead to government fines, loss of talent and disgruntled employees (Collins et al. 2018), and customer boycotts which reduce sales of the firm (Sen & Bhattacharya, 2001).

According to corporate finance theory, board composition significantly contributes to CSR. The firms try to maximize value by optimizing CG, mitigating risk, and focusing on disclosure policy (Rezaee, 2016). while Shahid & Abbas (2019) observe that corporate governance pronouncements may improve investor relations. As a result, the diverse social, political, and historical conditions may lead to the roles in society at individual and industry levels (deGraaf & Stoelhorst, 2009). CSR provide opportunities or challenges in transforming their resources and knowledge into products, goods, and stakeholder services that generate value not only for their investors but also for local communities (Filatotchev & Nakajima, 2014).

According to Isaksson et al. (2014), CSR is a business behavior that a huge number of firms currently implemented. Corporations engage in social responsibility initiatives in reaction to threats from the government and social activists, and these efforts can be used to raise manager morale or provide competitive benefits. The public's image of CSR has altered substantially in recent decades as the value of social responsibility behavior has grown for investors.

Existing research indicates that CSR has numerous themes, one of which is that greater CSR is

associated with improved stakeholder participation and connections (Cheng et al. 2014; El Ghouli & Kim, 2017). The term "corporate social responsibility" refers to ways to generate profit while also reducing agency issues through ethical business practices (Eccles et al. 2012). The firm's actions have an impact on employees, contractors, the environment, and society. The term "corporate social responsibility disclosure" refers to "corporations' communication" about operations that have an impact on employees' communities and the environment (Gray et al. 1995). To transmit the message, CSR disclosures are either mandated or optional, with the scope and nature of reporting differing widely among organizations (Brooks & Oikonomou, 2018). According to Hsu et al. (2013), CSR raises ethical and dependability standards, consumer perceptions of the firm's soft image, societal environmental conditions, and socioeconomic progress.

Corporate governance is intertwined with a company's strategic decisions and can assist it in becoming more socially responsible (Filatotchev & Nakajima 2014). When CSR is combined with corporate governance systems, firm performance improves. It is well established that when CEOs hold the position of Chairman, investors respond positively to the firms in emerging economies than in developed economies. There is a lack of understanding of the relationship of CG-CI in developing stock markets. Corporations fund their operations through short-term loans, long-term debt, and their funds (Warrant et al. 2014). McCahery et al. (2016) discovered that even if a country's investor protection is inadequate, it may still have a corporate governance regime that can attract investors. According to Bushee & Gerakos, low institutional turnover is associated with greater governance sensitivity (2010). Individuals, businesses, and governments can all be investors, and they can put their money into assets that are expected to generate profits in the future (Harrison et al. 2013). Coles & Hoi (2003) discovered a negative nexus between board size and Tobin's Q previously. A positive nexus, on the one hand, is fueled by an external board of directors that provides valuable advice to the CEO and management team (Coles et al. 2008). As a result, (Mishra & Kapil, 2017; Ofoeda, 2017); Sheikh & Karim, 2015) discovered a positive nexus between board size and firm performance but a negative association between independent directors and firm returns as a result. Hence, high board independence is expected to be less effective due to independent directors' excessive participation in day-to-day affairs, which would limit managers' ability to perform their functions deliberately (Wu & Wu, 2014). This study fills a gap in the literature; to examine the impact of CSR & CG on corporate investment decisions in Asian markets.

Because the impact of CG on an investor's confidence varies by industry, the importance of CG may differ from one firm to the next. Corporate governance provides perceptive processes that can be aided by sound investment decisions made by management (Huang & Kung, 2010). The high quality of CG provides incentives for managers to make safe investment decisions to increase the firm's worth. Gill et al. (2012) revealed a connection between CG and investment decisions, whereas Javeed et al. (2014) discovered a link between board independence and corporate performance. Based on the above discussion, the following hypotheses are developed;

H1: CSR significantly affects the corporate investment (CI) of firms.

H2: Corporate governance (CG) significantly affects corporate investment.

H3: there is a significant nexus between CI-FP

H4: CSR moderates the CG-CI relationship.

H5: CSR moderates the CI-FP relationship.

Research Method

This paper examines whether CSR moderates the nexus between CG, corporate investment decisions, and the financial performance of the firms. Thus, we measure the CSR disclosures level in the CSR reports from 2014–to 2019 for selected listed firms from four emerging markets including Pakistan, China, Malaysia, and India.

Initially, 284 non-financial largest firms were selected for each country, based on their market capitalization. Because the largest firms have the resources to invest in CSR activities. Our final sample consists of 214 firms across four emerging markets, firms that did not report CSR activities during the sample period were eliminated from the sample. Firms from the manufacturing sectors were considered because firms actively participate more in CSR activities than as compared to the firms of the other sectors (Ho, 2007). Secondly, as compared to the other sector firm, the manufacturing sector firms have a higher level of disclosure concerning environmental, production, and social activities (Haniffa et al. 2005). Manufacturing sector firms have a high market capitalization and unrestricted resources actively participate in CSR activities and have a huge CSR disclosures report (Ehsan et al. 2018). Fourth, as compared to the other sector, the manufacturing firms contribute more to the exporters to grow globally and meet international standards; these firms follow CSR activities at large (WBG, 2016). Moreover, in Asian Emerging markets, the CSR activities of firms differ concerning their size, nature, value, and the opinions of the executives and the owners. The participation in CSR activities by giant national firms is more as compared to SMEs; for instance, a dignified and well-planned program regarding CSR activities is followed by the Gas and oil exploration, Oil refinery, fertilizers, chemical, pharmaceutical, and energy production firms. These firms regularly broadcast their CSR reports to obey SECP and Global Reporting Initiative. These Asian emerging markets firms participate significantly in the welfare program such as improvement of health facilities, poverty alleviation, orphanage support, rehabilitation support for people affected by natural disasters, and HRD (Prieto et al. 2006).

Measurement of CSR Disclosure Index (CSRDI)

CSR information disclosure can be calculated in different ways, such as through internet sources, print media reports, and published annual reports available on the companies' websites. To calculate CSR information disclosure, the firm's annual reports were considered appropriate for this study. It is a valid argument that when an investor makes their investment decisions, considered the firm's environmental disclosures concerns (Deegan & Rankin, 1997). Belal (2000) reported that for the dissemination of information about the firm, the most important source is the published annual reports of the firm. Thus, considering the firm's annual reports as a source for data collection is identical to another former research (Guthrie & Parker, 1990). Another reason for considering a firm's annual reports as a source of data collection for this research is that the annual report is a well-known and widely acknowledged document that is prepared by the firms listed on the Pakistan Stock Exchange. To calculate the CSR score content analysis technique is used, and the firm's qualitative and quantitative information is codified into the categories predefined by the management of the firm (Talebna et al. 2013).

So to ensure the reliability of coding, the researcher made efforts to collect CSR information with due care, in this study instrument coding of items is done as "1" if a particular item in the annual report of the firm for a particular period is reported and if it is not disclosed in the annual reported then coded as "0". For example, if a CSR item such as a firm's donation to a hospital for prevention or eradication of cancer disease is reported in the annual report, it is coded "1" in the respective column of coding and otherwise "0". To calculate the final score of the firm, the scores of all items of the major categories are then added. The CSR reporting model thus finds the total scores of the firm's disclosures as follows:

$$CSRDI = \sum DI40/NJ,$$

Where *DI* is equal to "1" if the item *DI* is reported and otherwise "0", *NJ* is the maximum number of items for *jth* firms and $NJ \leq 40$.

To compute a percentage of the scores of the firm, the summation of each item's score is done and this sum is divided by the maximum score, and then is multiplied by 100. In this process, the maximum amount of possible disclosure is 40 items. Hence, for example, if a firm did not

disclose a single item out of the 40 items, the independent variable score will be 0%. Similarly, if a firm discloses half of the total items, then the independent variable score will be 50%.

Measurement of Investment Decisions

Investment decision relates to how funds of the firm are to be invested into different assets so that the firm can earn the highest possible return for the investors. According to Myers & Majluf (1984), firms having opportunities that outstrip operating cash flows and which have used up their strategy to issue low-risk debt may get good investments instead issue risky securities for financing them. Al-Tamimi (2009) found a significant relationship between financial decisions and investment decisions. Also, the most affecting factor for investment decisions is religious reasons and the least affecting factor is rumors. Another factor for investment in asset allocation involves dividing an investment portfolio into different categories like stock, bond, and cash. Asset allocation is also important because it has a major role to meet financial goals. Many investors use asset allocation to diversify their investments among asset categories. Asset allocation involves spreading the money among various investments in the hope that if anyone investment loses money rather than another will cover up those losses. Corporate investment is the dependent variable of our study, following model is used to measurement of corporate investment:

$$I_{it} = \text{Inv}_{it} / K_{it}$$

Investment measured as F.A (Fixed assets) variation between t period and t-1,

$$\text{Inv}_{it} = \text{NFA}_{it} - \text{Nfa}_{it-1} + D_{it}$$

Where NFA = Net fixed assets; D = Depreciation expenses; K = replacement value of capital

Corporate Governance Measurement

The blend of policies, procedures, guidelines, and control of governance structure leads the firm toward the accomplishment of its stated goals and objectives. In this study, we use the following aspects of corporate social responsibility disclosure to investigate whether they affect the relationship between the corporate governance and corporate investment decisions of firms or not. Shleifer & Vishny (1997) state that institutional investors own a large number of shares. Consistent with this viewpoint, Callen & Fang (2013) argue that institutional shareholders influence the behavior of the firm's management and are negatively linked to the firm's corporate investment decisions. We use an attribute of ownership concentration (OWC) which indicates the ownership percentage of total outstanding shares of a firm belonging to the top 10 shareholders of the f firm.

Adams et al. (2005) state that if the CEO of a firm is one of the founders' members, then he will be more persuasive and authoritative. Moreover, with an increase in the number of positions the CEOs hold for making the firm's decisions, their power also increases. For instance, the CEOs duality (as a CEO, the Chairman, and the president) indicates the CEO's talent to lead the vision of the board and enforce their willpower on generating favorable results in the board meetings (Morse et al., 2011). Adams et al. (2005) argue that in case a CEO of the firm is not the chairman, then he has less power because the chairman as compared to the CEO has greater power to influence the firm's strategic decisions. Likewise, the CEO in the position of the firm's president assures that the board has restricted options for an in-training replacement to implement if disparity with the CEO arises (Morse et al. 2011). To mitigate the agency issues, a separation of the chief executive officer and chairman of the board is necessary. We used a dummy variable of CEO duality that takes the value 1 if a post of CEO and Chairman of the board of a firm is occupied by one person during the year, otherwise 0.

The independent directors play a key role in monitoring the activities of the firm's management, to investigate the role of independent directors regarding investment decisions and firm performance; we use independent directors to board of directors' percentage (IndpD), the

independent directors' percentage of a firm j to its total numbers of directors on the board. We also consider the size of the firm's board of directors (BSize) which means the total number of directors on the board of a firm. The executive directors (ExeD) represent the percentage of the executive directors to the total number of executive directors on the board of a firm. It is expected that CSR is positively linked to the above variables of corporate governance.

Financial Performance Measures

In the existing literature, Tobin's Q is widely used as a market-based measure, so this is a suitable measure for the financial performance of firms.

Tobin's Q = Total Market value of Firm / Total Assets Value of Firm

Following the literature, we used the size of the firm as a commanding control variable that can affect investment decisions. Firm size is measured by following (Li et al. 2018), a natural log of total assets. A summary of variables used in the study is presented here in table 1.

Table1: Measurement summary of variables

Variable	Symbol	Description
Investment	ln(INVEST)	Sum of all outlays related to capital expenditure, acquisitions, R&D, receipts from the sale of Fixed Assets minus amortization & depreciation expense.
Tobin's Q	Q	The market value of total assets is deflated by the book value of total assets
Corporate Social Responsibility	CSR	CSR reports index value
Corporate Governance	CG	Board Size, Ownership Structure, Independent Directors, Executive directors
Board Size	BSIZE	Total number of directors on the board of directors of the firm
Ownership Concentration	OWC	Shareholding % of the top 10 shareholders
Independent Directors	IndD	% of the independent directors of total directors on the board of a firm
Executive Directors	ExeD	% of the executive directors of total directors on the board of a firm
Firm Size	SIZE	Natural log of the firm's total assets
Return on Assets	ROA	Net profit divided by total assets of the firm
Return on Equity	ROE	Operating profit divided by shareholders' equity

Following models are used to investigate the nexus of corporate investment (CI), corporate governance index, and CSR.

$$CI_{it} = \alpha + \beta_1 CGI_{it} + \beta_2 ROA_{it} + \beta_3 SIZE_{it} + \mu_{it} \quad \text{Model1}$$

$$CI_{it} = \alpha + \beta_1 CSR_{it} + \beta_2 ROA_{it} + \beta_3 SIZE_{it} + \mu_{it} \quad \text{Model2}$$

$$CI_{it} = \alpha + \beta_1 CSR_{it} + \beta_2 \sum_i^n CGI_{it} + \beta_3 ROA_{it} + \beta_4 SIZE_{it} + \mu_{it} \quad \text{Model3}$$

$$TobinQ_{it} = \alpha + \beta_1 CSR_{it} + \beta_2 \sum_i^n CG_{it} + \beta_3 CI_{it} + \beta_4 SIZE_{it} + \beta_5 IND_i + \beta_6 Country_i + \epsilon_{it} \quad \text{Model4}$$

Results and Discussion

The objective of this paper is to investigate the nexus between CSR, corporate investment, corporate governance, and the financial performance of the firm. Descriptive and correlation results presented in table 02 show that the mean value of CSR is 41.56, the mean value of CG is 0.52, the mean value of CI is 0 and 0.73, and the mean value of ROA is 0.089 respectively. Results show that mean values are greater than the standard deviation.

Table 2: Descriptive Statics and Correlation Matric

	Mean	Std. Dev.	CI	CSR	CGI	BS	BIND	EXD	OWC	ToQ
CSR	41.564	10.476	0.446	1						
CGI	0.518	0.1273	0.315	0.209	1					
BSIZE	1.238	0.764	0.209	0.325	0.105	1				
BIND	8.915	0.256	0.216	0.205	0.406	0.107	1			
EXD	2.097	1.685	0.430	0.536	0.201	0.024	0.597	1		
OWC	1.745	1.096	0.257	0.358	0.108	0.204	0.189	0.349	1	
TobinQ	1.238	0.764	0.189	0.208	0.034	0.024	0.167	0.294	0.249	1
ROA	0.089	20.257	0.210	0.408	0.306	0.059	0.035	0.194	0.343	0.386

Further, correlation analysis was performed to check the possibility of multicollinearity between the variables. Table 2 result shows that CSR has a significant relationship with corporate investment, ROA, and ROE. Results show that firms having better CSR can get a better image and get the attention of investors who make investment decisions.

Table 03 Pooled OLS Results

Variable	Model1	Model2	Model3
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Constant	0.1548 (0.215)	0.107** (0.014)	0.180*** (0.038)
CGI	0.058*** (0.030)		0.028* (0.064)
CSR		0.134*** (0.044)	0.235*** (0.016)
ROA	0.076** (0.030)	0.180 (0.100)	0.169 (0.145)
ROE	0.162*** (0.007)	0.230 (0.005)	0.136 (0.000)
SIZE	0.320 (0.130)	0.220*** (0.000)	0.483*** (0.001)
R²	0.318	0.404	0.346

Empirical findings of model 1 show that the corporate governance index has a positive and significant relationship with corporate investment. It means that better corporate governance led to more corporate investment decisions and vice versa (Rodriguez-Fernandez, 2016). The finding supports the prediction of agency theory. While model2 results show a positive(significant) nexus between CSR and corporate investment. Firms with more CSR activities have a more corporate investment (Erhemjants et al. 2013), and findings contradict internal fund theory.

Table 04: Relationship between CG characteristics, corporate investment & Firm Performance

Variables	corporate investment (CI)				Firm Performance (FP)			
	Model4	Model5	Model6	Model7	Model8	Model9	Model10	Model11
Constant	0.081 (0.106)	0.276 (0.450)	0.528 (0.411)	0.379 (0.189)	0.631 (0.165)	0.5486 (0.588)	0.4930 (0.157)	0.1536 (0.031)
CSR	0.508*** (0.011)	0.7693** (0.034)	0.254*** (0.023)	0.182*** (0.043)	0.7836 (0.016)	0.4763 (0.517)	0.0739 (0.045)	0.0247 (0.006)
BS	0.176*** (0.015)				0.2351 (0.052)			
BIND		0.249*** (0.035)				0.5452 (0.120)		
EXD			0.094*** (0.016)				0.5368 (0.236)	
OWC				0.384*** (0.031)				0.0945 (0.024)
ROA	0.139*** (0.017)	0.193** (0.042)	0.128 (0.202)	0.054*** (0.025)				
SIZE	0.146*** (0.018)	0.733** (0.023)	0.178 (0.103)	0.182*** (0.042)	0.1068 (0.038)	0.0642 (0.000)	0.0749 (0.035)	0.0538 (0.031)
R2	0.258	0.304	0.403	0.370	0.1294	0.2896	0.3463	0.1840

Results in Table 04 show the relationship between CSR, corporate governance (CG) attributes, and corporate investment. Findings indicate a positive and significant relationship between CG attributes (BS), CSR, and corporate investment. Results show that corporate investment is higher with better CSR and CG. In model 5, corporate investments are higher as board independent directors play the main role in the provision of CSR activities to society. In this model, results show that CSR activities are influenced by board independent directors. In model 6 results show that executive directors are less influenced by CSR activities. The model 7 results show that ownership concentration and CSR have a significant on corporate investment decisions. It means that corporate investment decisions are better with better corporate governance attributes and high CSR activities. Hence, CSR plays the main role in better corporate Governance and better corporate investment decisions making. Further model 8-9, results show a board size and board independence has a significant and positive relationship with a firm's performance. While model11 results show a relation of the executive director is significant and positive with firm performance. Similarly, in model 11, the relationship between ownership concentration and firm performance is measured with moderator CSR. Ownership concentration is a positive relationship with firm performance. The above model's results indicate that CSR significantly moderates the

relationship between CG and financial performance. This relationship shows a better corporate investment decision (Ali et al. 2019).

CSR Moderates the Relationship between CG-CI and CG-FP

Table 05 provides the results of H3 as CSR moderates the relationship of CG with corporate investment decisions. The four models including corporate governance attributes (board size, board independence, executive directors, and ownership concentration) are used to investigate the moderating relationship of CSR. In model-12, the results show that board size has a significant and positive relationship with corporate investment decisions. Greater board size is favorable for better corporate investment decisions. As members on board increase, there may increase a conflict of interest between members. Low numbers of members on the board are best for corporate investment decisions. In Model-13 the impact of CSR on the board of independent directors for corporate investment is measured. The results calculated from this model show that the impact of CSR with independent directors is highly significant and positive for better corporate investment decisions. The result is that in model-14, the impact of CSR on the executive directors is measured for better corporate investment. The result related to the impact of CSR on executive directors is positive and significant for corporate investment decisions. Model-15 results show a positive relationship between CSR and ownership concentration. Further, Table 6 results show whether CSR moderates the relationship between corporate governance and corporate investment decisions. Investors can make better investment decisions with good corporate governance and better CSR activities for society (Rodriguez-Fernandez, 2016).

Table 05 Moderating Results of CSR; CG-CI

Variable	CSR; CG-CI				CSR; CG ; & Financial Performance (FP)			
	Model12	Model13	Model14	Model15	Model-16	Model-17	Model-18	Model-19
Constant	0.2285 (0.196)	0.0236 (0.306)	0.1209 (0.263)	0.0282 (0.002)	0.1439 (0.070)	0.7081 (0.079)	0.0236 (0.034)	0.6945 (0.536)
CSR	0.0983 (0.043)	0.8753 (0.382)	0.7210 (0.471)	0.5418 (0.068)	0.0591 (0.000)	0.1495 (0.012)	0.3576 (0.100)	0.14290 (0.132)
BS*CSR	0.0164 (0.035)				0.0452 (0.012)			
BIND*CSR		0.5495 (0.035)				0.4235 (0.013)		
EXD*CSR			0.4316 (0.153)				0.1783 (0.016)	
OWC*CSR				0.2169 (0.025)				0.0749 (0.061)
ROA	0.2885 (0.105)	0.0731 (0.031)	0.9721 (0.331)	0.1788 (0.128)				
SIZE	0.1849 (0.071)	0.2407 (0.028)	0.1724 (0.546)	0.2293 (0.081)	0.4139 (0.053)	0.6590 (0.015)	0.3281 (0.217)	0.5613 (0.574)
R2	0.2836	0.2956	0.3801	0.4021	0.1785	0.1903	0.2013	0.2740

In the above results, board independent directors with CSR activities show ROA is also significant and positive. Also, CSR activities with executive directors and ownership concentration show a positive and significant relationship. Furthermore, ROE and CSR activities have a positive and significant relationship when moderator variables are used. Similarly, total assets are also positive and significant to CSR and corporate governance attributes. Moreover, Results (see model-16-19) revealed that CSR significantly moderates the relationship between corporate governance and firm financial performance of the firms listed on emerging stock exchanges. The results also show that there is a significant relationship between corporate governance attributes and the financial performance of firms. The ownership concentration and board size are also involved in better CSR activities and show a significant relationship. A larger board is less effective than a smaller board, and smaller boards can make effective CI decisions

(Erhemjamts et al. 2013).

Conclusion

In conclusion, this paper examined the relationship between CG, CI, and FP with moderating impact of CSR. This study built a new era for study as a CSR as moderator of the relationship among CG, CI, and firms' FP with the context of emerging stock markets. Findings show that CSR moderates the relationship between CG and CI decisions and the relationship between CG and firm FP. In this study, CG is taken in its attributes like board size, board independent directors, executive directors, and ownership concentration. Results show that a small board size is more significant than larger board size. As members increased on the board then conflicts of interest increased that decisions making is difficult because they do not easily agree on one point. Other attributes of CG, independent directors are measured are free from any force. They easily take decisions for better CI and make better firm FP. Independent directors also facilitate society with CSR activities. Results also show that the more reliable and assumptions social initiatives, the more they will have a positive effect on CI decisions and the firms' FP. The main moderator variables are CG attributes such as board size, board independent directors, executive directors, and ownership concentration. All moderating variables show a strong and positive relation relating to investment decisions and a firms' FP with CSR. Board independent directors take effective investment decisions with effective CG with a provision of socially responsible activities. Also, an effective controller as an agent better utilize the assets as internal fund utilization. Similarly, control variables also show a positive and effective relationship with CG, CI, and FP.

Findings contributed to the existing literature on CI decisions, the firm's FP, and CG. The better CG and high CSR practices are necessary for better CI decisions and better financial performance. This study contributes to the existing literature on CI decisions, CG, CSR, and FP.

References

- Adams, B., & Ferreira, D. (2009). Women in the boardroom and their impact on governance and performance. *Journal of Financial Economics*, 94 (2), 291–309.
- Adams, B., Almeida, H., & Ferreira, D., (2005). Powerful CEOs and their impact on corporate performance. *Rev. Finance. Stud.* 18(4), 1403–1432.
- Ali, R., Sial, M. S., Brugni, T. V., Hwang, J., Khuong, N. V., & Khanh, T. H. T. (2019). Does CSR moderate the relationship between corporate governance and a Chinese firm's financial performance? Evidence from the Shanghai Stock Exchange firms. *Sustainability*, 12(1), 149-61.
- Alkurdi, A., Hussainey, K., Tahat, Y., & Aladwan, M. (2019). The impact of corporate governance on risk disclosure: Jordanian evidence. *Academy of Accounting and Financial Studies Journal*, 23 (1), 1-16.
- Al-Tamimi, H. (2009). Financial literacy and investment decisions of UAE investors. *The Journal of Risk Finance*. 10(5), 500-521
- Ayuso, S., & Argandona, A. (2009). Responsible corporate governance: Towards a stakeholder board of directors? Working Paper, University of Navarra, 1–20.
- Brooks, C., & Oikonomou, I. (2018). The effects of environmental, social and governance disclosures and performance on firm value: A review of the literature in accounting and finance. *The British Accounting Review*, 50(1), 1-15.
- Carroll, B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*, 34 (4), 39-48.
- Chan, C., Watson, J., & Woodliff, D. (2014). Corporate governance quality and CSR disclosures. *Journal of Business Ethics*, 125(1), 59-73.
- Chang, K., Oh, Y., Park, H., & Jang, G. (2017). Exploring the relationship between board

- characteristics and CSR: Empirical evidence from Korea. *Journal of Business Ethics*, 140(2), 225–242.
- Coles, L., & Hoi, K. (2003). New evidence on the market for directors: Board membership and Pennsylvania Senate Bill. *Journal of Finance*, 58(1), 197-230.
- Coles, L., Daniel, D., & Naveen, L. (2008). Boards: Does one size fit all? *Journal of financial economics*, 87(2), 329-356.
- Davis, K. (1960). Can Business Afford to Ignore Social Responsibilities? *California management review*, 2 (3), 70-76
- Deegan, C.; Rankin, M. (1997). The Materiality of Environmental Information for Users of Annual Reports. *Account. Audit. Account. J.*, 10, 562–583.
- Eccles, G., Ioannou, I., & Serafeim, G. (2012). The impact of a corporate culture of sustainability on corporate behavior and performance. Cambridge, National Bureau of Economic Research.
- El Ghoul, S., Guedhami, O., & Kim, Y. (2017). Country-level institutions, firm value, and the role of corporate social responsibility initiatives. *Journal of International Business Studies*, 48(3), 360-385.
- Elliott, B., Jackson, E., Peecher, E., & White, J. (2014). The unintended effect of corporate social responsibility performance on investors' estimates of fundamental value. *Accounting Review*, 89, 275–302.
- Erhemjamts, O., Li, Q., & Venkateswaran, A. (2013). Corporate social responsibility and its impact on firms' investment policy, organizational structure, and performance. *Journal of business ethics*, 118(2), 395-412.
- Fama, F., & Jensen, C. (1983). Separation of ownership and control. *Journal of law and economics*, 30 (2) 301-325.
- Ferrero-Ferrero, I., Fernandez-Izquierdo, A., & Munoz-Torres, J. (2013). Integrating sustainability into corporate governance: An empirical study on board diversity. *CSR & Environmental Management*, 22 (4), 193–207.
- Filatotchev, I., & Nakajima, C. (2014). Corporate governance, responsible managerial behavior, and corporate social responsibility: Organizational efficiency versus organizational legitimacy? *Academy of Management Perspectives*, 28(3), 289-306.
- Frias-Aceituno, V., Rodriguez-Ariza, L., & Garcia-Sanchez (2012). The role of the board in the dissemination of integrated corporate social reporting. *CSR & Environmental Management*, 20 (4), 219–233.
- Gill, A., Sharma, P., Mand, S., & Mathur (2012). The relationship between corporate governance and the investment decision of small business firms in India. *Journal of Finance and Investment Analysis*, 1(2), 41-59.
- Gray, R., Kouhy, R., & Lavers, S. (1995). Corporate social and environmental reporting. *Accounting, Auditing & Accountability Journal*.
- Guthrie, J. & Parker, L. (1990) Corporate Social Disclosure Practice: A Comparative International Analysis. *Adv. Public Interest Account*, 3, 159–175.
- Haji-Abdullah, M., & Wan-Hussin, N. (2009). Audit committee attributes, financial distress, and quality of financial reporting in Malaysia. *SSRN*, 1–40.
- Haniffa, M. & Cooke, E. (2005) The impact of culture and governance on corporate social reporting. *Journal of Accounting*.
- Harjoto, M., Laksmana, I., & Lee, R. (2015). Board diversity and corporate social responsibility. *Journal of Business Ethics*, 132 (4), 641–660.
- Hoang, C., Abeysekera, I., & Ma, S. (2018). Board diversity and corporate social disclosure: Evidence from Vietnam. *Journal of Business Ethics*, 151(3), 833–852.
- Huang, C., & Kung, F. (2010). Drivers of environmental disclosure and stakeholder expectation: Evidence from Taiwan. *Journal of Business Ethics*, 96(3), 435-451.
- Javeed, A., Hassan, M., & Azeem, M., (2014). Interrelationship among Capital Structure, Corporate Governance Measures, and Firm Value. *Journal of Commerce and Social*

- Sciences. 572-589.
- Jensen, C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *Journal of financial economics*, 3(4), 305-360.
- Jensen, C. (2005). Value maximization, stakeholder theory, and corporate objective function. *Journal of Applied Corporate Finance*, 14 (3), 8-21
- Katmon, N., Zuriyati, Z., Norlia, M., Norwani, M., & Farooque, A. (2017). Comprehensive board diversity and quality of corporate social responsibility disclosure: Evidence from an emerging market. *Journal of Business Ethics*, 1–35.
- Khan, I., Khan, I., & Saeed, B. (2019). Does board diversity affect the quality of CSR disclosure? Evidence from Pakistan. *Corporate Social Responsibility and Environmental Management*.
- McCahery, A., Sautner, Z., & Starks, T. (2016). Behind the scenes: The corporate governance preferences of institutional investors. *Journal of Finance*, 71(6), 2905-2932.
- McWilliams, A., & Siegel, D. (2001). Profit maximizing corporate social responsibility. *Academy of Management Review*, 26(4), 504-505.
- Post, C., & Byron, K. (2015). Women on boards and firm financial performance: A meta-analysis. *Academy of Management Journal*, 58(5), 1546–1571.
- Rodriguez-Fernandez, M. (2016). Social responsibility and financial performance: Role of good corporate governance. *Business Research Quarterly*, 19(2), 137-151.
- Shleifer, A., & Vishny, W. (1997). A survey of corporate governance. *Journal of Finance*, 52(2), 737-783.
- Talebnia, G., Alikhani, R., & Maranjoori, M. (2013). Evaluating the Quantity and Nature of Disclosure of Environmental and Social Accounting Information in Iran. *Journal of accounting and auditing, review* 19 (69), 43-60.



Impact of Regional Economic Integration on FDI in SAARC Countries

***Jai Kumar**, School of International and Public Affairs, Jilin University, Changchun 130012, China

*Corresponding author's email: jaikumarlohano8@gmail.com

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ABSTRACT

Purpose: The empirical literature is inconclusive regarding whether some regions are more effective than others at attracting Foreign Direct Investment (FDI). The article aims to ascertain the effect of regional economic integration on FDI in SAARC member countries from 1998 to 2017.

Design/Methodology/Approach: Mix research technique has been used. While qualitative research entails in-depth literature readings and reports, quantitative analysis entails presenting data via graphs and tables.

Findings: Findings suggest a significant positive connection between FDI and regional integration in the SAARC economies. While regional economic integration has a vital role in increasing SAARC's share of global commerce, it has increased FDI inflows and its share in Asia and the world. As a result, while we cannot overlook both classic and non-traditional economic factors affecting FDI, regional integration may play a critical role in fostering FDI growth.

Implications/Originality/Value: By boosting cross-border investment, regional cooperation will allow businesses, particularly those from smaller nations, to expand their size and capabilities to compete worldwide. It can also aid in increasing efficiency and reforming industries. SAARC countries must make significant progress towards integration.



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Introduction

The South Asian Association for Regional Cooperation (SAARC) is a group of countries in South Asia that was formed in 1985. It aims to improve economic, scientific, interpersonal, and cultural modernization with a focus on collective self-reliance. SAARC is one of the world's most economically impoverished regions, having four Least developed countries LDCs (Afghanistan, Bangladesh, Bhutan, and Nepal), two low-income countries (India and Pakistan), and one lower-middle-income country (Sri Lanka). Moreover, 20 percent of the world's population lives here, including half of the world's poor. Meanwhile, it has surfaced as one of Asia's rapidly rising areas

in recent years. According to the Asian Development Outlook (2007) of the Asian Development Bank, South Asia has grown at an annual rate of greater than 7.5 percent since 2003, allowing it to lower poverty threshold. India is the most populous nation, with about 75 percent of the world's population. Being one of the world's top ten industrial powers, India has the most diverse regional industrial sector and the world's second-largest pool of English-speaking scientists and engineers FICCI, (2007). In the early stages of their development, most of these countries employed extremely interventionist trade policies, and Foreign Direct Investment (FDI) was encouraged by significant trade policies. However, this began to shift in the late 1970s. Sri Lanka started gradually liberalizing in 1977, and others followed in the 1980s. However, in the early 1990s, this environment began to open up in general [Jayasuriya and Weerakoon (2001), Sahoo (2006), RIS (2008), Dutta (2000)]. Globalization of economics resulted in significant reductions in investment and trade barriers; these countries accelerated economic integration using regional, sub-regional, and bilateral initiatives and international trade liberalization. Except for Afghanistan, the (SAARC) was founded in 1985 as a political consultative body. At the Sixth Summit in Colombo in December 1991, SAARC endorsed the formation of an Inter-Governmental Group (IGG) to formulate an agreement to develop a "SAARC Preferential Arrangement" (SAPTA) by 1997. The SAPTA Agreement was made on April 11, 1993 (far ahead of schedule) and had become effective on December 7, 1995, thanks to the consensus within SAARC. SAPTA was envisioned as the first stage toward establishing a South Asian Free Trade Area (SAFTA), eventually leading to a Customs Union, Common Market, and Economic Union. The South Asian economic integration project gained traction with the accord's implementation.

On January 6, 2004, during the Twelfth SAARC Summit in Islamabad, the South Asian Free Trade Area (SAFTA) Agreement was signed on January 1, 2006, the agreement came into effect, and on July 1, 2006, it was formally launched. The Least Developed Negotiating States' specific requirements are sighted by implementing non-reciprocal favorably weighted measurements in their favor. The agreement is a standard method of lowering trade obstacles, and its main goal is to remove tariff and non-tariff trade barriers and make the cross-border flow of goods between the Contracting States easier. There have been combining bilateral agreements, involving South Asian countries, in addition to SAFTA: India-Bhutan, India-Sri Lanka, Pakistan-Sri Lanka; Asia Pacific Trade Agreement (India, Bangladesh, Sri Lanka, Philippines, Lao PDR, and Korea); and seven trade agreements: India-Nepal, India-Bangladesh, Bangladesh-Nepal, Bangladesh-Pakistan, Pakistan-Nepal, and Sri Lanka-Nepal. Others are currently being worked on in India, and Sri Lanka is working on a comprehensive Economic Partnership Agreement. BIMSTEC (Bangladesh, Bhutan, India, Myanmar, Nepal, Sri Lanka, and Thailand)-FTA (Bangladesh, Bhutan, India, Myanmar, Nepal, Sri Lanka, and Thailand)-FTA (Bangladesh, Bhutan, India, Myanmar, Myanmar, Nepal, Sri Lanka, and Thailand)-FTA (Bangladesh, Bhutan, India, Myanmar, Nepal, Sri Lanka, and Thailand)-FTA (Bangladesh, Bhutan, India, Finally, India-Pakistan, India-Bangladesh, and Pakistan-Bangladesh RTAs are also in the works Chaturvedi (2007). Except for BIMSTEC, these agreements are classic RTAs that attempt to reduce or eliminate just trade barriers while excluding all other essential problems such as operations, competition, intellectual property rights, government contracting, and finance. Thus, regional cooperation in South Asia is a superficial RTA, with "old regionalism" focusing solely on lowering or eliminating commodity trade barriers, although it is a relatively recent occurrence.

Moreover, the sensation of localism must be analysed not only in trade terms and capital, but also in terms of other types of collaboration and their implications for supporting peace and stability and developing trust in conflict situations affected areas like SAARC Khan and Larik (2007). The subcontinent is prone to violence and is subject to ongoing political tensions, and strains tend to resurface regularly, making it difficult to establish a trusting environment. Any initiative taken by these countries has the potential to help resolve conflict and promote peace, and in turn, it may

result in a more favorable investment climate. Since every nation needs investment and through FDI nation wants to get prosperity and economic growth, while FDI is a definite source of economic growth for nations Kumar et al., (2022). In the form of economic cooperation and political peace, regional integration appears to be mutually beneficial; ASEAN + 3, APEC, and ASEM have enhanced cooperation amongst East Asian nations in Asia. The European Union's success has shown that regionalism may be useful in combating past hostilities and guaranteeing stability. Mexico has a vast history of skepticism and hatred against the United States. However, NAFTA has had a significant effect on the US-Mexico political connection.

The main goal of these targets is to connect the countries in the SAARC region and benefit from their economic interdependence. This paper aims to look at how economic integration can help SAARC get more FDI and trade. SAARC started to become more economically integrated in 1995 when the South Asian Preferential Trade Agreement (SAPTA) was implemented. It was part of the South Asian Association for Regional Cooperation, which was a group of countries in South Asia that worked together (SAARC). People in SAARC have grown at the second-fastest rate in the world. Over 22 percent of the world's people live there, but only 3 percent of the world's land is used for it. It has almost 500 million poor people, accounting for 40 percent of the world's destitute. It has a tiny share of the world's GDP and purchasing power, but it has a lot of money (around 2 percent and 7 percent, respectively). This is even worse: it only makes up about 1 percent of the world's total trade. But between 1981 and 2001, there was a significant change. The number of people who were very poor dropped from 52 percent to 31 percent. Even though this isn't as important as in East Asia, where the percentage dropped from 58 percent to 15 percent, it was still a big deal for the region.

Process of Economic Integration in SAARC

It is focused on the trade and investment benefits provided to economies by entirely or partially eliminating tariffs and other regulations at country and regional borders. Economic integration aims to improve resident countries' social, technological, and economic fundamentals to allow goods to flow at a lower cost than outside the region's significant trade expense. There are six stages to economic integration.

1. A preferential trade area is a trade bloc in which member economies enjoy preferential access to specific goods. This is achieved through reducing tariffs rather than abolishing them entirely.
2. Free-trade area refers to the region encompassed by a trading bloc whose members have signed a free-trade agreement (FTA).
3. Customs union is a type of trade arrangement in which a collection of countries imposes a uniform set of tariffs on the rest of the world while allowing unrestricted trade within the group.
4. Economic union refers to an agreement between states that provides for the free movement of goods, services, and labor.
5. Economic and monetary union is a sort of trade bloc comprised of a common market, a customs union, and a monetary union.
6. Complete economic integration is the unification of all policies, rates, and economic trading rules.

In fact, trade liberalization and economic integration go hand in hand. For this reason, the free

trade option is one viable option for commodity trading within the developed economic countries' territories. On the other hand, Individual Regions failed to accept this degree of integration in the short term.

Political Factors and Acute Mistrust among SAARC Nations

The biggest disadvantage of this region is India, which has only been under British rule for roughly 250 years. In addition, after independence in 1947, the economies of Pakistan and India were split up; since their independence, these countries have been at odds with one another. After a devastating war, the world's third-largest economy, Bangladesh, gained independence from Pakistan in 1971 after a disastrous war. Pakistan and India's political rivalry has persisted, owing to a number of unresolved political concerns, such as the status of Kashmir. Bangladesh can't trust Pakistan because of its previous bad experience. Political considerations, such as a lack of confidence, mistrust of others, fear of sharing information, a lack of funding structure, and government instability, are all factors that obstruct SAARC countries' progress in terms of investment Sobhan (2004). Many factors such as Less growth, influence over the credit market, poor creditworthiness, and shallow FDI inflow play a vital role in these economies. Over time, it has become clear that the founders of SAARC were more concerned with growing mutual collaboration in the socio-economic and cultural spheres than with political difficulties. Despite such an apolitical viewpoint, political disagreements exist across SAARC countries, and efforts to enhance collaboration in non-political areas have not materialized, especially given the current political turbulence. In fact, due to inherent disparities in their political systems, finding common ground among the political leaders of South Asian countries is challenging. Bhutan, for example, has a constitutional monarchy despite the presence of parliamentary democracy in India. Furthermore, Nepal was a monarchical monarchy until recently, while Pakistan was a government country. Definitely, India and Pakistan have adopted opposing positions on various international issues.

It is important to recall that the foundation of regional cooperation is allied countries' equal interest in mutual benefit and similar engagement in enhancing collaboration. However, in terms of population, military might, economic progress, etc. Between SAARC countries, there is also a necessity and intra-competition for political issues to take precedence over economic factors. An example of global market competition is tea export competition between India and Sri Lanka, jute free market forces between India and Bangladesh, rice export competition between India and Pakistan, and cotton textile competition between Pakistan and Sri Lanka. The SAARC countries' concern about India is that it dominates in terms of territory, population, technological advancement, and military power, which could be a key reason for the region's continued and gradual expansion of cooperation. Religious and cultural concerns also hamper SAARC's expansion to some extent. Pakistan favors economic and cultural cooperation with Islamic countries; Nepal and Bhutan, which are inhabited by Hindu and Buddhist religions, are spiritually and culturally closer to India. In terms of economics, there are concerns that India and Pakistan are more sophisticated and established than Bhutan and Nepal and that more developed partners will exploit them. Even if there is a lack of trust and skepticism among SAARC members, there is still a lot of room for cooperation Jyotirmoy Banerjee (2006).

Spatial Distribution of FDI across the Region

While regional integration may increase extra-regional investments in the country overall, it may not increase FDI in independent member countries. While external EU members such as Ireland have captured with other EU members in terms of productivity – presumably via commerce and FDI spillovers – there has been some discrepancy and accumulation in developing nations such as the East African Community and the Central American Common Market, both of which date back to the 1950s and 1960s. The effects of agglomeration can help to improve an unequal distribution of benefits among participants Venables, A. J. (1999). The spatial clustering of

business growth is referred to as the "agglomeration effect." Agglomeration can occur within a county (e.g., cities) or across borders. Clusters of economic activities can contribute to efficiency advantages, for example, because economies of scale allow for a pool of specialized support services e.g., Porter, M. E. (1998). If relocation effects occur within a region, efficiency increases may arise, reinforcing the relocation impact. This would result in even more divergence or convergence, affecting the distribution of gains and, eventually, the motivations for regional integration. On the other hand, smaller (and possibly poorer) countries may have incentives to create a region to attract investment away from other members, notably extra-regional FDI, as Ethier (1998) argues. This could be the situation when regional tariff preferences allow multinational investors to establish beachhead facilities in tiny (or poor) countries to serve the entire regional market. As a result, the spatial distribution of FDI is an empirical subject influenced by external MFN tariffs, RoO strictness, market size, and agglomeration effects in individual member nations.

The net inflow of FDI has increased dramatically over the last few decades, rising from US\$12.358 billion in 1970 to US\$1.631 trillion in 2019. (Figures 1 and figure 2)

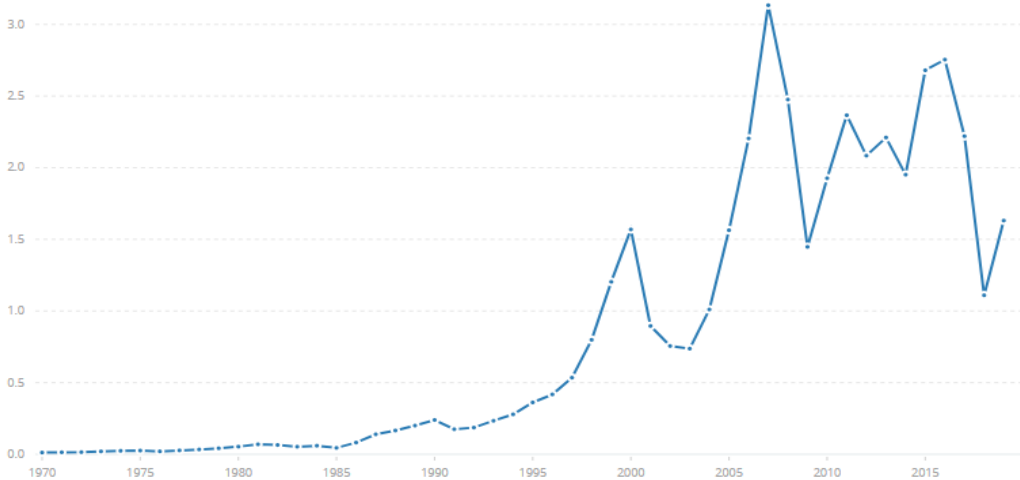


Figure 1 World net foreign direct investment (FDI) inflow: 1970-2019 (Trillion US Dollars)
Source: Author’s compilation on the basis of data from World Bank

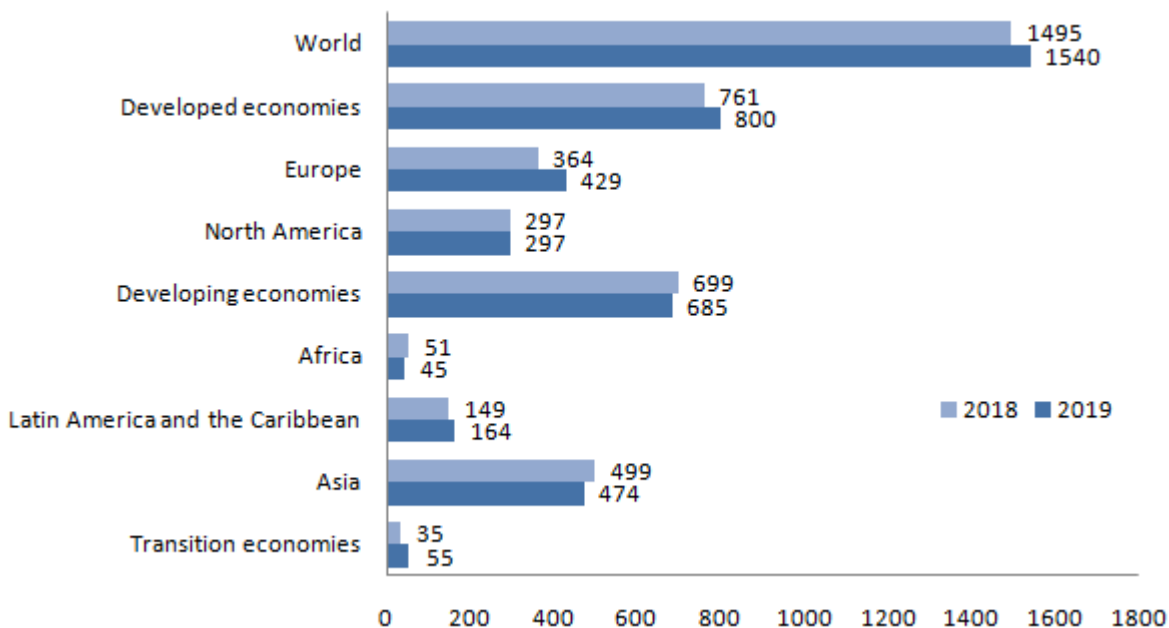


Figure 2 Foreign Domestic Investment Inflows Global and by Group of Economies, 2018 and 2019

(Billions of US dollars)**Source: Author's compilation on the basis of data from World Bank**

In 2019, Asia gained US\$474 billion of FDI inflows, showing 69 percent of the FDI inflows to developing economies (sum of US\$685 billion and 44 percent of all FDI). In contrast, other developing economies in Africa obtained US\$45 billion, which consists of 6.5 percent, and Latin America and the Caribbean gained US\$164 billion, which makes 24 percent of developing economies the US\$474 billion. FDI inflows into Asia in 2017, the top five host economies were china (US\$117.1 billion), Hong Kong, China (US\$59.3 billion), Korea Republic (US\$35.5 billion), Singapore (US\$33.3 billion), and United Arab Emirates (US\$15.9 billion).

Table 1 shows the global flow of FDI from 1998 to 2017(US\$ Million)

Years	World	Developing Countries	Developed Countries
1998	681630.9	178045.4	503585.6
1999	1078272	218687.3	859585.1
2000	1356645	234178.8	1122466
2001	773137.2	219515.8	553621.4
2002	590315.2	170874.1	419441.1
2003	549625.2	201102.7	348522.5
2004	698437.7	271298.4	427139.2
2005	953166	336348.7	616817.3
2006	1415967	412251.1	1003716
2007	1906729	533178.7	1373550
2008	1489144	598419.7	890724
2009	1239093	481242.9	757850.1
2010	1393729	641914.7	751814.5
2011	1612890	689628	923262.1
2012	1491331	688889.3	802441.2
2013	1453506	674485.7	779020.6
2014	1402117	698595.7	703520.9
2015	2032298	746248.9	1286049
2016	2065238	673750.2	1391488
2017	1647312	716344.1	930967.8

Source: Author's compilation on the basis of data from World Bank

Globalization's impact on FDI patterns, emerging markets have received FDI for several decades, driven by market size, rapid growth, and cheap resource availability (cheap raw materials and labor compared to developed countries). To increase profits, multinational corporations have entered unsaturated markets. From 1990 to 2008, global FDI flows grew far faster than global economic or trade growth, according to UNCTAD research. Table 1 states that total FDI increased from \$481.91 million in 1997 to \$958.69 billion in 2005. After a four-year surge to \$1.9 trillion in 2007, FDI flows have slowed. In 2008, (-16 percent) due to the global economic crisis, multinational corporations faced a contraction in the primary economic system in 2009. The stock market crash impacted loan conditions, property values, and business profitability (UNCTAD, 2011). As a result of the worldwide financial and economic crisis, total inflows declined dramatically in 2009. Also, global FDI climbed somewhat to \$1.24 trillion in 2010 but remained 15 percent below pre-recession levels. FDI in wealthy economies declined 40 percent in 2009, while it fell 22 percent in developing nations. Intra-company loans to developed economies reduce the weight of reinvested profits and FDI flow (UNCTAD, 2010). Global Investment Reports (2009) and (2010) predict that FDI will speed the transition to a developing economy in 2011, and between 2007 and 2009, this movement was prominent. The fundamental factor is the countries' political and economic reforms to attract foreign investment. Similarly, overall FDI flows continued to expand in 2012 and peak in 2013, according to UNCTAD research (2010-2012), with roughly 60 percent of revenue going to developing China. Optimistic estimates include other global economic effects and consider lingering risks like the eurozone

crisis. This may harm future EU FDI while benefiting Asia and other growing nations. UNCTAD research (2009–2011) shows international corporations are worried about the slump's consequences. Additional short- and long-term economic repercussions, citizenship is also safeguarded and enhanced in many developed and developing countries. Non-equity alternatives like franchising, licensing, or outsourcing are alternatives to greenfield and M&A investments.

Potential for Regional Economic Integration in SAARC

Even though SAARC nations have built a variety of institutional structures to foster regional economic integration during the last three centuries, the share of intraregional trade in overall trade has remained stable at around 5 percent (compared to over 20 percent for Southeast Asia). SAARC, founded in 1985 and brought together all eight South Asian nations, is the most extensive. In 1991, it launched an economic cooperation agenda, and four years later, the SAARC Preferential Trading Arrangement was established (SAPTA). Between 2006 and 2016, SAARC established the Agreement on South Asian Free Trade Area (SAFTA) to create a borderless economic zone and abolish tariffs on traded goods. SAARC signed the SAARC Agreement on Trade in Services (SATIS) and launched the \$300 million SAARC Development Fund with humanitarian, socioeconomic, and structural windows at the 16th SAARC Summit in Bhutan in 2010. Another overlapping body for regional collaboration is the Economic Cooperation Organization (ECO), which has two SAARC members, Afghanistan and Pakistan. Five nations in South Asia (Bangladesh, Bhutan, India, Nepal, and Sri Lanka) and two countries in Southeast Asia are members of the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) (Myanmar and Thailand). The Asia-Pacific Trade Agreement (APTA), formerly known as the Bangkok Agreement, was negotiated under the auspices of the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) and signed in 1975 by Bangladesh, India, the Lao People's Democratic Republic, the Republic of Korea, and Sri Lanka. In the year 2000, China became a member of the APTA. UNESCAP had also assisted in the creation of the Asian Clearing Union, a financial mechanism to cut central bank transaction and foreign exchange expenses for its nine members, namely Bangladesh, Bhutan, India, the Islamic Republic of Iran, the Maldives, Myanmar, Nepal, Pakistan, and Sri Lanka, a year before APTA was established.

Through specific agreements and the standard work programmes maintained by their respective secretariats, specialised organisations founded by them, and other relevant activities, ECO, SAARC, and BIMSTEC address different concerns of trade, investment, and transport connectivity. ECO has formed the ECO Bank and enacted a favourable trade agreement, the ECO Trade Agreement (ECOTA) of 2003. While tariff liberalization in the ECO region is underway under ECOTA, the ECO Transit Trade Agreement (TTA) and ECO Transit Transport Framework Agreement address some of the most significant non-tariff trade barriers, particularly those connected to trade and transport facilitation gaps (TTFA). SAFTA remains the primary mechanism for trade liberalization within the SAARC framework. Some nations have adopted 'para-tariffs,' which have effectively countered the SAFTA's limited tariff advantages Pursell (2011). As a result of liberalization changes, all of the region's countries have grown more open to FDI. Sri Lanka is the only country in the area that has concurrently liberalized trade and investment policy frameworks Athukorala and Rajapatirana (2000). However, the member states' long-standing practice of maintaining extensive vulnerable lists to exclude items from special privileges, notably for non-LDCs, has hampered tariff reduction under SAFTA. The implementation of SATIS, which allows for the liberalization of service commerce through requests and offers, is still in its early stages. A South Asia Regional Standards Organization (SARSO) was established under the SAARC framework, and working groups for financial cooperation and customs reforms were formed. Other major SAARC initiatives include the creation of SAARC transport corridors to solve connectivity difficulties and policy mechanisms utilized under SAFTA to overcome non-tariff trade barriers. BIMSTEC took more than 15 years

after its founding in 1997 to build a permanent secretariat in Dhaka, Bangladesh. Regular BIMSTEC work programs, particularly in the fields of commerce and transport, are now underway with fresh enthusiasm following the BIMSTEC leaders' retreat in India in October 2016. Many reciprocal preferable transit and trade or trade pacts, such as those between India and Nepal, Bhutan and India, Afghanistan and Pakistan, and Pakistan and Sri Lanka, help these intersecting arrangements work even better than they would on their own. South Asia's trade agreement, on the other hand, is the only one that covers all of the nations in the region and works.

FDI and Economic Status of SAARC

The South Asian Association for Regional Cooperation (SAARC) is a regionally linked organization of seven developing countries worldwide. The primary goal of the organization's inception was to foster strong regional integration, improve the FDI position and increase trade involvement between members and non-members. Access to international investment and the strengthening of macroeconomic metrics (e.g., GDP, gross national income, etc.) are two advantages of this integration. However, FDI flows from the post-independence period through the 1970s did not increase significantly compared to the 1980s. In recent decades, the country has been hampered by harsh economic policies. Strict tax and trade policies are examples of this. Import Substitution Policy and stringent legislation and regulations, only national companies and self-improvement are promoted with this stringent goal. Flows of FDI are currently at a standstill. FDI has expanded in many countries, allowing international investors to own up to 100 percent of the shares, allowing for acceptable royalty and technology fee conditions to be negotiated with foreign investors in technology transfers and investments. Geographical position lowers trading costs for communication and transportation Schiff & Winters (2003). Overseas investment is permitted; as a result, in the last decade, FDI into SAARC countries has skyrocketed. For example, FDI increased from \$542 million in 1990, \$4368 million in 2000, an additional \$31699 million in 2010, and \$56.674 billion in 2019. Research by Pandey, P., and Singh, HK (2012) highlights the relevance of CRM in customer retention and argues that the employment of innovative technologies in the public and commercial sectors is favorable to obtaining customer trust.

Table:2 Cumulative FDI inflows in SAARC(US\$ Million)

Year	FDI Inflow	Growth Rate
1998	3548	-27.53%
1999	3080	-13.17%
2000	4368	41.79%
2001	5798	32.76%
2002	6355	9.60%
2003	4821	-24.14%
2004	7477	55.11%
2005	10889	45.63%
2006	25540	134.55%
2007	32472	27.15%
2008	51156	57.54%
2009	39495	-22.79%
2010	31699	-19.74%
2011	40646	28.23%
2012	27781	-31.65%
2013	33525	20.68%
2014	40327	20.29%
2015	49719	23.29%
2016	50932	2.44%
2017	46334	-9.03%
2018	48656	5.01%
2019	56674	16.48%

Source: Author's compilation on the basis of data from World Bank

FDI was a significant source of finance for SAARC countries in the 1990s. Still, influential countries like India, Bangladesh, Pakistan, and Sri Lanka changed their investment policy, helping the economies to thrive. To make the effect more understandable, a graphical illustration is provided below.

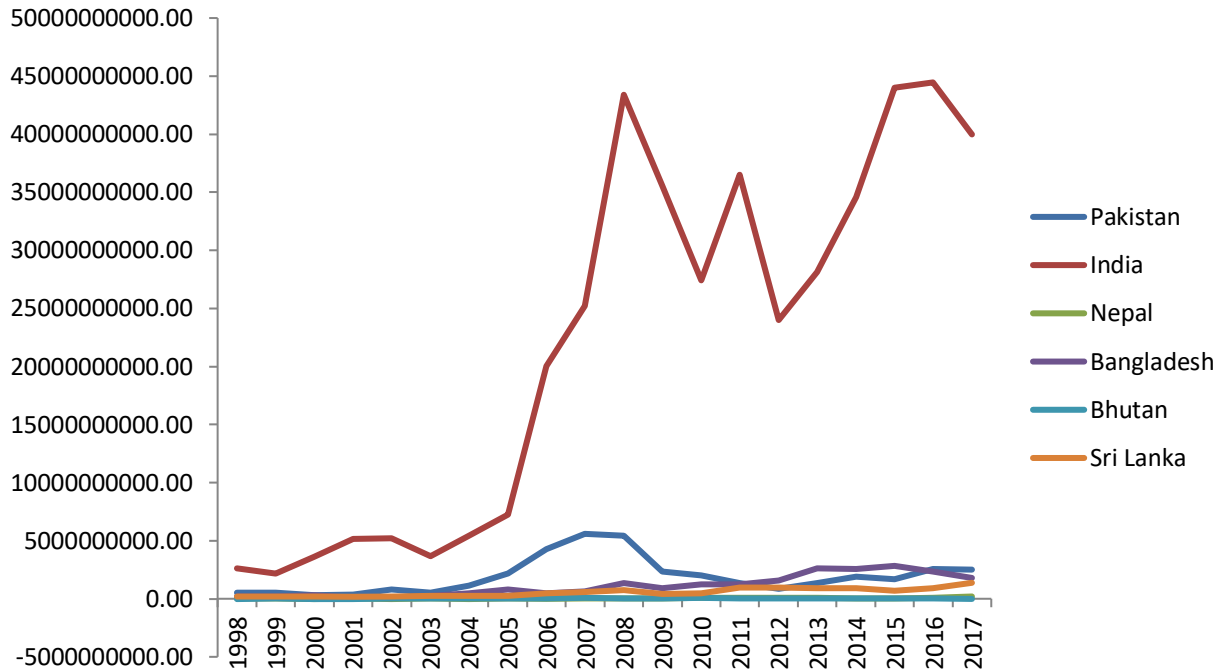


Figure 3 Cumulative FDI inflow in SAARC (US\$ Million)

Source: Author's compilation on the basis of data from World Bank

Due to the abolition of macroeconomic programs and the imposition of high tax barriers in the 1970s and 1980s. As a result, SAARC's FDI prospects are bleak. India, which was the world's largest economy in 1991, has begun liberalizing trade and investment. Prior to India, this results in the highest investment. Natural resources abound, and multiple potentials for expansion and productivity have attracted large investors from the United Arab Emirates, the United Kingdom, and the United States to do business in member countries. Regional disparities in violence are examples of such difficulties in Security and Political Issues. This frequently inhibits investments from achieving their projected growth goals. Many factors contributed to this period, including India's rapid opening of trade and liberalization processes with other SAARC countries since 2010. The internal trend of FDI was interrupted from 1996 to 1999. Other developing countries, such as Nepal and Bhutan, have started projects since 2000. Nepal, and Bhutan, among other undeveloped countries, have launched schemes to attract many foreign investors. India receives a significant amount of FDI in the services, telecommunications, computer hardware, and software industries. Similarly, Pakistan is the most profitable in the oil and gas business. From 2000 to 2005, with the improvement of US-Pakistan relations and the Indian government's permissive FDI policy, member states were paid based on their capacity to absorb. In addition, FDI inflows have improved. The FDI totaled \$7.477 billion till 2004; during this time, FDI surged by doubled compared to 1998.

FDI has provided the Member States with numerous prospects for growth and productivity. SAARC made the most significant investment in rapid expansion from 2005 to 2008. It is valued at \$25.54 billion, representing a double over the previous year. The main reasons for this were

India, Pakistan, Sri Lanka, and Bangladesh. In 2008, FDI was \$51.156 billion. On the other hand, India was the least hit by the worst crisis. However, Pakistan and other countries in the region incurred significant casualties. As a result, investors began to withdraw funds to keep the economy afloat.

Table:3 Proportion of SAARC in Cumulative World FDI(US\$ Million)

Year	SAARC Inflow	World Inflow	Share of SAARC in World FDI
1998	3548	795628	0.45%
1999	3080	1203498	0.26%
2000	4368	1569123	0.28%
2001	5798	895500	0.65%
2002	6355	755583	0.84%
2003	4821	737213	0.65%
2004	7477	1010419	0.74%
2005	10889	1563481	0.70%
2006	25540	2203987	1.16%
2007	32472	3133859	1.04%
2008	51156	2475531	2.07%
2009	39495	1447375	2.73%
2010	31699	1926407	1.65%
2011	40646	2366295	1.72%
2012	27781	2084673	1.33%
2013	33525	2210927	1.52%
2014	40327	1951892	2.07%
2015	49719	2680789	1.85%
2016	50932	2744641	1.86%
2017	46334	2218043	2.09%
2018	48656	1068469	4.55%
2019	56674	1498071	3.78%

Source: Author's compilation on the basis of data from World Bank

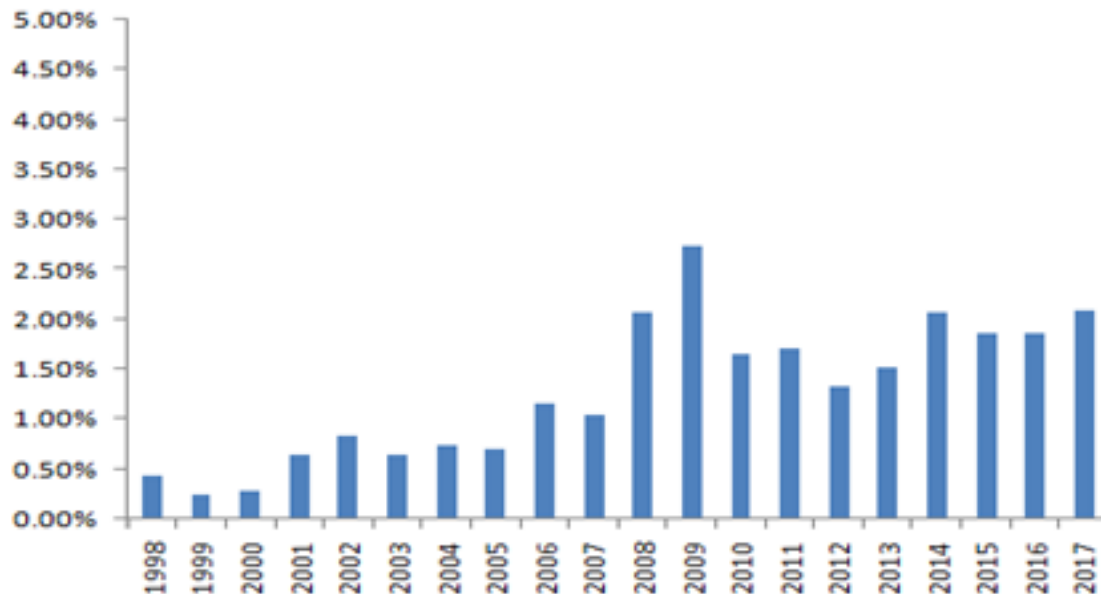


Figure 4 Proportion of SAARC in cumulative World FDI

Source: Author's compilation on the basis of data from World Bank

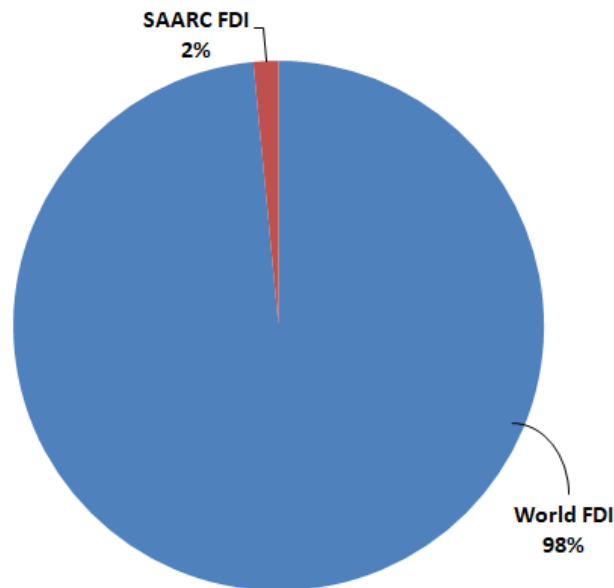


Figure 5 Share of SAARC in cumulative World FDI inflows 1998 to 2017

Source: Author's compilation on the basis of data from World Bank

Based on their social and economic foundations, countries are commonly categorized into developed and developing countries worldwide. It is separated into various economic zones. Since its foundation, SAARC has been one of the economic regions consistently invested. SAARC's part of this massive FDI and many wealthy and developing countries modified their trade and investment policies early. By assisting them in improving their international FDI status, the total amount of FDI in 1998 was \$3548 billion in SAARC, accounting for only 0.45 percent of global FDI. SAARC's worldwide FDI is increasing. The FDI totaled \$5.798 billion in 2001.

Moreover, \$895.5 billion in worldwide foreign direct investment, Global FDI declined to \$895.5 billion in 2001, down from \$1569.123 billion the year before, and to \$895.5 billion in 2006 and 2007. SAARC's cumulative share increased marginally, from 1.16 percent to 1.04 percent. SAARC may have received the most significant FDI influx of US\$51.156 billion in 2008, while global FDI was \$2,475.531 billion. SAARC's global share of FDI was 2.07 percent earlier this year. Later in 2009, the financial crisis spread to the US economy due to a drop in global FDI and a shrinking SAARC share. In 2009, the highest SAARC accounted for 2.73 percent of global FDI, and the global status of FDI improved from 2010 to 2019. SAARC's share of global FDI might rise to 3.79 percent, with SAARC's FDI totaling 56.674 billion dollars. Million dollars to attract additional foreign direct investment; as a result, domestic businesses become more resilient. According to Amit and Saini (2012), any business encounters numerous challenges; on the other hand, challenges spur innovation, which impacts sales and profitability. As a result, appropriate methods and tactics must be implemented to maintain an unknown future for businesses. FDI may accelerate the economy's growth and assist its development by facilitating technological transfers and spillovers [Jaumotte, (2004); Aggarwal, (2008); Soomro et al., (2022)].

Conclusion

Regional integration in South Asia has made slow progress and yielded minimal results, leading to widespread pessimism about its effectiveness. However, according to the research above, regional integration has the capacity to boost economic development in member states, regardless of their size or growth rate. Only a deeper level of cooperation will allow this potential to be realized, and there are still a few obstacles to overcome. Unresolved structural defects,

bureaucratic impediments, political activities, circumscribed patriotism, and mutual suspicion are just reasons why the area has not realized its full potential. These flaws can only be addressed and corrected by increased regional collaboration. Increased investment flows will help area businesses compete in global markets. In general, inward investment is thought to be helpful to the host country's businesses. However, it's worth noting that foreign investment is a stimulus for increased commercial competitiveness. By boosting cross-border investment, regional cooperation will allow businesses, particularly those from smaller nations, to expand their size and capabilities to compete worldwide. It can also aid in increasing efficiency and reforming industries. SAARC countries must make significant progress toward integration. There are various practical and other constraints to adopting SAARC; as a result, reforms inside this forum, such as relaxing of origin criteria, are essential. A conducive environment must be established to facilitate meaningful conversations between countries, particularly between India and Pakistan. A tighter and broader regional union is required, resulting in significant changes to the region's whole political and economic framework to encourage the FDI to promote economic growth.

References

- Aggarwal, A. (2008) 'Regional economic integration and FDI in South Asia: prospects and problems', ICRIER-New Delhi Working Paper, No. 218, pp.1–44
- Amit saini (2012). Emerging Challenges for Sustainable Business. *International Journal of Languages, Education and Social Sciences*, 02(1), 22-30.
- Athukorala, P. & Rajapatirana, S. (2000). *Liberalization and industrial transformation: Sri Lanka in international perspective*. New Delhi: Oxford University Press.
- Banerjee, Jyotirmoy. "Cooperative Denuclearisation?." *Challenges to India's Foreign Policy in the New Era* (2006): 171.
- Chaturvedi S. (2007), "Trade Facilitation Measures in South Asian FTAs: An Overview of Initiatives and Policy Approaches", RIS Discussion paper 118.
- Development (UNCTAD). (2009). *Information economy report 2009: Trends and outlook in turbulent times*. United Nations Publications.
- Dutta D (2000) ed., "Economic Liberalisation and Institutional Reforms in South Asia: Recent Experiences and Future Prospects", Delhi, Atlantic, 2000.
- Ethier, W.J. (1998). Regionalism in multilateral world. *Journal of Political Economy*, 106(6), 1214–1245.
- FICCI (Federation of Indian Chamber of Commerce and Industry). (2007). *India Inc's acquisitions abroad*. New Delhi: FICCI.
- Jaumotte, F. (2004) 'Foreign direct investment and regional trade agreement: the market size effect revisited', International monetary fund (IMF) Working Paper, Vol. 4, No. 206, Washington, D.C.
- Jayasuriya, S., and D. Weerakoon (2001), "FDI and Economic Integration in the SAARC Region" in T.N. Srinivasan (ed.), *Trade, Finance and Investment in South Asia*, Social Sciences Press, New Delhi.
- Khan, H.A. and Z. Larik (2007), "Globalization and Regional Co-operation in South Asia: A Political and Social Economy Approach", CIRJE-F-480 discussion paper.
- KUMAR, J., SOOMRO, A. N., & KUMARI, J. (2022). Revisiting the Nexus of Foreign Direct Investment, Financial Development, and Economic Growth: The Case of Emerging Economies. *The Journal of Asian Finance, Economics and Business*, 9(1), 203-211.
- Pandey, P., & Singh, H. K. (2012). The Relationship between CRM Dimensions and Customer Retention in Indian Banking Industry: an Empirical Study of Public and Private Sector Bank. *Journal of Commerce and Accounting Research*, 1(4), 51-59.
- Porter, M. E. (1998). *Clusters and the new economics of competition* (Vol. 76, No. 6, pp. 77-90). Boston: Harvard Business Review.
- Pursell, G. (2011). Trade policies in South Asia. In Raghavendra Jha (Ed.), *Routledge handbook of South Asian economies* (pp. 219–237). London: Routledge.

- RIS (Research Information System). (2008). *South Asia development and cooperation report*. New Delhi: Oxford University Press.
- Sahoo, P. (2006), "Foreign Direct Investment in South Asia: Policy, Trends, Impact and Determinants", ADB Discussion Paper No: 56; Published: November 28 2006.
- Schiff, M.W. & Winters, L.A. (2003). *Regional integration and economic development*. Washington DC: World Bank.
- Sobhan, Rehman, (2004). Promoting Cooperation in South Asia – An Agenda for the 13th SAARC Summit, Promoting and Facilitating Investment in South Asia. Edited, The University Press Limited, Dhaka, Bangladesh.
- SOOMRO, A. N., KUMAR, J., & KUMARI, J. (2022). The Dynamic Relationship Between FDI, ICT, Trade Openness, and Economic Growth: Evidence from BRICS Countries. *The Journal of Asian Finance, Economics and Business*, 9(2), 295-303.
- UNCTAD, D. (2010). World investment report 2010: transnational corporations, agricultural production and development.– New York.
- UNCTAD, F., & Treatment, E. (2012). UNCTAD series on issues in international investment agreements II. *United Nations, Geneva*.
- UNCTAD, T. (2011). Development report, 2011. *N.-Y. and Geneva, United Nations Publication*.
- UNCTAD. (2009). UNCTAD Training Manual on Statistics for FDI and the Operations of TNCs.
- Venables, A. J. (1999). Regional Integration Agreements: a force for convergence or divergence?. Available at SSRN 629197.



The Impact of Firm-Specific Factors on the Stock Prices: New Insight from Emerging Market of Asia

Yusra Nazir, MPhil Scholar, International Islamic University, Islamabad, Pakistan

Farheen Zahra Hussain, Lecturer, Department of Commerce, Bahauddin Zakariya University, Multan, Pakistan

Ariba Mukhtar, MPhil Scholar, International Islamic University, Islamabad, Pakistan

Samina Khalid, MPhil Scholar, International Islamic University, Islamabad, Pakistan

*Corresponding author's email: farheenzh@gmail.com

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ABSTRACT

Purpose: The purpose of this paper is to investigate the factors that can influence the share prices of listed firms.

Design/Methodology/Approach: The sample of 120 listed firms was selected from 2014–to 2020 was collected.

Findings: We documented a new insight that all the variables have a strong relationship between variables with the share prices except leverage. The ROA and Leverage show a negative relationship with the share price and EPS, dividend per share, firm size and price-earnings ratio show a positive relationship with the share prices.

Implications/Originality: This paper contributes to the existing literature and continuing debate about firm-specific determinants influencing share price in an emerging market, with a focus on manufacturing firms of Pakistan.



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Introduction

The stock price is a significant economic indicator that influences economic activity and plays a significant part in a country's economic development. The stock markets are supposed to stimulate economic growth by boosting the quality of investments, as well as rising domestic savings. The stock market's success is influenced by a variety of external and internal factors. Investors, managers, financial experts, and the government all regard stock market performance to be the most essential area of financial study. The stock market facilitates cash transfers between the government, investors, and other stakeholders (Uddin et al. 2013). Investing in stock is one of the key areas of investment that has the potential to provide significant returns to investors. The factors affecting share prices are always a matter of debate, and financial experts have different opinions about the stocks prices. The share prices would be ascertained in the

efficient market by using different fundamental variables such as EPS, payout ratios, dividend per share, firm size and dividend yield, etc. Future share prices are anticipated by calculating the current fair value of the stock and the forecasted value of the various ratios. If the current share price is not equivalent to the firm's fair worth, the stock is underpriced or overpriced. Consequently, the market price falls towards the fair value of the firm. Understanding different variables and their effects on stock prices are crucial for investors since it will aid them in making judgments about stock investments (Srinivasan, 2012). The returns on such investments depend on the performance and price variations in each stock (Bhattarai, 2014). Similarly, the share price has a significant impact on investors' stock investment decisions (Uddin et al. 2013).

The determinants of share price are frequently a source of discussion. The financial experts and investors in the stock market have different opinions regarding the pricing of an asset. Fundamental considerations such as earnings per share, dividend payment ratio, and company size, among others, would influence share prices in an efficient market. According to Raza et al., (2018), a movement in share price can only occur if information related to future earnings is dispersed. However, theories indicate that changes in the prices of shares are related to changes in fundamental financial variables. The efficient market hypothesis is a common theory that assumes that a rational market investor will make a purchase or sale choice based on accessible information such as business dynamics and other fundamental declarations from the company. If they believe that the information is positive, then they will hold the stocks if already purchased or buy the shares which were previously not bought and vice versa. The action of investors regarding the purchase and sale of shares is responsible for the change in the price of the shares. The efficient market hypothesis is divided into three categories such as strong, semi-strong, and weak. They differ in terms of the information provided to investors and the general public (Aveh & Awunyo-Vitor, 2017; Singh, 2018). Another "Random Walk" theory claims that stock values are unpredictable and impossible to predict. This hypothesis is scientifically examined numerous times and has been confirmed by the researchers. The efficient market hypothesis is consistent with random walk behavior because of the random flow information that allows the investors to assess the share price. For instance, even if the firm's fundamentals do not change, investors will invest in shares if the price rises (Singh, 2018).

Several factors relating to the firm have an impact on the share prices, i.e., industry, the general environment, and the overall economy. Although, various studies have been conducted by various scholars to explore the impact of various variables on stock price movement. A ground-breaking empirical study on the US stock exchange revealed that share prices respond to financial statement information content (Ball & Brown 1968). The prior studies in Pakistan have not found any current findings on the casual correlations between fundamental variables and share prices, indicating that more research is needed. This study varies from others and concentrates on non-financial firms, which has been overlooked in prior studies because the majority of research in Pakistan is centered on the banking sector. In addition, this study uses data from more recent years and bigger sample size than previous studies. The previous studies were conducted on dividend yield, dividend payout, and stock prices. This study further includes four variables in the analysis. Further, this study examines the impact of share price determinants in Pakistan over some time to give investors with comprehensive data from 2014 to 2020.

A few researchers investigated factors that influence the share price of publicly traded firms. According to findings, the size of the firm has a significant impact on share prices (Yu, 2003). Larger organizations are going toward a more diversified strategy. In another study, the size of a company and the degree of its leverage have no bearing on the company's share price (Saquido 2003). He argued that the determinant of share price and company financing decisions strongly distinct from one another. Another earlier work indicated that the business production potential is increasing as the firm size increases, resulting in high returns by having a high share price

(Lawrence 2004). He observed a strong link between the firm size and profitability of firms. Azam & Shah (2010) investigated how internal and external financial restrictions affected firm share prices. Findings show that share price and firm size are strongly associated with each other. The paper has shown when the size of the firm is large it will make increase the share price if the size of the firm upsurges the share price will incline. The size of a corporation has a positive and considerable impact on its stock price. This suggests that when a company's size is large, its stock price is considerably large in comparison to small firms (Kadapakkm et al. 1998).

Mukhtar & Asad (2016) examined the influence of financial leverage and firm size to determine share price across Pakistan. A sample of 30 listed firm data was gathered from the annual reports from 2001-to 2013. It has been discovered that firm size has a positive and extremely significant relationship with the share price. Another researcher Ullah (2017) investigated the link between firm size with the share price. According to the findings, the price of a share rises in tandem with the firm's size. Firm size has a positive impact on valuation, which is consistent with the assumption that larger enterprises have lower necessary returns. As a result, the purpose of the research is to see how firm-specific factors affect the stock prices of firms listed in the Pakistan market. The reason for this is that Textiles, Cement, Sugar, Automobiles, and Food & beverages are Pakistan's most important manufacturing industries since they serve as the country's economic backbone. Furthermore, this research would provide useful instructions to financial managers, investors, and policymakers for them to make more informed judgments about future investments. As a result, the current research intends to quantify the impact of selected firm-specific dynamics on the share price of Pakistani non-financial firms belonging to the Textile, Sugar, Food & beverages, Automobile, and Cement sector.

A gap is found in the literature since much of the research on this topic has focused on dividend policy to comprehend how it affects stock prices, but little attention has been paid to the relationship between different parameters such as earnings and business size. Further, the banking industry receives the majority of research in the Pakistan stock market. The gap is filled by this study by conducting a comprehensive analysis of 120 non-financial firms listed belonging to cement, sugar, textile, food & beverage, and automobiles sectors to establish the extent of their influence on share prices.

Hamad et al. (2019) conducted research by using the empirical data from Pakistan's automobiles sector and the findings show a significant relationship between determinants and share prices. Arshad, et al. (2015) conducted a study and various determinants of share prices are explored in the context of Pakistan. Various studies have been carried out to investigate share prices with some variables by choosing different samples, but there is limited literature available on the share price determinants. Therefore, this study explores the determinants(factors) that influence share price, by which choosing 120 firms as a sample from different sectors from 2014 to 2020. No such study has been carried out in the country before., thus the following objectives are established:

- To investigate the impact of EPS on the share prices of listed firms in Pakistan.
- To investigate the impact of dividends per share-on-share prices of listed firms in Pakistan.
- To investigate the impact of the P/E ratio on the share prices of listed firms in Pakistan.
- To investigate the impact of Firm size on share prices of listed firms in Pakistan.
- To investigate the impact of Leverage on share prices of listed firms in Pakistan.
- To investigate the impact of Return on Assets on share prices of Pakistani listed firms.

The focus of the study is to examine the impact of factors such as EPS, dividend per share, price-earnings ratios, company size, leverage, and ROA on stock prices. This study helps to exist as well as prospective investors to observe investments in different securities or sell their stocks. The research will also identify the elements that influence stock prices in Pakistan. This

study will be helpful for firms to design strategies considering the variables affecting the stock prices. This study is extremely beneficial to investors and policymakers since it allows them to make informed investment decisions. It may be useful to portfolio managers and investors in terms of risk management. So, investors should consider these variables in investment decisions in Pakistan.

Literature Review

In the finance literature, several types of research have been done the investigation the driver of share prices in different stock markets. However, still, the consensus does not exist on the factors that influence share prices. Existing literature revealed that many factors contribute to share prices variations (Almumani, 2014; Sharma, 201; Bhattarai, 2014; Enow & Brijlal, 2016). Researchers discovered a relationship between factors that affect stock prices in developing markets, the level of significance varies over time (In'airat, 2018). Empirical research based on Ohlson (1995) model disclosed a nexus between accounting information and share price, but levels of explanation varied (Pirie & Smith 2008; Khanagha 201; Sharma & Singh 2012). As a result, determining share price is a difficult task. Shiller (1983) discovered that share prices are not stable and move disproportionately in reaction to fundamental news because of market irrationality. According to Adebisi & Lawal (2015), the share price is a virtuous measure that depicts the firm's value and performance to stockholders in a well-organized market (Adebisi & Lawal (2015).

The prospective stockholders need to acknowledge those factors that can affect the share price. The focus of this study is on microeconomics factors that determine the equity share prices (EPS, DPS, BV, PE ratio, dividend payout ratio). Literature showed a positive link between BV and EPS with the stock price, whereas PE ratios, size, and DPS were also found to have a substantial impact on the stock price. In another study conducted by Chowdhury et al. (2019), they found that the following determinants (Earning price share, Firm size, net asset per value, and dividend payout) affect the share prices. A study conducted by Robbetze & Harmse (2017), and found a strong link between EPS and share prices. The research conducted on developed markets stated a significant relationship between firm-specific factors and stock returns (Cooper et al. 2003; Malhotra & Tandon, 2013). The above-mentioned studies identified firm-specific variables such as EPS, DPS, BV, FS, dividend yield, etc. as influencing factors for the share price.

M & Menaje (2012) found that EPS has a high positive relationship with stock prices, but ROA has a weak negative relationship with stock prices. In addition, Khan (2012) revealed that ROA, cash dividend, and retention ratios had a significant association with share prices. Khan et al. (2011) found dividend yield, ROE, and profits per share have a positive relationship with share prices; Sharma (2011) also investigates the nexus of share prices with the following factors (DPS, BV per share, EPS, dividend payout ratio, PE ratio, size). Findings revealed a significant impact of DPS, and EPS on share prices. Similarly, Malakar & Gupta (2002) investigated the nexus between share prices and determinants. Findings show a strong correlation of EPS with stock prices and are considered a key determinant of share prices. Thus, the following hypothesis is proposed:

H1: There is a positive association between Earning per share and share prices.

Irfan & Nishat (2002) examined the key determinants that influence the prices of stock. Findings showed that dividend yield, dividend payout ratio, and firm size are the major causes of changes in share prices. As Sharif & Pillai (2015) documented that firm size, P/E ratio, EPS, ROE, and DPS are key factors that influence share prices on the Bahrain Stock Exchange. Similar studies in developed markets also identified that EPS, DPS, and book-to-market value had a significant influence on share price (Cooper et al. 2003; Jiang & Lee 2007; Morelli 2007). Khoury &

Maladjian (2014) documented that policies related to dividend payout positively affected risk, size, and dividends paid, but were negatively influenced by profitability and the firm's expansion. Another study by Anita & Yadav (2014) indicated a favorable correlation between the price of the stock and EPS, BV per share, price to book value, and market capitalization except for dividend yield. Similarly, Akbar & Baig (2010) suggested an affirmative relationship between dividends and stock prices. Further, Azhagaiah & Priya (2008) indicated that share prices were significantly influenced by the dividends in firms. Singhanian (2008) results also showed that DY, BV per share, PE ratio, dividends, and EPS were key determinants that significantly influenced share prices. Hence, the following hypothesis is proposed:

H2: There is a positive association between Dividend per share and share prices.

In a study conducted by Sukhija (2014), the following factors dividend per share, cover, profits per share, growth, and return on capital employed were identified as the primary predictors of equity prices in the Bombay stock exchange. Arsalan & Zaman (2014) showed a significant impact of firm size and the price-earnings ratio on stock prices. Whereas a negative relationship between dividend yield was found with share prices. The findings of Malhotra & Tandon (2013) also demonstrated a positive relationship between EPS, BV, and PE ratio with the firm's share price, however dividend yield was found as having a negative relationship with stock's share price. Another study examined and found that (DPS, Profits per share, BV per share, DPO ratio, firm size, and PE ratio) were the most significant determinants determining share prices (Sharma and Singh 2006). In contrast, Amidu & Abor (2006) discovered a significant relationship between earnings, dividends, and share prices in Ghana. Further, book value per share and earnings per share play a role in share price changes (Al-Omar and Al-Mutairi 2008).

As, Uddin (2009) discovered a strong correlation between dividends, per-share net asset value, price-earnings ratio, and stock price. While Al-Tamimi and Rahman (2011) discovered that EPS has a positive relationship with the share price. Chowdhury et al. (2019) documented that EPS, price-earnings, size, and dividend payout are the major determinants that influence share prices. Large firms are more likely than small firms to have low growth potential because it is assumed that large firms have already discovered and exploited all of their potentials. Paying a low dividend could imperil a large firm's future investments if it allows managers to demand more perquisites by making poor investments. Further, due to ownership dispersion, agency problems are more prevalent in larger firms than in smaller enterprises (Jensen & Meckling, 1976). Higher dividends may be one answer to this agency problem, as they reduce retained earnings and push management to rely more on external finance. Large firms have less asymmetric information than smaller firms because they tend to offer more information to outside investors (Fama & Jensen, 1983).

As Sharif, Purohit, & Pillai (2015) identified the factors that have an impact on stock prices in the stock exchange of Bahrain. Findings showed a significant and positive association between price-earnings ratio, ROE, BV per share, DPS, and firm size. While they found a negative association between the share prices and dividend yield. Further, Arsalan & Zaman (2014) investigated the impact of dividend yield, business size, and price to earnings ratio on stock prices of listed firms on the Pakistan stock exchange. Results indicate a considerable positive relationship between size and price-earnings ratio with share prices. While Bapat & Raithatha (2009) demonstrated that volatility, size, and profitability were the significant factors of the stock prices.

H3: A significant association exists between the price-earnings ratio and share prices.

In the existing literature, firm size had been extensively explored and findings indicated that the size of a firm has a significant impact on the share price. AS Yu (2003) documented that firm size has a significant effect on share prices. He argued that larger firms are moving towards

diversified strategies. According to Saquido (2003), the size of the firm and the degree of its leverage has no bearing on the company's share price. He argued that the determinant of share price and company financing decisions strongly distinct from one another (Saquido 2003; Lawrence, 2004).

Sharma & Sing (2006) investigated the influence of essential factors on equity share prices of manufacturing companies listed on the Bombay Stock Exchange. According to the study's findings earnings ratio, book value, and price to earnings ratio were the key determinants of share prices in the engineering industry. The size of the firm and book value ratio showed a significant relationship with share price in the cotton textile industry. PE ratio and dividends were identified as favorable determinants of share prices in the electrical industry. The author also observed a strong correlation between the size and profitability of the firm.

In another study conducted by Azam & Shah (2011), and results confirm that share price and firm size are strongly linked with each other. In addition, Mukhtar & Asad (2016) examined the influence of financial leverage and firm size to determine share price. Firm size has been found to have an important relation to share price. As Ullah (2017) discovered that dividends paid by large firms tend to be higher than those paid by smaller and newer enterprises. According to Lloyd et al. (1985) viewpoint, the size of a firm has an impact on its stock price. Large firms had records of easy access to varied external funds, profitability, and stability. The critical theory highlights the importance of the owner's control over the firm's resources, such as assets, technology, and intellectual property, as determinants of business size. With the availability of vast corporate resources, the company can meet the demand for products that will gain market share, hence increasing revenue and allowing the corporation to cover the costs of process manufacturing (Rajan and Zingales 2001). According to Sharma (2011), the firm size is linked to a firm's diverse capacities in settling various payments, and this factor affects the share prices movement. Thus, we predict the following hypothesis:

H4: There is a significant association between firm size and share prices.

Nirmala & Ramachandran (2011) in their research looked at the factors that influence share prices from 2000 to 2009. Findings revealed that the price-to-earnings ratio has a positive association with the share price while the debt-to-equity ratio is also a significant factor but has a negative nexus with the stock price. The results also revealed dividend, leverage, and price-to-earnings ratio as significant factors for all the selected three sectors. return on equity was found as having a positive association with the share price for the auto sector only while return on the asset was found as having negative relation with the share price for the remaining two sectors.

A similar study was conducted by Nirmala et al. (2011), results explained that the PE ratio and dividends have a positive relationship with the stock prices. The findings also suggested an upsurge in stock prices by growth in the price-to-earnings ratio and dividends. Consequently, the financial managers can increase the stockholder's wealth by growing dividends. Another study conducted by Nazir & Ahmed (2010) and findings revealed a negative relationship between dividend yield, payout ratio, and price volatility. It means that for firms whose dividend-paying ratio is higher, price instability will be lower. Thus, the following hypothesis is established;

H5: There is a negative association between leverage and share prices.

A study by Idawati & Wahyudi (2015) examined the relationship and impact of return on asset and earnings per share on the share prices of the firms listed. Findings showed that ROA and EPS have a favorable significant association with the stock prices. Another research by Gunadi & Kesuma (2015) demonstrated a positive relationship between stock return with ROA, DER, and EPS, while the debt-to-equity ratio showed a significantly negative impact on stock return.

Munyua (2014) conducted a relationship and findings revealed that share prices are influenced by the dividends paid to shareholders. Findings also explained a strong association among all variables except the debt-to-equity ratio which shows an unfavorable relationship with share prices. M & Menaje (2012) disclosed a strong favorable relationship of EPS with share prices whereas weak unfavorable association of ROA with the stock prices. Thus, we predict the following:

H6: There is a negative association between ROA and share prices

Research Method

This study is quantitative, and secondary data gathered from non-financial listed firms on the Pakistan stock exchange from 2014 to 2020. A random sampling method has been used to draw the sample of current research. The participant in the research consists of non-financial listed firms, and data was gathered from the website of the stock exchange, as well as the annual reports of the firms. There were 367 non-financial firms registered at the PSX as of 2018, but after excluding all those non-financial firms for which data was not available continuous basis or those with zero sales for at least two consecutive years during the analysis period, and due to the lack of time the sample size was reduced to 120 firms (Textile, Sugar, Automobiles, food & beverages and Cement sector) which are listed at Pakistan stock exchange. Data associated with the stock prices, EPS, ROA, PE ratio, DPS, LEV, and firm size were obtained from the stock exchange website and annual reports of various firms.

Measurement of the Variables

In this research, the share price is considered as a dependent variable whereas earnings per share, price to earnings ratio, dividend per share, leverage, return on asset and firm size are considered independent variables. The variables are measured as follows;

Earnings per share (EPS) ratio is computed as” $EPS = \frac{Net\ Profit}{No.\ of\ Shares\ Outstanding}$

Dividend per Share (DPS): Dividend per share is the sum of declared dividends issued by a company for every ordinary share outstanding. Dividend per share is amount of dividend paid on a single share by the firm to its shareholders.” It is calculated as: $DPS = \frac{Annual\ Dividend\ Paid}{No.\ of\ Shares\ Outstanding}$

Price to Earnings Ratio (P/E): Price Earnings ratio tells how the stock is valued either it is overvalued or undervalued.” It is calculated as: $P/E = \frac{Market\ Value\ per\ Share}{Earnings\ per\ Share}$

Firm Size(FS): Firm size means the scale or volume of operation turned out by a single firm. The study of the size of a business is important because it significantly affects the efficiency and profitability of firm.” Firm Size= Log of Total Assets

Leverage Ratio ratio illustrates the “level of debt acquired by firm or portion of firm’s assets financed by debt instead of shareholder’s equity”; Calculated as; $LEV = \frac{Total\ Liabilities}{Shareholders\ Equity}$

Return on Asset (ROA) indicates that “how efficiently a firm utilizes its assets to earn profit.” It is calculated as: $ROA = \frac{Net\ Income}{Total\ Assets} * 100$

Econometric Model

In the study, to empirically observe the share price determinants by using a simple linear regression model, widely used in previous literature. The below specific equation was developed.

$$SP_{it} = \alpha + \beta_1 EPS_{it} + \beta_2 DPS_{it} + \beta_3 PER_{it} + \beta_4 FS_{it} + \beta_5 LEV_{it} + \beta_6 ROA_{it} + \epsilon_{it}$$

Where: SP= Share Price; EPS= Earnings per Share; DPS = Dividend per Share; PER= Price to Earnings Ratio; FS = Firm Size; LEV = Leverage; ROA= Return on Asset; μ = error term

Results and Discussion

The descriptive statistics are provided in table 1. It illustrates the six independent variables and

their impact on the share prices of the 120 firms listed on the stock exchange in Pakistan. The descriptive results indicate that the mean price of the share is 64.895 and its standard deviation is 73.797. The average value of ROA is 1.215 and the standard deviation is 0.9494. The average PE ratio is 7.619 and the standard deviation is 27.095. The mean value of leverage is 12.743 with a deviation of 7.8708 and mean value of EPS is 7.214 and the firm size is 32.706.

Table 1: Descriptive Statistics and Correlation Analysis:

	Mean	Std. Dev.	SP	ROA	PER	LEV	EPS	DPS	FS
SP	64.89	73.79	1.000						
ROA	0.216	0.946	0.396	1.000					
PER	7.614	27.09	0.155	0.156	1.000				
LEV	12.740	7.82	-0.277	-0.740	0.071	1.000			
EPS	7.217	7.63	0.791	0.577	0.102	-0.484	1.000		
DPS	3.016	3.68	0.686	0.367	0.081	-0.347	0.736	1.000	
FS	32.701	0.206	0.195	0.259	0.123	-0.285	0.253	0.542	1.00

The above findings indicate that ROA, EPS, PER, DPS, and firm size have a positive association with share prices. While there is a negative correlation between SP and LEV. Table 2 shows estimation results for all variables. The value of R² shows that when there is a change in an independent variable, out of the total change in share price, 87% change is due to change in all independent variables while the remaining 13% change in share price is due to other variables which have been not included in the estimated model. The experiential results from the regression analysis indicate that EPS has a positive and significant relationship with the share price of listed companies. It means that the increase in one unit of EPS will bring a significant increase in the share price of listed firms. The statement is supported by the previous researchers saying that EPS is a key determinant of share prices (Gunadi & Kesuma 2015). So that H1 is accepted. Further, empirical results illustrate a positive and significant relationship between DPS and the share prices of listed firms. This outcome basically means that increase or change in dividend per share will increase the market price of the share. This outcome is supported by the previous author's findings by arguing that DPS will cause an increase in share prices (Adebisi & Lawal 2015). With the help findings, the H2 is accepted.

Table 2: Fixed Effect Model (Dependent Variable: Share Price)

Variable	Coefficient	Prob.
Constant	0.1054	0.0013
ROA	-0.2419	0.0633
PER	0.0837	0.0088
LEV	-0.5931	0.1382
EPS	0.7175	0.000
DPS	0.5679	0.0005
FS	0.1518	0.1477
R squared	0.8771	

The PE ratio shows a positively significant relationship with the share price. It signifies that an increase or modification in the PE ratio will result in a 0.084 increase in the share price of corporations. This result supported the result of (Malhotra & Tandon 2013); hence H3 is accepted. The empirical outcomes from the regression analysis indicate that there is a positive relationship between firm size and share prices. The findings of the present study are supported by the previous researchers. As a result of the study's findings, H4 is accepted.

Further, empirical results show a negative and insignificant relationship between Leverage and share price. It means that Leverage has no influence on the share price. According to Gutu (2015)

point of view, that leverage has a negative relationship with the share price of listed firms. Hence the H5 is accepted. The ROA is showing a strong negative and significant association with the price of the stock. It means that a change in ROA has a significant impact, it will bring a change in share price. The current result contends the results of earlier that ROA has a positive relationship with the share prices (Gunadi & Kesuma 2015; Idawati & Wahyudi, 2015), hence H6 is rejected.

Discussion & Recommendations

The purpose of the study was to determine the nexus between selected variables of listed firms' share prices in Pakistan. To identify the factors (EPS, dividends per share, price earnings ratio, ROA) and their link with the share prices of firms, the data of 120 listed firms from 2014 to 2020 were collected. Based on the findings of the study, it can be stated that all variables, except leverage, have a considerable impact on the share prices of companies. Findings also show that ROA has a negative relationship with share prices, while all other factors such as earnings per share, dividend per share, price earning ratio, and firm size have a positive relationship with share prices in Pakistan. Findings show that the majority of the conclusions are consistent with those of earlier researchers. This study is extremely beneficial to investors and policymakers since it allows them to make informed investment decisions. Further, to identify crucial elements that cause share price volatility, the study's conclusions may be useful to portfolio managers and investors in terms of risk management.

References

- Abor, J., & Amidu, M. (2007). Determinants of dividend payout ratios in Ghana. *Journal of Risk Finance*, 7(2), 136-145.
- Adebisi, S., & Lawal, O. (2015). Equity Share Price Determinants: A Survey of Literature. *Arabian Journal of Business and Management Review*, 5(3), 38-42.
- Akbar, M., & Baig, H. (2010). Reaction of Stock Prices to Dividend Announcements and Market Efficiency in Pakistan. *Lahore Journal of Economics*, 15(1), 103-125.
- Al Masum, A. (2014). Dividend Policy and Its Impact on Stock Price; A Study on Commercial Banks Listed in Dhaka Stock Exchange. *Global Disclosure of Economics & Business*, 3(1).
- Ali , B. (2011). Stock Prices and Microeconomic Variables: T-Y Granger Causal Evidence From Dhaka Stock Exchange . *Research Journal of Finance and Accounting*, 2(6), 1-8.
- Al-Qenae, R., Li, C., & Wearing, B. (2002). The Information Content of Earnings on Stock Prices: The Kuwait Stock Exchange. *Multinational Finance Journal*, 6(3), 197-221.
- Al-Twaijry, A. (2007). Dividend policy and payout ratio: Evidence from the Kuala Lumpur stock exchange. *The Journal of Risk Finance*, 8(4), 349-363.
- Al-Yahyaee , K. (2006). Capital structure and dividend policy in a personal tax free environment: The case of Oman.
- Anita, & Yadav, P. (2014). Influence Of Selected Financial Indicators On Stock Price. *International Journal of Innovation in Engineering & Management*, 3(7), 249-252.
- Arsalan, M., & Zaman, R. (2014). Impact of Dividend Yield and Price Earnings Ratio on Stock Returns: A Study Non-Financial listed firms of Pakistan. *Research Journal of Finance and Accounting*, 5(19), 68-74.
- Aurangzeb (2012). Factors affecting performance of stock market: Evidence from South Asian Countries. *International Journal of Academic Research in Business & social sciences*, 2(9), 1-12.

- Azhagaiah, R., & Priya, S. (2008). Effect of dividend policy on shareholders' wealth. *International Research Journal of Finance and Economics*, 20, 187-189.
- Booth, L., Aivazian, V., & Cleary, S. (2003). Do emerging market firms follow different dividend policies from US firms? *Journal of Financial Research*, 26(3), 371-387.
- Enow, T., & Brijlal, P. (2016). Determinants of share prices: the case of listed firms on Johannesburg Stock Exchange. *Journal of Accounting and Management*, 6(1), 85-91.
- Grossman, Z. (2000). Determinants of share price movements in emerging equity markets: Some evidence from America. *Quarterly Review of Economics & Finance*, 40(3), 355-74.
- Hussainey, K., Mgbame, O., & Chijoke-Mgbame, M. (2011). Dividend Policy and Share Price Volatility: UK Evidence. *Journal of Risk Finance*, 12(1), 57-68.
- Idawati, W., & Wahyudi, A. (2015). Effect of Earning Per Shares (EPS) and Return On Assets (ROA) against Share Price on Coal Mining Company Listed in Indonesia Stock Exchange. *Journal of Resources Development and Management*, 79,90.
- Irfan, M., & Nishat, M. (2002). Key fundamental actors and long-run price changes in an emerging market. *Pakistan Development Review*. 41(4), 517-533.
- Khan, I. (2012). Effects of Dividends on Stock Prices: a Case Study of Chemical and Pharmaceutical Industry of Pakistan. *Management*, 1-18.
- Khan, I., Aamir, M., Qayyum, A., Nasir, A., & Khan, I. (2011). Can Dividend Decisions Affect the Stock Prices: A Case of Dividend Paying Companies of KSE. *International Research Journal of Finance and Economics*, 76(2), 67-74.
- M, P., & Menaje, J. (2012). Impact of Selected Financial Variables on Share Price of Publicly listed firms. *American International Journal of Contemporary Research*, 2(9), 98-101.
- Malakar, B., & Gupta, R. (2002). Determinants of share price; A system approach: Modified Model. 16(04), 1409-1418.
- Malhotra, N., & Tandon, K. (2013). Determinants of Stock Prices: Empirical Evidence from NSE 100 firms. *International Journal of Research in Management & Technology*, 3(2).
- Munyua, N. (2014). Effect of Dividend Policy on Stock Prices for Firms Listed at the Nairobi Securities Exchange. 1-33.
- Nazir, S., Nawaz, M., Anwar, W., & Ahmed, F. (2010). Determinants of Stock Price Volatility in Karachi Stock Exchange: The Mediating Role of Corporate Dividend Policy. *International Research Journal of Finance and Economics*(55), 100-106.
- Nirmala, S., Sanju, S., & Ramchandran, M. (2011). Determinants of share prices in India. *Journal of Emerging Trends in Economic and Management science*, 2(2), 124-130.
- Olowookere, E., & Fadiran, P. (2016). Determinants of Share Price on the Nigerian Stock Exchange. *International Journal of Business and Applied Social Science*, 2(7), 49-57.
- Profilet, K., & Bacon, W. (2013). Dividend Policy And Stock Price Volatility In The U.S. Equity Capital Market. *ASBBS*, 20(1).
- Robbetze, N., Villiers, R., & Harmse, L. (2017). The Effect Of Earnings Per Share Categories On Share Price Behaviour: Some South African Evidence. *The Journal of Applied Business Research*, 33, 41-149.
- Sharif, T., Purohit, H., & Pillai, R. (2015). Analysis of Factors Affecting Share Prices: The Case of Bahrain Stock Exchange. *International Journal of Economics and Finance*, 7(03), 207-214.
- Sharma, S. (2011). Determinants of Equity Share Prices In India. *Journal of Arts, Science & Commerce*, 2(4), 51-60.

- Somoye, O., Akintoye, R., & Oseni, E. (2009). Determinants of equity price in the Stock Market. *International Research Journal of Finance and Economics*, 30(1).
- Srinivasan, P. (2012). Determinants of Equity Share Prices in India: Approach. *The Romanian Economic Journal*, 205, 206.
- Sukhija, S. (2014). Fundamental Determinants affecting Equity Share Prices of BSE-200 Companies in India. *European Journal of Business and Management*, 6(31), 160-170.
- Uddin, B., (2009). Determinants of market price of stock: A study on bank leasing and insurance companies of Bangladesh. *Journal of Modern Accounting and Auditing*, 5(7), 1-6.



Changing Oil Prices, Exchange Rates and its Impact on Inflation in Pakistan

Hammad Hussain, Ph.D. Scholar, School of Economics, Bahauddin Zakariya University, Multan Pakistan

***Muhammad Zahir Faridi**, Professor, School of Economics, Bahauddin Zakariya University, Multan Pakistan

Saddam Hussain, Ph.D. Scholar, School of Economics, Bahauddin Zakariya University, Multan Pakistan

*Corresponding author's email: zahirfaridi@bzu.edu.pk

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Purpose: The key objective of the analysis is to explore the impact of oil prices and exchange rates on the inflation rate in Pakistan by using annual time-series data from the period 1980 to 2020.

Design/Methodology/Approach: The augmented Dickey-Fuller test, bound test approach, and ARDL model are applied to achieve the objectives of the study.

Findings: It is found that the crude oil prices and real effective exchange rate are found to be significant factors that influence the inflation rate in Pakistan. The other findings explored that money supply, exports, and gross fixed capital formation are positively related to the inflation rate.

Implications/Originality: The author's recommended that policymakers should take steps to control the inflation rate by regulating the fiscal and monetary policy measures in the right direction.



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Introduction

Developing economies facing the issue of price stability. The different causes are attached to price instability. Crude oil price fluctuations affect every economy in the world. Change in crude oil prices significantly influences the economies of developing countries as these economies are vulnerable to external shocks. Oil price movements have a significant influence on the pace of inflation and price changes. Fluctuations in the level of prices may lead to subsequent changes in economic structure, which have an impact on overall economic performance. The rate of inflation is regarded as the most important economic indicator for determining the state of the economy. As a result, policymakers' primary policy objectives are price stability and low inflation (Sek et

al., 2015).

Change in oil prices is imperative in influencing the rate of inflation as oil is a critical raw material in the industrial sector. An increase in the prices of oil is directly linked to the cost of production and commodity prices. These changes have an impact on the pricing of raw materials, labor, and finished goods (Hamilton, 1983). To put it another way, crude oil prices are directly associated with the price of energy-related goods including home fuels, vehicle fuels, and electricity. Similarly, rising oil costs reduce productivity, decline in real wages and employment level, reduce the level of investment and profits, and stock market capitalization. The transmission of energy price changes to total inflation is explained by a mix of these variables and central bank policy responses (Malik, 2016). Cost-push inflation has resulted from oil price hikes. Although the effects of oil prices on inflation are obvious, there are disagreements on the extent of the effects of oil price shocks (OPS) on the economy. This is because the effects of OPS on the macroeconomic performance have been seen to vary between nations and across time (Burbidge & Harrison, 1984).

On the contrary, in various ways, exchange rates and price stability are linked. When the influence of exchange rates on the pricing of tradable items spreads to the non-tradable sector, and eventually to the general price level, price stability is threatened. Even though the exchange rate pass-through impact has decreased in several economies, there is an association between the rate of exchange and domestic prices, and severe enough exchange rate shocks can destabilize domestic prices (Jařsova et al., 2016). Second, as a result of the growing reliance on world trade finance via dollar invoicing, debt repayment is influenced by increasing exchange rate fluctuations. Depreciations in response to tighter lending conditions, for example, may not boost foreign competitiveness but instead result in domestic contractions (Bruno et al., 2018). Finally, because several economies borrow in foreign currency and foreign investors hold a considerable amount of sovereign debt, local currency appreciations can have an expansionary influence on the home economy when financial conditions ease. Policymakers are naturally concerned about a buildup of financial vulnerability under such circumstances because any abrupt shocks that might offset this impact would likewise pose long-term threats to the stability of prices (Borio & Lowe, 2002; Gourinchas & Obstfeld, 2012).

Inflation rates are high during periods of exchange rate instability. This suggests that fluctuating exchange rates cause inflation in a given economy. Price volatility might contribute to a rise in market risks and uncertainty. The goal of a price stability strategy is to maintain the value of money and eliminate cyclical variations. Domestic price fluctuations degrade money's value as a store of value and create business uncertainty and risks (Babatunde & Kehinde, 2016). In the current situation, one of the major issues facing emerging nations is maintaining price stability. The combination of a high index of growing prices and money-losing its actual worth has always been concerning, as it raises the cost of living, decreases investment, and harms economic and social well-being (Greenidge, 2005).

Every government is concerned about price stability because high and fluctuating inflation erodes consumers' buying power and inhibits investment. Financial stability and economic growth are aided by a regulated inflationary environment (Pakistan Economic Survey, 2020-21). Currently, Pakistan is also facing high inflation rates with a high exchange rate. Crude oil prices in the world market are also at their peak levels. The primary concern of this investigation is to examine the influence of oil prices and exchange rates on the inflation rate in Pakistan. So that this research is significant in the sense that how oil prices and rate of exchange influence the inflation rate in Pakistan. The organization of this paper is as follows: section 1 illustrates the introduction, section 2 illustrates the review of literature, section 3 illustrates the data and methodology, section 4 illustrates the analysis, and section 5 presents the conclusion and recommendations.

Literature Review

This section illustrates the literature review of some recent studies that examine the determinants of the inflation rate. Such as Musa (2021) used yearly time series data from 1986 to 2019, to investigate the influence of volatility of the exchange rate on inflation in Nigeria. The outcomes revealed that both the money supply and the nominal rate of exchange had a direct and substantial influence on the consumer price index, implying that both exchange rate changes and an increase in the money supply induce inflation in Nigeria. The research proposed that the central bank limit the expansion of the money supply to keep inflation to a minimum rate. Keefe (2020) investigated the role of the rate of exchange in influencing inflation targeting policies by using the data of advanced and emerging countries dataset from 2000 to 2016. It was found that when the rate of exchange volatility is below 1% then both advanced and emerging economies stick to their inflation targeting commitments, but when volatility exceeds this level, they are incapable to respond to inflation gap deviations.

Okwori & Abu (2017) observed the effectiveness of monetary policy in reducing inflation in Nigeria by using data from 1986 to 2015. The analysis discovered that monetary policy has a considerable impact on Nigeria's inflation rate. The Monetary Policy Rate was found not to be statistically significant, which has influenced its transmission mechanism to the interest rate of commercial banks. Malik (2016) explored the relation between oil prices and inflation in Pakistan by recruiting data from 1979-1980 to 2013-2014. Our findings point to a high correlation between oil prices and inflation, particularly when oil prices have been growing steadily for the last year. Sek et al., (2015) explored the influence of oil price fluctuations on inflation in two sets of countries: those with high oil reliance and those with a low oil dependency. The findings showed that oil price changes are directly related to the inflation in the low oil dependence group and indirect influence on inflation in the high oil reliance group because of the changes in the production cost of export. The real rate of exchange and production cost of exports, as well as domestic output and production cost of exports, were the key factors of the rate of inflation.

Bashir et al., (2011) looked at demand and supply-side factors of the rate of inflation in Pakistan. The analysis used data from 1972 to 2010. The study's findings showed that the supply of money, GDP, imports, and government expenditures all have a beneficial influence on the consumer price index in the long run, whereas government revenue lowers the total price level in Pakistan. In the short term, the consumer price index from the previous year and government revenue from two years prior are both directly engaged in raising the current year's consumer price index. Khan & Gill (2010) used four price variables to examine the drivers of inflation in Pakistan: the CPI, wheat price index, sugarcane price index, and GDP. Annual time-series data from 1971 to 2006 were utilized in the research. All indicators have risen in consequence of the currency rate depreciation and the growth in the value of imports. Sugar cane, rice, wheat, and cotton support prices have had a favorable impact on all indices; however, the support price of wheat has only had a direct influence on the GDP deflator.

Zamir et al., (2017) exercised data from 1980 to 2014 to explore the causes that influence the volatility of the exchange rate in Pakistan. The results exhibited that the rate of exchange has a negative link with factors including rate of inflation, FDI, and imports, but a positive association with per capita GDP and exports. Bashir et al., (2016) analyzed the factors of the rate of inflation in Pakistan by using the data from 1972 to 2014. Population, roads, and government spending are demand-side drivers for inflation, whereas government revenue, external debt, imports, and power generation were found to be supply-side factors. In the long run, price levels are declining owing to FDI, the growth rate of population, and power generation. Ellahi (2017) used a dataset spanning 1975 to 2015 to investigate the drivers of inflation in Pakistan. The main preliminary findings revealed that the supply of money and national spending had a considerable impact on the rate of inflation. The growth rate of GDP was found to be inversely related to inflation while

imports of goods and services were found to be positively related to the inflation rate.

Research Method

To examine the impact of oil prices and exchange rates on the inflation rate in Pakistan annual time-series data of Pakistan is utilized from a period of 1980 to 2020. The data of variables consumer price index, real effective exchange rate, exports of goods and services, money supply, and gross fixed capital formation is collected from World Development Indicators (WDI) while the data of World Crude Oil Prices are collected from Pakistan Energy yearbook and OECD. Augmented Dickey-Fuller of unit test is employed to check the level of stationarity while ARDL bound test is exercised to check the long-run cointegration of variables. For the long-run estimation of parameters Autoregressive Distributed Lag model is applied. The following model is established to inspect the influence of oil prices and exchange rates on the rate of inflation in Pakistan:

$$CPI_i = \beta_0 + \beta_1 WCOP_i + \beta_2 REER_i + \beta_3 MS_i + \beta_4 EXPT_i + \beta_5 GFCF_i + u_i$$

Where;

CPI = Consumer price index

WCOP = World Crude Oil Prices

REER = Real Effective Exchange Rate

MS = Money Supply

EXPT = Exports of Goods and Services

GFCF = Gross Fixed Capital Formation

Table 1: Description of Variables

Variables	Description of Variables	
Dependent Variables		
CPI	Inflation, Consumer Price Index	Annual (Percent)
Independent Variables		
WCOP	World Crude Oil Prices	US Dollars Per Barrel
REER	Real Effective Exchange Rate	Index
MS	Broad Money Supply	Percentage of GDP
EXPT	Exports of Goods and Services	Percentage of GDP
GFCF	Gross Fixed Capital Formation	Percentage of GDP

Analysis

The descriptive statistics of variables are explained in this section. This analysis presents the characteristics of variables such as mean, median, the maximum, minimum value of data, standard deviation, skewness, and kurtosis. Table 2 presents the descriptive statistics. It is found that the mean inflation rate in Pakistan is 8.163, the maximum inflation rate as measured by the consumer price index is 20.286, the minimum inflation rate is 2.529, the standard deviation is 3.763, the skewness is 0.675, and the kurtosis value is 3.770. The characteristics of other variables can also be similarly analyzed in Table 2.

Table 2: Descriptive Statistics

Variables	CPI	OPC	REER	MS	EXPT	GFCF
Mean	8.163	44.739	127.953	46.979	13.275	15.916
Median	7.844	33.000	115.642	45.365	13.336	16.343
Maximum	20.286	111.630	237.501	62.378	17.271	19.112
Minimum	2.529	13.270	96.486	34.799	8.257	12.521
Std. Dev.	3.763	30.067	39.528	7.054	2.350	1.642
Skewness	0.675	0.935	1.574	0.426	-0.188	-0.283
Kurtosis	3.770	2.724	4.137	2.160	2.348	2.088
Jarque-Bera	4.131	6.100	19.149	2.447	0.968	1.968

Probability	0.127	0.047	0.000	0.294	0.616	0.374
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Source: Author's Calculations

To assess the degree of association between any two pair of variables pair-wise correlation coefficient is used. The estimates of the correlation coefficient are presented in Table 3. Correlation estimates found that the consumer price index is positively correlated to world crude oil prices (0.271), money supply (0.141), exports (0.300), and gross fixed capital formation (0.248) while the consumer price index is negatively correlated to the real effective exchange rate (-0.083).

Table 3: Correlation matrix

	CPI	OPC	REER	MS	EXPT	GFCF
CPI	1.000					
OPC	0.271	1.000				
REER	-0.083	-0.376	1.000			
MS	0.141	0.631	-0.460	1.000		
EXPT	0.300	-0.401	-0.208	-0.432	1.000	
GFCF	0.248	-0.594	0.368	-0.409	0.401	1.000

Source: Author's Calculations

Unit root analysis is imperative in examining the level of stationarity of variables. This analysis assists in which technique is better for the long-run estimation of parameters. For this aim Augmented Dickey-Fuller (ADF) test of unit root is exercised and its outcomes are presented in Table 4. It is found that the variables OPC, REER, MS, EXPT, and GFCF are stationary at 1st difference while the variable CPI is stationary at the level. The mixed order of integration specifies that the Autoregressive Distributed Lag Model (ARDL) is a suitable method for a long-run estimation of parameters.

Table 4: Unit Root Analysis

Variables	Level		1st Difference		Order of Cointegration
	t-stat.	Prob.	t-stat.	Prob.	
CPI	-3.025	0.041	--	--	I(0)
OPC	--	--	-6.758	0.000	I(1)
REER	--	--	-6.008	0.000	I(1)
MS	--	--	-5.430	0.000	I(1)
EXPT	--	--	-6.207	0.000	I(1)
GFCF	--	--	-5.888	0.000	I(1)

Source: Author's Calculations

ARDL bound test analysis assists us in investigating the long-run cointegration between variables. The outcomes of the bound test are demonstrated in Table 5. The outcomes expose that the F-statistic value is greater than lower and upper bound values demonstrating that there exists long-run cointegration between variables so that we can proceed further to the ARDL estimation.

Table 5: ARDL Bound Test Estimates

Null Hypothesis: No long-run relationships exist		
Test Statistic	Value	K
F-statistic	5.710888	5
Critical Value Bounds		
Significance	I0 Bound	I1 Bound
10%	2.26	3.35
5%	2.62	3.79
2.5%	2.96	4.18

1%	3.41	4.68
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Source: Author's Calculations

Table 6 displays the ARDL estimates of the impact of oil prices and exchange rates on the rate of inflation in Pakistan. It is found that the variables world crude oil prices (OPC), real effective exchange rate (REER), supply of money (MS), exports (EXPT), and gross fixed capital formation (GFCF) are positively related to the inflation rate in Pakistan. The variables OPC and REER are found to be the most significant factors that influence the inflation rate in Pakistan. The coefficient value of crude oil prices demonstrates that as OPC increases by one unit it leads to a rise in the inflation rate by 0.0923 units. Because oil is the primary source utilized in the manufacture of many items, the price of oil has a substantial impact on economic performance. Oil price fluctuations, in particular, have an impact on production costs. A rise in manufacturing costs might result in a rise in consumer prices. As a result, excessive fluctuations in oil prices contribute to domestic inflation (Sek & Lim, 2016). These outcomes are also linked with the findings of Malik (2016); Sek et al., (2015). The coefficient value of the real effective exchange rate shows that as REER enhances by one unit it leads to a rise in the inflation rate by 0.0460 units. These outcomes are also linked with the findings of Musa (2021); Ahmad et al., (2014); Ijaz et al., (2014); Khan & Gill (2010). The money supply is another factor that positively influences the inflation rate. The coefficient value of the money supply shows that as MS increases by one unit it leads to an increase in the inflation rate by 0.1984 units. An increase in the money supply means people have more money to spend on goods and services which enhances the aggregate demand in an economy and leads to an increase in price levels. These outcomes are also linked with the findings of Musa (2021); Alam & Alam (2016); Ijaz et al., (2014); Bashir et al., (2011). The variable export of goods and services is found to be a positive determinant of the inflation rate. The coefficient value show that as EXPT increases by one unit it leads to a rise in the inflation rate by 0.6408 units. These outcomes are also linked with the findings of Musa (2021); Ijaz et al., (2014). An increase in exports means an increase in overall production in an economy; it increases the level of employment so that people have more income to spend on goods and services this leads to an increase in aggregate demand and an increase in price levels. The variable gross fixed capital formation also originated to be a positive determinant of the inflation rate. The coefficient of the variable show that as GFCF enhances by one unit it leads to a rise in the inflation rate by 1.9342 units. GFCF means an increase in the domestic assets of a country. As the level of GFCF increases, it also increases the job opportunities in a country which leads to an increase in the income of people so that aggregate demand and price levels are also enhance.

Table 6: ARDL Long-Run Estimates

Dependent Variable: Inflation Rate				
Variables	Coefficient	Std. Error	t-Statistic	Prob.
OPC	0.0923	0.0220	4.1972	0.0002
REER	0.0460	0.0182	2.5311	0.0170
MS	0.1984	0.1116	1.7776	0.0853
EXPT	0.6408	0.3048	2.1020	0.0438
GFCF	1.9342	0.4593	4.2106	0.0002
C	-44.8804	9.3135	-4.8188	0.0000

Source: Author's Calculations

The estimates of the short-run error correction model are presented in Table 7. The ECM term is important in short-run analysis and its value should be less than one and also statistically significant. It is found that the value of ECM(-1) is found to be -0.7708 and also statistically significant it specifies the 77.08 percent speed of adjustment toward long-run equilibrium if any disturbances happen in the short-run.

Table 7: Sort-Run ECM

Variables	Coefficient	Std. Error	t-Statistic	Prob.
D(OPC)	0.0712	0.0180	3.9436	0.0004
D(REER)	0.0020	0.0141	0.1423	0.8877

D(MS)	-0.2338	0.1038	-2.2518	0.0316
D(EXPT)	0.4940	0.2593	1.9049	0.0661
D(GFCF)	0.4437	0.3824	1.1603	0.2548
ECM(-1)	-0.7708	0.1144	-6.7356	0.0000

Source: Author’s Calculations

Table 8 presents the estimates of the Breusch-Pagan-Godfrey test. It is originated that the F-statistic value is statistically insignificant so it specifies that there is no problem of heteroskedasticity in a model.

Table 8: Heteroskedasticity Test

Breusch-Pagan-Godfrey Test			
F-statistic	1.7705	Prob. F(8,31)	0.1196
Obs*R-squared	16.6767	Prob. Chi-Square(8)	0.1337

Source: Author’s Calculations

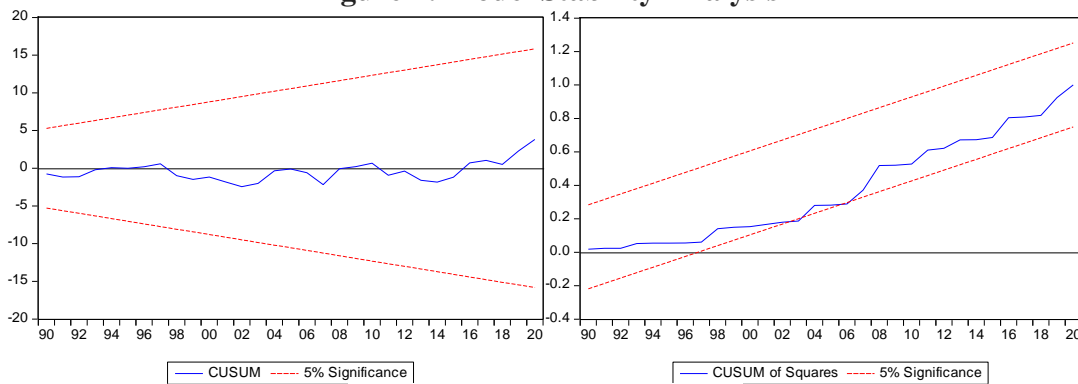
Table 8 presents the outcomes of the Breusch- Godfrey serial correlation LM test. The outcomes showed that the F-statistic value is statistically insignificant so that it specifies that there is no problem of autocorrelation in a model.

Table 9: Serial Correlation LM Test

Serial Correlation LM Test			
F-statistic	1.5529	Prob. F(2,29)	0.2287
Obs*R-squared	3.8695	Prob. Chi-Square(2)	0.1445

CUSUM and CUSUM of squares are used to analyze the stability of the model. The estimated model is considered to be stable of the recursive residuals lie between the two critical regions. Figure 2 shows that recursive residuals of both the graphs of CUSUM and CUSUM of squares lie between the critical regions. It specifies that the estimated parameters of the study are stable for the period under consideration.

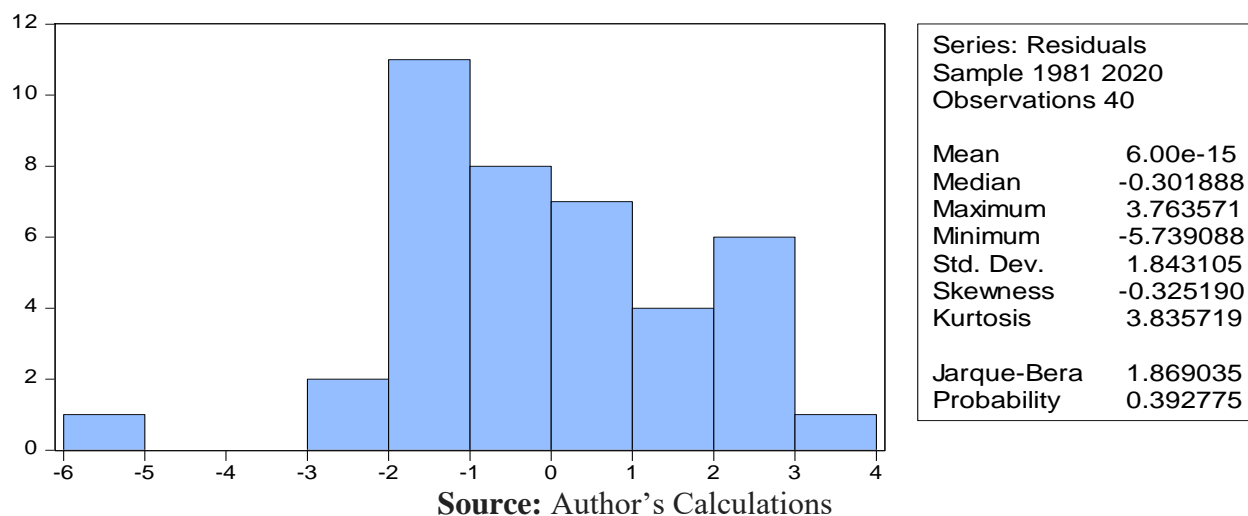
Figure 1: Model Stability Analysis



Source: Author’s Calculations

To examine the normality of residuals in the model Jarque-Bera test of normality is applied by utilizing the histogram normality test. The value of the Jarque-Bera test originated to be statistically insignificant it exposes the residuals are normality distributed.

Figure 2: Normality Test



Conclusions and Recommendations

This investigation attempts to explore the influence of oil prices and exchange rates on the inflation rate in Pakistan. To attain this objective the yearly time series data from the period years, 1980 to 2020 is utilized. To check the level of stationarity ADF test is applied it specifies that the variables OPC, REER, MS, EXPT, and GFCF are stationary at 1st difference whereas the variable CPI is stationary at level. Correlation analysis found that the consumer price index is positively correlated to world crude oil prices, money supply, exports, and gross fixed capital formation while the consumer price index is negatively correlated to the real effective exchange rate. Bound test analysis demonstrates that there exists long-run cointegration between variables. ARDL long-run estimates show that the variables OPC, REER, MS, EXPT, and GFCF are positively related to the inflation rate in Pakistan. It is concluded that the OPC and REER are found to be the most significant factors that influence the inflation rate in Pakistan. Due to the adverse balance of payments, the exchange rate is day by day increasing which is the main reason for inflation in Pakistan. On the contrary, the prices of crude oil prices are also increasing in the world market, due to the increasing crude oil prices and increasing exchange rates the cost of raw materials is also increasing which leads to cost-push inflation. Based on the outcomes it is suggested that the central bank of Pakistan keep the exchange rate stable and at that level that stable the prices of goods and services in Pakistan. The government of Pakistan may also create an Oil Fund Authority (OFA) that maintains the prices with the assistance of OGRA at a certain level irrespective of world market prices. When the oil prices are too low in the world market this authority may set prices above the world market prices and the gap between world market prices and prices set by this authority may be saved and can be used for a subsidy when oil prices are too high in a world market, in this way oil prices in a country can be stable and chances of high inflation rate could also be reduced.

References

- Alam, M. Q., & Alam, M. S. (2016). The determinants of inflation in India: The Bounds test analysis. *International Journal of Economics and Financial Issues*, 6(2), 544-550.
- Babatunde, A. A., & Kehinde, I. V. (2016). The impact of monetary policy on price stability in Nigeria. *Global Journal of Economics and Business Administration*, 1(2), 14-26.
- Bashir, F., Nawaz, S., Yasin, K., Khursheed, U., Khan, J., & Qureshi, M. J. (2011). Determinants of inflation in Pakistan: An econometric analysis using Johansen co-integration

- approach. *Australian Journal of Business and Management Research*, 1(5), 71.
- Bashir, F., Yousaf, F., & Aslam, H. (2016). Determinants of inflation in Pakistan: Demand and supply-side analysis. *Journal of Finance and Economics Research*, 1(1), 43-57.
- Borio, C., & Lowe, P. (2002). Assessing the risk of banking crises. *BIS Quarterly Review*, 7(1), 43-54.
- Bruno, V., Kim, S. J., & Shin, H. (2018, May). Exchange rates and the working capital channel of trade fluctuations. In *AEA Papers and Proceedings* (Vol. 108, pp. 531-36).
- Burbidge, J., & Harrison, A. (1984). Testing for the effects of oil-price rises using vector autoregressions. *International economic review*, 25(2), 459-484.
- Ellahi, N. (2017). The determinants of inflation in Pakistan: an econometric analysis. *The Romanian Economic Journal*, 20(64), 2-12.
- Gourinchas, P. O., & Obstfeld, M. (2012). Stories of the twentieth century for the twenty-first. *American Economic Journal: Macroeconomics*, 4(1), 226-65.
- Greenidge, K., & DaCosta, D. (2009). Determinants of Inflation in Selected Caribbean Countries. *Journal of Business, Finance & Economics in Emerging Economies*, 4(2), 371-397.
- Hamilton, J. D. (1983). Oil and the macroeconomy since World War II. *Journal of political economy*, 91(2), 228-248.
- Ijaz, K., Zakaria, M., & Fida, B. A. (2014). Terms-of-trade volatility and inflation in Pakistan. *The Lahore Journal of Economics*, 19(1), 111-132.
- Jašová, M., Moessner, R., & Takáts, E. (2016). Exchange rate pass-through: What has changed since the crisis? (BIS Working Paper Series, 583). Basel, Switzerland: Bank of International Settlements.
- Keefe, H. G. (2020). The impact of exchange rate volatility on inflation targeting monetary policy in emerging and advanced economies. *International Finance*, 23(3), 417-433.
- Khan, R. E. A., & Gill, A. R. (2010). Determinants of inflation: A case of Pakistan (1970-2007). *Journal of economics*, 1(1), 45-51.
- Malik, A. (2016). The impact of oil price changes on inflation in Pakistan. *International journal of energy economics and policy*, 6(4), 727-737.
- Musa, N. (2021). Impact of exchange rate volatility on inflation in Nigeria. *Journal of Contemporary Research in Business, Economics and Finance*, 3(1), 26-38.
- Okwori, J., & Abu, J. (2017). Monetary policy and inflation targeting in Nigeria. *International Journal of Economics and Financial Management*, 2(3), 1-12.
- Sek, S. K., & Lim, H. S. (2016, June). An investigation on the impacts of oil price shocks on domestic inflation: A SVAR approach. In *AIP Conference Proceedings* (Vol. 1750, No. 1, p. 060002). AIP Publishing LLC.
- Sek, S. K., Teo, X. Q., & Wong, Y. N. (2015). A comparative study on the effects of oil price changes on inflation. *Procedia Economics and Finance*, 26, 630-636.
- Zamir, M., Amin, A., Ullah, S., & Khan, S. U. (2017). Exchange Rate Volatility in Pakistan and Its Impact on Selected Macro Economic Variables (1980-2014). *iBusiness*, 9(4), 167-187.



Identification and Protection of Corporate Whistle-blowers: A Legal Perspective

Naheeda Ali, Department of Law, The University of the Punjab, Gujranwala Campus, Gujranwala, Pakistan

***Kanwal Iqbal Khan**, Institute of Business & Management, University of Engineering and Technology Lahore, Pakistan

*Corresponding author's email: kanwal.khan@uet.edu.pk

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ABSTRACT

Purpose: Internal audit, management review, and account reconciliation are popular tools for combating corporate fraud, but whistle-blowing is the most prevalent. Whistle-blowers frequently fear reprisal from coworkers and bosses. That is why they require protection and support. Many international organizations have advocated that countries adopt regulatory frameworks for protecting whistle-blowers. Therefore, the current study investigates the notion of whistle-blowing to compare it to Public Interest Disclosure Act 2017 of Pakistan, which was enacted. It identifies the influence of legal and ethical cultural norms in organizations on whistle-blowing behaviour.

Design/Methodology/Approach: Qualitative method was used to analyze statutes, local and international protocols, rules and regulations of Pakistan and developed countries.

Findings: The results suggest that the development of legal and ethical culture in a business may inspire whistle-blowing, and whistle-blowers may feel psychologically safe when reporting wrongdoings. Further, whistle-blowers must be legally supported and encouraged to function as corporate monitors, discouraging wrongdoers to the point of elimination.

Implications/Originality/Value: It is suggested that the Act be revised to address the existed flaws. The Act is specifically amended to cover private-sector whistle-blowers, and an impartial, external reporting channel is established under one of the existing specialized organizations that deal with fraud. In particular, anti-corruption bodies, like National Accountability Bureau, has established as an external reporting and investigative channel.



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Introduction

In recent years, the conflict of interest between management and stakeholders has gained worldwide attention, leading to modifying the existing legal structure (Vuong et al., 2021). Many nations have sought to enact substantial laws to develop, improve, or alter their conflict-of-interest management mechanisms (Cailleba & Petit, 2018). The conflict of interest contributes to a critical character in forming a state's ethical and moral structure. Invasion of the public interest jeopardizes society's integrity, moral ideals, social norms, and characteristics. Obeying moral and legal principles of fairness, interest, and the common good is required for the public good (Ogbu, 2017). The public interest is concerned with the overall welfare, not the profit of a specific group of people (Breznau, 2021). Ultimately, the core of society and the government is trust in public institutions. The government's primary organs for carrying out public-good activities are public institutions.

The public's widespread unhappiness with government institutions is blamed for the fall in confidence. In order to preserve, it is critical to earning public confidence by acting as an ethical and responsible performance, repairing, or establishing public trust in government institutions while productivity and trust are inextricably linked (Khan et al., 2021). The government suffers from a huge trust deficit due to the lack of trust in major public institutions (Kramer & Lewicki, 2010).

Even more challenging is identifying public officials who look at public assets, degrade institutions, sabotage economic progress, and deprive poor residents of essential human services. While people have various valid interests outside of their profession, they are responsible for upholding society's overarching interests. In essence, an employee must eliminate the conflict of interest that arises when fulfilling official tasks (Mata et al., 2021). The officeholders are required to take all practical stages to evade actual or ostensible conflicts of interest that might jeopardize the public's integrity, fairness, openness, and accountability (Lewis, 2022). Pakistan's public and corporate governance is being scrutinized from all sides (Ali et al., 2022). Many high-profile instances involving corruption, resource mismanagement, favouritism, blatant fraud, and money laundering have surfaced on the domestic front (Salinger, 2005). On a global scale, the New York branch of Pakistan's leading Habib Bank Ltd. was recently chastised by US authorities and forced to shut down due to poor financial management. Like other developing countries, Pakistan's challenge is to improve its governance to reduce non-trivial misbehaviour, allowing for higher private investment and quicker economic growth. While experts advocate various methods to strengthen public and corporate governance, this essay focuses on whistle-blowing as a weapon for combating misconduct and whether Pakistani laws fully exploit its potential (Ogbu, 2017).

Whistle-blowing is not yet common in Pakistani organizations, and study on the subject is even more restricted. The laws and regulations are still in the works. With particular application to Pakistan, the notion of whistle-blower protection mandates that persons who reveal information about wrongdoing, whistle-blowers be safeguarded. Whistle-blowers, however, are not protected under the Right to Freedom of Information Act. It does not shield you from any regulatory, administrative, or employment-related penalties for sharing information. In excluding a whistle-blower protection clause, officials who simply suspect wrongdoing or malfeasance would fear losing their jobs or being suspended if they exposed evidence (Cailleba & Petit, 2018). The current corporate governance wake-up call may be related to recent business scandals. Corporate stakeholders are now on their toes & eager to put corporate governance systems in place (Ogbu, 2017). Therefore, various empirical evidence from various viewpoints on corporate governance has been studied. This study examines legislative provisions extended to the protection of private company whistle-blowers. The whistle-blowers' protection act, which is already mandatory in the public sector, should be mandatory for all private enterprises, regardless of size. Researchers have discovered three antecedent elements for whistle-blowers' intents: ethical culture of

organization, teleological & technological assessments, with durable ethical culture playing a significant role in persuading associates to be whistle-blowers in contradiction of their employers' misconduct. It is said that the occurrence of trade unions encourages associates to voice their complaints without the terror of punishment & with the idea that the infraction will not be corrected. (O'Dowd et al., 2010).

Whistle-blowers' culture and practice are well established in common law nations than in continental states because of their early origins. Common law nations' whistle-blowers' legislation is in better form (Bauhr & Grimes, 2012). In continental Europe, legislative procedures for protecting whistle-blowers are inadequate. However, Pakistan became the first country in the subcontinent to enact freedom of information legislation in 2002 (Ahmed, 2016). People are hesitant to act since there is no equivalent correct interpretation word whistle-blower in various jurisdictions in continental Europe. The political leaders in continental Europe must be committed to using whistle-blowers as a tool to combat corruption. Alleyne et al. (2013) stated that while having an independent board of directors through appointing outsiders as directors indicates excellent corporate governance, the efficiency of these boards is constantly in doubt since they are dominated by management and significant shareholder representatives.

Researchers believe that internal and external whistle-blowers are influenced in the same way by wrongdoing and malfeasance. Second internal and external whistle-blowers are influenced differently by organizational features. The third is the ability of an organization to adapt to whistle-blowers increases internal whistle-blowers while decreasing external whistle-blowers. External whistle-blowers have a lower level of support, but intra-organizational whistle-blowers have a higher level of support. Those in the commercial sector are more equivocator & more likely to blow the whistle externally. In contrast, employees in the public sector are more committed and less likely to blow the whistle (Alleyne et al., 2013). To summarise, this research aims to discover the influence of ethical and cultural norms in organizations on whistle-blowing behaviour. Whistle-blowers must be supported and encouraged to function as corporate monitors, discouraging wrongdoers to the point of elimination.

Literature Review

Concept of Whistle-blowing

In an organization, a whistle-blower is someone who blows the whistle on exploitation, frauds, corruption, crimes, wrongdoings, or misconducts, among other things, on ethical and moral grounds (Rothschild & Miethe, 1999). It is the disclosure of unlawful, corrupt, or illegitimate actions by prior or current workers to individuals or organizations that may be able to take action (Miethe & Rothschild, 1994). Internal whistle-blowing is often defined as reporting wrongdoing outside the traditional line of command. Still, external whistle-blowing is essentially reporting wrongdoing to someone outside the company who may be able to halt or remedy wrongdoings (Cailleba & Petit, 2018). The Act of a referee 'blowing a whistle' is highly prevalent on sports grounds and schoolyards. When players break the rules of the game, the goal is to attract attention to it, interfere, or pass judgement to restore the spirit of sportsmanship. However, in today's organizational setting, the phrases are employed in a more limited sense. According to the International Labour Organization (2018), Whistle-blowing is defined by workers or former workers revealing unlawful, asymmetrical, harmful, or unscrupulous workplace actions. Whistle-blowing is also defined by Tricker and Tricker (2015) as telling authorities about a person or group that is perceived to be acting unlawfully, such as breaching laws or regulations, violating an ethical code, or offending in some other way. Jubb (1999) drives home the concept's finer points, proposing the following definition:

“Whistle-blowing is a non-obligatory act of disclosure made by a person who has or had privileged access to data or information of an organization, about non-trivial illegality

or other wrongdoing, whether actual, suspected, or anticipated, that implicates and is under the control of that organization, to an external entity with the ability to correct the wrongdoing”.

Some may disagree with Jubbin's position on limiting whistle-blowing to solely external reporting. As a result, there is internal whistle-blowing, reporting suspected ethical or legal infractions to a higher authority within a company. On the other hand, external whistle-blowing refers to the exposure of misconduct to an authority outside of an organization (Cailleba & Petit, 2018).

Why Whistle-blowing?

Whistle-blowing has become an essential component of regulatory enforcement operations in the developed world. The worldwide cost of corruption and fraud is estimated to be more than \$2.9 trillion (ACFE 2016). According to theoretical and empirical studies, there is a substantial negative association between a country's perception of corruption and fraud and its pace of economic growth (Kimbrow, 2002), decreasing all future profits, reduces revenue collection. Fraud encourages secrecy, the underground economy, money laundering, and capital flight all obstruct capital accumulation. As a result, the battle against it must be intelligently articulated to motivate widespread vigilance and action. According to data, internal factors are biggest offenders of fraud (some 52 percent incidents in 2018). Whistle-blowing might be the only crucial pillar to control fraud (PWC 2018). Therefore whistle-blower protection is crucial for encouraging openness, accountability, and good governance among public and commercial entities.

Who Blows the Whistle on Public and Corporate Wrongdoing?

Whistle-blowers' choice is a tremendously complex phenomenon, not a simple one. This phenomenon has significant relevance to legal systems; as a result, it is vital to comprehend critical to whistle-blower decision-making, particularly in its legal context, to gain insights (Cailleba & Petit, 2018). As legitimate representatives of a country's inhabitants, governments create a general whistle-blowers atmosphere for private & public companies. Governments typically encourage people to discover fraud, dishonesty, and wrongdoing in the workplace. They give the climate and procedures for whistle-blowers. The mechanism is critical in deciding whether or not to blow the whistle and whether or not to report wrongdoings (Lewis, 2022). According to a business ethics perspective, employee integrity plays a major part in many occurrences of whistle-blowing. Bauhr and Grimes (2012) examine corporate fraud from a somewhat different standpoint. When internal corporate governance fails, they believe a legal position on fraud detection points to external factors, such as auditors and securities regulators, having a crucial role. According to this finance view, those with residual rights in the business, such as stock and debt holders, and their agents, analysts and auditors fulfil the monitoring role (Lewis, 2022). Table 1 explains the types of whistle-blowers in an organization.

Table 1: Whistle-Blowing in Organization

Procedural	Distributive	Interpersonal	Informational
Discloser mechanism	Reduce Wrongdoing	Treatment on disclosure	Access to information regarding the disclosure
Proceed on disclosures	Freedom of speech	Rational Loyalty	Progress of interrogation
Interrogating disclosure	Good Governness	Effective management	Accountability
Accessibility to resources	Ethical work environment	Trustworthy environment	Access to information about resources

How Whistle-Blowers are Identified?

Whistle-blowing legislation in the United States has evolved from single sections in various rules & regulations related to sectoral legislation or broad. For fortification, exposure strategy has grown extra widespread, particularly in nations with broad whistle-blower protection legislation. In essence, protection should be broadened to guarantee that all sorts of stakeholders are protected (Cailleba & Petit, 2018). The contemporary debate about whistle-blower fortification attempts to strike an equilibrium between the requirement to maintain information freely & essential of safeguarding information secrecy and anticipated allegiance from workers. Legislation has attempted to define what constitutes a fact triggering protection in this situation. (Lewis, 2022).

Detection Mechanism

Whistle-blowers (those who disclose misbehaviour in public sector institutions and the government) are used to establish detection mechanisms in several nations. In Pakistan, the underlying whistle-blowing system has yet to be developed in public sector companies, and there is a glimmer of hope for the future.

Independent Oversight Body

In public sector organizations, the institutional system for detecting and investigating conflicts of interest is organized through the hierarchy; each institution's head is responsible for detecting and controlling conflicts of interest through internal inspection and sanctioning violations (Miceli & Near, 2002). However, no independent national or provincial supervision authority in the country is responsible for reviewing and assessing the execution of conflict of interest cases. After obtaining information from a whistle-blower, this impartial organization will conduct a preliminary investigation and take tangible actions to prevent a breach of the public interest. The commission is also responsible for ensuring that the person who discloses information is not mistreated and protecting a persecuted whistle-blower.

Determinants of Successful Whistle-blowing

Corporate governance is not a novel topic in corporate law, according to regulatory agencies and auditing and accounting companies, the whistle-blower is vital for corporate culture. In today's corporate systems, present whistle-blowers processes are ineffective (Ahmed, 2016). Fear of reprisal prevents employees & members, including shareholders of companies, from reporting misconduct. At work, whistle-blowers suffer two sorts of retribution: one is connected to a relationship at the workplace, and another is related to documentation of employment record retaliation. Recent studies documented Whistle-blower prejudice (Farooqi et al., 2017). Whistle-blowers risk being denied promotion, suspended, or fired from their jobs; however, rules protecting correct disclosure prevent them from being suspended, refused promotion or fired. If organizations retaliate, whistle-blowers can use legal measures to protect themselves. The availability of reprisal punishment is a critical issue in this case. And if there are inadequate, ineffective, or insufficient legal remedies in this area, it discourages individuals from reporting misconduct. Whistle-blowers are afraid of being harassed and receiving a negative response; thus, they prefer to expose wrongdoings through external means.

Managers must attentively listen to the whistle-blower's complaint, investigate it thoroughly, and rectify the situation for successful whistle-blowers in the organization. It is also critical to safeguard the whistle-safety. Blower's The element "presence of explicit provisions in legislation regarding retaliatory penalty" is also worth investigating and analyzing further, arguing that a delay in the justice is the same as a denial of justice. They further said that judicial independence aids in quickly completing a trial of inquiry or matter. Wrongdoing is defined as the abuse of power to facilitate unlawful activity. Whistle-blowers benefit from the law for whistle-blowers because it helps them get justice quickly. In the case of whistle-blowers, the "minimum duration" of a trial is crucial to effective whistle-blowers and should be considered for analysis (Ahmed,

2016). The following factors for analysis have been discovered due to the literature review, as shown above. The country's legal climate; the necessity for a whistle-blowers -specific law; a statute that has punitive provisions; the existence of explicit legal provisions on penalties for false reporting; whistle-blower remedies; simple access to court; whistle-blower burden of proof; specific legal laws concerning retribution punishment; and whistle-blowers cases must be decided within a certain time frame (Lewis, 2022).

National and International Legislations

Examination of national and international legislation will be conducted below; a systematic legal work is provided to expound on many aspects to address, using specific laws.

Legal Environment of Nation

Organizational governance is governed by corporate laws, which comprise rules and regulations. The "Sarbanes–Oxley Act of 2002," adopted by America, is an example of such legislation. This statute offers unique measures for whistle-blower protection in the United States, although it is not a comprehensive law for whistle-blowers. It is now necessary to enact particular regulations for whistle-blowers in the twenty-first century. In most nations across the globe, regulations are needed to offer protection for whistle-blowers. Legislation is essential to promote, assist, acknowledge, and eventually defend whistle-blowers (Alleyne et al., 2013). Whistle-blowers legislation must include measures for avoiding retaliation, protection, fiscal fortification & remuneration for whistle-blowers, among other factors. It has also been suggested that specific legal provisions must be in place to penalize wrongdoers, false reports, and retaliators. Punitive clauses in company law have been mentioned as a factor. There have been cases where government and private sector auditors or workers created false reports and benefited from technological gaps in the legislation.

Punishment for false reporting contributes to developing a culture that avoids blame. False reporting is a criminal offence that breeds suspicion and distrust. False reporting is punished differently in different nations, although it is considered an offence. This element has also been underlined for further investigation as the availability of particular legal provisions regarding penalties for false reporting (Lewis, 2022). Whistle-blowers are deterred from disclosing fraud and malpractice due to a lack of clarity regarding their remedies. Accusations that give wrongdoers time to cover up errors tend to have a negative impact on organizations. Employees are reportedly afraid of harming themselves or their families if they submit information regarding wrongdoings. This component has been mentioned as a whistle-blower's remedy. Access to justice is a critical component of the legal system that supports a country's rule of law. A vital aspect of the corporate governance regime is informal access to the legal structure for relief. Employees and whistle-blowers subjected to retaliation can seek justice through the courts. (Cailleba & Petit, 2018).

Because it is a final choice for whistle-blowers, "easy access to justice" is a critical issue to consider for research. An auditor is a good place to start if you are looking for proof of financial misbehaviour in your company. Auditors and accountants are obligated to minimize organizational wrongdoing as part of their job. Auditors are frequently whistle-blowers of financial wrongdoing, according to corporate history. Whistle-blowers are obligated to file complaints, therefore, they bear the "burden of evidence." It is essential to identify anything important in the whistle-blower's procedure for subsequent examination. (Alleyne et al., 2013).

Best Practices on Whistle-blower Protection Legislation

After discussing the national legislation, the attention moves to putting the notion of whistle-blower protection into practice through comprehensive law. The G20 Anti-Corruption Action Plan (2012) comes in help in this situation (Ahmed, 2016). To begin, the misconduct should be

severe, involving significant mismanagement and waste of finances. Setting a minimal standard for the scope of wrongdoing might be beneficial. Second, only good faith and reasonable grounds disclosures should be safeguarded. Those acting out of personal vendettas or willfully making false accusations should not be protected by the law. Third, in its broadest sense, whistle-blower protection should be extended to both private & public segment personnel, including advisors, free-lancers, momentary employees, ex-employees, helpers, job candidates, and others who have been black-listed (Chalouat et al., 2019). Similarly, some types of workers who perform sensitive work, such as members of the military services and the intelligence community, should be exempt from the broad legislation and subject to unique norms and procedures for a protected disclosure.

Fourth, the scope of protected disclosures should be broad, explicit, and legally assured. According to the ILO definition, corruption, breaches of food, health, safety, unfair competition, environmental regulations, and the conduct of criminal offences are all examples of unlawful, unethical, or harmful practices. Fifth, legislation should shield whistle-blowers against name revelation, discriminatory and retaliatory activities, criminal and civil liabilities, and libel and defamation cases, among other things. Sixth, legislation should explicitly define the reporting methods, techniques, and channels available for protected disclosures. In addition, creating national hotlines is gaining popularity. Seventh, by using incentives such as monetary prizes to promote whistle-blowing should be examined. Eighth, the legislation should include supervision and enforcement measures, including creating an independent institution to examine charges of retaliation against whistle-blowers and make access to the courts for prosecution easier. In addition, legislation should be incorporated to provide for employer retaliation in the event of harm resulting from protected disclosure and criminal penalties for retaliating employers. Wolfe et al. (2014) give a full update on these best practices, which are utilized to benchmark the situation of Pakistan in the following sections. Table 2 presents the analytical framework.

Table:2 Analytical Framework

Areas	Criterion	Description
Scope of protection: who is protected	Broad coverage of organizations	Comprehensive coverage of organizations in the sector
	Broad definition of whistle-blowers	Broad definition of whistle-blowers whose disclosures are protected (e.g. including employees, contractors, volunteers and other insiders)
Scope of protection: material scope	Broad definition of reportable wrongdoing	Broad definition of reportable wrongdoing that harms or threatens the public interest (including corruption, financial misconduct and other legal, regulatory and ethical breaches)
Elements of protection: protection from retaliation	Broad protection against retaliation	Protections apply to a wide range of retaliatory actions and detrimental outcomes (e.g. relief from legal liability, protection from prosecution, direct reprisals, adverse employment action, harassment)

	Comprehensive remedies for retaliation	Comprehensive and accessible civil or employment remedies for whistle-blowers who suffer detrimental action (e.g. compensation rights or injunctive relief, with a realistic burden on employers or other repressors to demonstrate detrimental action was not related to disclosure)
Elements of protection: reporting channels	Range of internal and regulatory reporting channels	Full range of internal (i.e. organizational) and regulatory agency reporting channels
	External reporting channels (third party, public)	Protections extend to the same disclosures made publicly or to third parties (external disclosures e.g. to media, NGOs, labour unions, members of Parliament) if justified or necessitated by the circumstances
Elements of protection: anonymity	Provisions and protections for anonymous reporting	Protections extend to disclosures made anonymously by ensuring that a discloser (a) has the opportunity to report anonymously and (b) is protected if later identified
	Confidentiality protected	Protections include requirements for confidentiality of disclosures
Elements of protection: enforcement mechanisms	Internal disclosure procedures required	Comprehensive requirements for organizations to have internal disclosure procedures (e.g. including requirements to establish reporting channels, have internal investigation procedures, and have
		procedures for supporting and protecting internal whistle-blowers from the point of disclosure)
	Sanctions for retaliators and incentives for whistle-blowers	Reasonable criminal or disciplinary sanctions against those responsible for retaliation, as well as financial rewards for whistle-blowers
	Oversight authority	Oversight by an independent whistle-blower investigation or complaints authority or tribunal
	Transparent use of legislation	Requirements for transparency and accountability on the use of the legislation (e.g. annual public reporting and provisions that override confidentiality clauses in employer-employee settlements)
Elements of protection: the notion of good faith	Thresholds for protection	Workable thresholds for protection (e.g. honest and reasonable belief of wrongdoing, including protection for "honest mistakes", and no protection for knowingly false disclosures or information)

Protection of Whistle-blowers in Pakistan

On November 2, 2017, Pakistan's President granted his assent to Act No. XXXVI of 2017 - Public Interest Disclosure Act 2017 ("Act"), which both chambers of Parliament had previously adopted. The Act establishes a system for public interest disclosure to combat corruption and safeguard whistle-blowers. SECP withheld notice of the whistle-blowing Regulation 2017 that it had designed to extend protection to private sector enterprises following the legislation's passage.

We analyze the Act in the following sections using Wolfe et al. (2014) G20 .'s best practices.

Table 3: Benchmarking Pakistan Public Interest Disclosures Act 2017 on Superlative Practice Standards

Sr No.	Superlative Practice Standards for Whistle-blowing Legislation (Wolfe et al., 2014)	Assessment of Public Interest Disclosures Act 2017 of Pakistan
1.	Broad coverage of Organizations	The Act provides a comprehensive exposure of public sector organizations. However, handling private sectors entities is left to discretion as they would need to be specified by notification in the official Gazette (<i>Ch I, ss.2e</i>).
2.	Definition - reportable wrongdoing	The reportable wrongdoing in <i>Ch I, ss.2c para i& ii</i> could have been more elaborate covering any dangerous activities, legal, regulatory and ethical breaches as well as losses due to incompetence. For instance, breaches in relation to defilements of food, health, security, unfair competition & environmental law and commission of criminal offences should be included.
3.	Broad definition of Whistle-blowers	Again, the definition provided in <i>Ch I, ss.2f</i> is wanting. A broad definition would include consultants, contractors, temporary employees, job applicants, and persons who have been blacklisted by the entities.
4.	Internal regulatory reporting networks	The only reporting channel provided in the Act is the 'Competent Authority' heading the same department against which the complaint is being made or its nominee. The competent authority is given 'exclusive jurisdiction' on trial of the disclosed matter with powers of a civil court. While no disclosures can be made that are construed as breaches of privileges attached to elected offices, privileged are bound to partake in civil court proceedings if required. Further, the Act is silent on the 'right of appeal' outside the organization against the competent authority. (see <i>Ch I, ss.2a, ChII, ss.3(1,6), ChIII, ss.7,8,9, Ch. V, ss. 19</i>).
5.	External reporting channels (third party / public)	The law is silent on external reporting channels arguably implying that protection does not outspread to the disclosures declare public or to 3 rd parties such as Member Parliament, media and civil society organizations.
6.	Thresholds for protection	<i>Chapter VI, ss.20</i> of the Act provides reasonable protection against all actions undertaken in good faith under the Act. Yet, it will be helpful if along with 'competent authority', the word 'complainant' is also specified among those who are protected. Also, <i>Ch. V, ss. 16</i> prescribes punishment for false or frivolous disclosure, which is understandable.
7.	Provision and protections for anonymous reporting	The Act rules out processing anonymous or pseudonymous disclosures (See <i>Ch. I, ss.3(5)</i>), which contravenes best practices.
8.	Confidentiality protected	<i>Ch. IV, ss.12</i> and <i>Ch. V, ss.15</i> reasonably protect the identity of the complainant and confidentiality of the disclosures made.
9.	Internal disclosure procedures required	The Act provides some procedures for internal disclosures and powers of the competent authority (e.g., <i>Ch II, ss. 3(3 &6), 4,5,Ch.IV, ss.13</i>) and creates scope for issuing additional rules pertaining to this matter (<i>Ch. VI, ss. 22,23,24</i>).

10.	Broad retaliation Protections	<i>Ch. IV</i> broadly deals with and provides protection to complainants and witnesses against adverse employment action, harassment or direct reprisals. However, protections against lawsuits, prosecution or other legal proceedings are extended in <i>Ch. VI, ss. 20</i> . It is recommended that like the 'competent authority', the word 'complainant' should be clearly mentioned among those protected against lawsuits.
11.	Comprehensive remedies for retaliation	Somewhat limited remedies are provided to whistle-blowers in case of retaliation. For instance, <i>Ch. IV, ss.10(3)</i> shifts the burden of proof against victimization of the complainant to the employing 'organization'. <i>Ch. IV, ss.10(5)</i> provides remedy of restoring the complainant to the status quo <i>ante</i> in case of victimization. The Act is silent on compensation rights or civil redressal for whistle-blowers who agonize damaging Act.
12.	Sanctions for retaliators	The Act provides limited sanctions for retaliators. <i>Ch. IV, ss.10(6)</i> provides for penalties of up to Rs. 500,000 (\$4,400) for any person who wilfully does not comply with the direction of the 'Competent Authority' to protect the 'complainant' from victimization. This compares with the median fraud size in South Asia of \$100,000 (ACFE 2016)
13.	Oversight authority	The Act in its present form does not provide oversight by an sovereign whistle-blower enquiry / complaints authoritys or tribunals.
14.	Translucent usage of legislation	<i>Ch. VI, ss.21</i> provides for preparation of an annual report on disclosures under this Act to be laid before each House of Parliament.

Conclusion

One of the primary concerns of many organizations is the development of an ethical corporate culture through which it aims to control, minimize, and eventually try to eliminate wrongdoings and wrongdoers from the organization that are impeding progress; by taking action against wrongdoers and encouraging whistle-blowing, which aids in doodling attention of the management to wrongdoings and wrongdoers. The last several years have shown enormous social and economic consequences due to financial statement scams that have shaken the corporate markets. As a result, investment portfolios have crumbled, and financial reporting has been disturbed, among other things. The majority of these crimes were discovered not by external auditors or analysts but by workers who had access to accounting information. As a result, law enforcement authorities throughout the globe have recognized the value of whistle-blowing in both discouraging and identifying financial misconduct. They have enacted rules to encourage employees' whistle-blowing against corporate crimes.

It is challenging to keep up the fight against conflicts of interest in public life. The harm it may wreak to citizens' trust in their government is extensive. The goal is to guarantee that public officials, lawmakers, ministers, bureaucrats, and judges do not improperly utilize their public positions to benefit themselves, their families, or those close to them. They must be aware of and behave in accordance with ethics and values, and they must practice integrity in both personal and institutional behaviour. Having definite rules and regulations in place is not enough to provide public service. If rules and regulations are to be significant, they must be implemented effectively. Conflict of interest laws cannot be incorporated or enduring without a welcoming and supportive overall governance atmosphere and strengthened transparency and accountability frameworks. As a result, it will not take off unless there is a greater understanding that the government and legislature are the custodians of public welfare and that they are accountable to the people for policy and implementation failures. According to research, whistle-blowing plays an important role in uncovering fraud worldwide. As a result, governments must take steps to safeguard whistle-blowers through legislation.

The Pakistan Freedom of Information Act of 2013 (FOIA) grants citizens access to government decisions, information, documents, and records. The formulation and execution of a whistle-blower law requiring the government of Pakistan personnel to disclose suspected integrity violations as a professional requirement and personal responsibility might have a significant influence on Pakistan's governance system. Examining the Pakistan Public Interest Disclosure Act 2017 in terms of best practices indicates a few important concerns that need to be addressed. The Act does not cover all businesses, accept anonymous complaints, give whistle-blowers various choices for reporting internally or externally, establish an oversight authority, or provide for independent judicial review. In the end, the 'competent authority,' which is internal and potentially the head of the organization or its candidate, acquires a significant role and prohibitive power as the exclusive reporting route as well as the investigative authority. It is suggested that the Act be revised to address the aforementioned flaws. The Act is specifically amended to cover private-sector whistle-blowers, and an impartial, external reporting channel is established under one of the existing specialized organizations that deals with fraud, ideally the National Accountability Bureau. Confidence, openness, and trustworthiness would all benefit from this.

References

- ACFE (2016), Report to the Nations on Occupational Fraud and Abuse – 2016 Global Fraud Study, ACFE, available at: www.acfe.com/rtn2016.aspx
- Ahmed, S. Z. (2016). A critical examination of regulating and monitoring conflict of interest perspective in Pakistan. *Applied Research Journal*, 2(3), 97–103.
- Ali, W., Wilson, J., & Husnain, M. (2022). Determinants/motivations of corporate social responsibility disclosure in developing economies: A survey of the extant literature. *Sustainability*, 14(6), 3474.
- Alleyne, P., Hudaib, M., & Pike, R. (2013). Towards a conceptual model of whistle-blowing intentions among external auditors. *British Accounting Review*, 45(1), 10–23.
- Bauhr, M., & Grimes, M. (2012). What is government transparency. *QoG Working Paper Series*, 2012(16), 16.
- Breznau, N. (2021). The welfare state and risk perceptions: The novel Coronavirus pandemic and public concern in 70 countries. *European Societies*, 23(sup1), S33-S46.
- Cailleba, P., & Petit, S. C. (2018). The whistle-blower as the personification of a moral and managerial paradox. *Management*, 21(1), 675. <https://doi.org/10.3917/mana.211.0675>
- Chalouat, I., Carrión-Crespo, C., & Licata, M. (2019). *Law and practice on protecting whistle-blowers in the public and financial services sectors* (Vol. 1978, Issue 151).
- Farooqi, S., Abid, G., & Ahmed, A. (2017). How bad it is to be good: Impact of organizational ethical culture on whistle-blowing (the ethical partners). *Arab Economic and Business Journal*, 12(2), 69-80. <https://doi.org/10.13140/RG.2.2.31270.88647>
- Jubb, P. B. (1999). Whistle-blowing: A restrictive definition and interpretation. *Journal of Business Ethics*, 21(1), 77-94.
- Khan, K. I., Saleem, S., Sheeraz, M., & Imtiaz, U. (2021). Breaking silence and improving performance: how subordinates feeling trusted, and loyalty towards supervisors mediates the relationship between ethical leadership and project team members' silence. *Academy of Strategic Management Journal*, 20, 1-18.
- Kimbro, M. B. (2002). A cross-country empirical investigation of corruption and its relationship to economic, cultural, and monitoring institutions: An examination of the role of accounting and financial statements quality. *Journal of Accounting, Auditing & Finance*, 17(4), 325-350.
- Kramer, R. M., & Lewicki, R. J. (2010). Repairing and enhancing trust: Approaches to reducing organizational trust deficits. *Academy of Management Annals*, 4(1), 245-277.
- Lavena, C. F. (2016). Whistle-blowing: Individual and organizational determinants of the decision to report wrongdoing in the federal government. *The American Review of Public Administration*, 46(1), 113-136.

- Lewis, D. (2022). Retaliation for whistle-blowing: Some case studies on the experience of re-employment/redeployment. *International Journal of Law and Management*. <https://doi.org/10.1108/IJLMA-10-2021-0244>
- Mata, M. N., Khan F. H., Khan, K. I., Martins, J. N., Rita, J. M., & Dantas, R. M. (2021). Team diversity and project performance: Role of trust and absorptive capacity in IT Industry, *Academy of Strategic Management Journal*, 20(2S), 1-20.
- Miceli, M. P., & Near, J. P. (2002). What makes whistle-blowers effective? Three field studies. *Human relations*, 55(4), 455-479.
- Miethe, T. D., & Rothschild, J. (1994). Whistle-blowing and the control of organizational misconduct. *Sociological Inquiry*, 64(3), 322-347.
- O'Dowd, A., Hayes, J., & Cohen, D. (2010). Whistle while you work. *BMJ (Online)*, 340(7756), 1110–1113.
- O'Higgins, E. R. (2006). Corruption, underdevelopment, and extractive resource industries: Addressing the vicious cycle. *Business Ethics Quarterly*, 16(2), 235-254.
- Ogbu, S. U. (2017). Whistle blowing policy as a mechanism for energizing the 'war against corruption' in Nigeria. *International Journal of International Relations, Media and Mass Communication Studies*, 3(4), 16-32.
- Richardson, B. K., & McGlynn, J. (2011). Rabid fans, death threats, and dysfunctional stakeholders: The influence of organizational and industry contexts on whistle-blowing cases. *Management Communication Quarterly*, 25(1), 121-150.
- Rothschild, J., & Miethe, T. D. (1999). Whistle-blower disclosures and management retaliation: The battle to control information about organization corruption. *Work and occupations*, 26(1), 107-128.
- Salinger, L. M. (Ed.). (2005). *Encyclopedia of white-collar & corporate crime* (Vol. 1). Sage.
- Tenbrunsel, A. E., & Smith-Crowe, K. (2008). 13 ethical decision making: Where we've been and where we're going. *Academy of management Annals*, 2(1), 545-607.
- Tricker, B., & Tricker, R. I. (2015). *Corporate governance: Principles, policies, and practices*. Oxford University Press, USA.
- Vuong, Q. H., La, V. P., Nguyen, H. K. T., Ho, M. T., Vuong, T. T., & Ho, M. T. (2021). Identifying the moral-practical gaps in corporate social responsibility missions of Vietnamese firms: An event-based analysis of sustainability feasibility. *Corporate Social Responsibility and Environmental Management*, 28(1), 30-41.
- Wolfe, S., Worth, M., Dreyfus, S., & Brown, A. J. (2014). *Whistle-blower protection rules in G20 countries: The next action plan*. Melbourne: Transparency International Australia.



Tax Collection in Pakistan: Determinants and Impact on Economic Growth

Muhammad Faheem Ullah, Research Scholar, Institute of Business Management Sciences, University of Agriculture, Faisalabad, Pakistan

Hammad Badar, Assistant Professor, Institute of Business Management Sciences, University of Agriculture, Faisalabad, Pakistan

Kashif Hamid, Lecturer, Institute of Business Management Sciences, University of Agriculture, Faisalabad, Pakistan

Muhammad Yasir Saeed, Visiting Lecturer, Institute of Business Management Sciences, University of Agriculture, Faisalabad, Pakistan

*Corresponding author's email: kashif.boparai@gmail.com

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ABSTRACT

Purpose: Taxes are the primary source of government revenues. Through taxes, governments can increase the revenues needed for public spending. This study is aimed at investigating the determinants of tax collection and how they impact the economic growth of Pakistan.

Design/Methodology/Approach: The secondary data has been taken from 1990 to 2020 from different sources such as the World Bank and Pakistan Economic Survey. The regression analysis has been performed on the collected data. The study has taken tax collection as the dependent variable and per capita gross domestic product, exchange rate, exports, imports and unemployment and inflation rates as the independent variables.

Findings: Results indicate a significant impact of GDP per capita, exchange rate, imports, and exports on tax collection in Pakistan. Tax collection has a significant and positive impact on economic growth.

Implications/Originality/Value: The study findings urge to frame policies for increasing gross domestic product per capita, controlling inflation and unemployment for greater attraction of taxpayers for the sake of high tax collection. The high unemployment rate and inflation are the main barriers to tax collection and the country's better economic growth. This study will be helpful to the concerned public-sector institutions in improving tax collection in Pakistan, and the government should take necessary steps to improve and develop a solid mechanism to collect taxes.



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Introduction

Taxes are the main source of revenues for governments in developed and developing economies. The socio-economic development of countries heavily relies on taxes. An effective and efficient taxation system equipped with modern technologies, equipment and processes can generate higher tax collection. Governments strive hard to raise tax collection so that the public may be provided with various facilities such as roads, health cover, education, law enforcement, social security, and preservation. It is widely believed that taxes play a crucial role in building nations sustainably (Ahmad *et al.*, 2013). That is why greater emphasis is laid on developing an efficient tax system for generating domestic resources. However, collecting taxes is considered a challenging task due to many reasons, including evasion of tax and corruption (Oyedele, 2012).

Various authorities collect taxes at federal, province, and local levels in Pakistan. The Federal Board of Revenue (FBR) collects federal taxes which mainly include income and sales taxes and federal excise and customs duties. The primary responsibility of the FBR is to plan and implement various strategies and action plans for raising and tax collection (FBR, 2020). The provincial taxes mainly include property tax, vehicle tax, stamp duty, professional tax, and excise duties on hotels, cinemas, and services. The provincial excise and taxation departments collect these taxes (Zaidi, 2015). At the local level, districts, tehsils, towns, and union councils collect taxes on road networks, bridges, highways, licenses, and cattle markets.

The Federal Board of Revenue is endeavoring to enhance the capability and capacity of the system to collect more taxes. For this purpose, modern technologies and systems are also being used. However, slower growth of the economy, low and narrow industrial base, corruption and bribery, and inadequate political determination appear as the major stumbling block. Furthermore, a sizeable part of the economy is not documented and **digitalized**. Tax-to-GDP ratio indicates the status of the collection of taxes in relation to the country's Gross Domestic Product. Generally, developed countries have a higher tax-to-GDP ratio than developing countries. The lower tax to tax-to-GDP has always been a constraint on economic development and a main reason of higher fiscal deficits in Pakistan. Economic growth depends on tax collection, exchange rate, exports, inflation, imports and employment (Aslam *et al.*, 2018). This research seeks to investigate the influence of various factors such as inflation rate, exchange rate, import, export, unemployment, and GDP per capita on tax collection in Pakistan

Pakistan faces the challenge of raising tax collection every year, and the problem of fiscal deficit constrains the government in realizing its development goals. This study supports policymakers and regulators in framing appropriate policies for increasing tax collection in Pakistan. In addition, the study contributes to the literature on tax collection and has filled the knowledge gap that has not been addressed in Pakistan.

Literature Review

Literature has highlighted the importance of taxes in attaining the economic growth and development on sustainable basis in developing and developed economies. Tax is a compulsory payment individuals or businesses make to a government for effective and smooth functioning of a country's economy. The term "tax" has originated from the Latin word "taxo", which implies estimate (Kulkarni and Hinge, 2019). Taxes are levied across the world to collect money for government expenditures and social schemes for the public.

Ghugre and Katdare (2016) describe taxation as the primary source of revenue for governments, and a sound taxation infrastructure is essential for economic growth. A tax structure that facilitates ease of doing business and bars tax evasion contributes significantly to bringing prosperity to a country's economy. According to them, India has a well-developed tax system with the three tiers of the government collecting taxes and duties at their levels. Although the

taxation system in India has been reformed many times, it is not flawless and is facing many challenges, such as reliance on indirect taxes, corruption and tax evasion, which highlight the need for significant policy adjustments to address these challenges.

Several studies have argued that appropriate adjustments in taxation policy can further help generate fiscal revenues, ultimately resulting in higher economic growth. On the other hand, poor taxation policy can have adverse effects. For example, a large gap between target revenue and actual tax collection can have undesirable and significant impacts on economic growth. However, the gap could be narrowed by broadening the tax network and modernizing and reforming the country's tax administration and infrastructure, as evident in the study of Illyas & Siddiqi (2010). Broadly taxes are identified as indirect and direct taxes. Several studies have observed that indirect taxes are the primary cause of cost-push inflation in emerging economies. Moreover, it also brings income inequality in countries. Since developing countries need capital and finances for public revenue expenditures, they remain more inclined to generate revenues from indirect taxes, which can be collected relatively easily but may harm the overall economy in the long term. According to Furceri & Karras, 2008, a continuous rise in tax rate may have a negative impact on real GDP per capita in the longer term. Pakistan is one of those countries that mainly rely on indirect taxes. Almost 70% of annual public revenues are generated from indirect taxes. That is why the relationship of taxation with economic growth has been negative in the recent few years (Ahmad & Sial, 2016).

Many studies have identified factors that play a key role in enhancing economic growth, imports and exports, exchange rates and inflation. Economic policy performance depends on these factors because of their significant contribution to generating revenues (Aslam *et al.*, 2018). One of the more enormous challenges in taxation policies is amnesty schemes. These schemes can be a harmful act in the tax authorizations system. On the other hand, such schemes may also have a positive side as it increases state revenues. However, Sari & Mulyati, 2018 argue that an increase in tax revenue may not necessarily increase the tax to GDP ratio. As a result, several tax amnesty policies offered over time in Pakistan could not bring desired results.

Furthermore, Kalas (2018) has investigated the association of taxes with the economy's growth in Serbia and Croatia. The study results indicate that taxes positively and significantly impact economic growth. However, other factors such as inflation, exchange rate, imports and exports also impact economic growth. Given the importance of these factors, the study has incorporated these factors in determining the impact of taxes on economic growth.

Methodology

This research aims to find determinants of tax collection and their impact on economic growth, which is a key parameter for analyzing the economic performance of any country (Saeed *et al.*, 2018; Saeed *et al.*, 2020). The required secondary data has been gathered from The World Bank and various issues of the Pakistan Economic Survey. The explanatory variables used in the study include gross domestic product per capita, exports and imports, exchange rate, inflation rate and unemployment rate. The tax collection in Pakistan has been included as the dependent variable (Table 1). The study model is as below.

Table 1: Data Sources and Description

Variable	Description	Data source	Nature
Tax collection	TC (Annual %)	Pakistan Economic survey	Dependent
Inflation Rate	INF% of GDP	The World bank	Independent

Export	EXP% of GDP	The World bank	Independent
Unemployment rate	UNEMP % of GDP	The World bank	Independent
Exchange Rate	EXCH as % of GDP	The World bank	Independent
Import	IMP as % of GDP	The World bank	Independent
GDP Per Capita	(constant 2010 US\$)	The World bank	Independent
Economic Growth	(% of GDP)	The World bank	Dependent

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \varepsilon$$

Y = Tax collection

X₁ = GDP per Capita

X₂ = Export

X₃ = Import

X₄ = Exchange rate

X₅ = Inflation rate

X₆ = Unemployment rate

ε = error term.

Table 2 indicates the positive association between macroeconomic variables and tax collection. It demonstrates that any rise in macroeconomic factors may push tax collection.

Table 2: Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	-11748.762	1333.057		-8.813	.000		
INF	14.423	18.831	.051	.766	.452	.568	1.761
EXCH	29.678	7.316	.237	4.056	.000	.726	1.378
UNEMP	107.980	37.343	.223	2.892	.008	.416	2.401
GDP(Per capita)	9.730	.615	1.162	15.818	.000	.457	2.188
IMPORT	-18.721	5.584	-.205	-3.352	.003	.662	1.510
EXPORT	13.494	6.076	.124	2.221	.036	.789	1.267

Dependent Variable: Tax Collection

Coefficients of the exchange rate and gross domestic product per capita are highly significant, with a P-value of 0%. The impact of imports on tax collection is negative at a 3% level of significance. This implies that an increase in imports negatively affects tax collection and can be a hurdle in meeting fiscal expenditures and overall economic development. The exports have a statistically significant impact on tax collection at a 3.6% significance level. Hence, there is a dire need to enhance the exports volume of the country.

Table 3: Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
	B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
(Constant)	56.070	6.494		8.634	.000	42.767	69.373		
Tax	.075	.004	.962	18.688	.000	.066	.083	1.000	1.000

collection**Dependent Variable: Economic growth**

Regression coefficients presented in Table 3 reveal how tax collection impacts the economic growth in Pakistan. The coefficient shows that one unit change in tax collection brings about a 7.5 unit change in economic growth in Pakistan.

Table 4: Impact of Tax Collection on Economic Growth

Model	R	R Square	Std. Error of the Estimate	Change Statistics					
				R Square Change	F Change	df1	df2	Sig. Change	F
1	.962 ^a	.926	24.95849	.926	349.224	1	28	.000	

a. Predictors: (Constant), Tax collection

The R-Square value in Table 4 highlights that 92% variation in the dependent variable (economic growth) occurs due to the tax collection. The remaining 8% variation may incur due to other unexplored factors. Since the value of R-Square is higher than 0.75, the model seems the best fit.

Table 5: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	217540.923	1	217540.923	349.224	.000 ^b
	Residual	17441.930	28	622.926		
	Total	234982.853	29			

a. Dependent Variable: Economic growth**b. Predictors: (Constant), TAX collection**

Table 5 reflects the overall fitness of the model. A p-value lower than 5% denotes the significance of the outcome and shows improvement in the variable prediction. The F-ratio in this model has a value 349.224, which indicates the model's overall fitness.

Conclusion and Recommendations

Raising tax collection is vital for sustainable economic growth. The tax structure of a country is considered the backbone of a nation. It is difficult to put the economy on a growth path without generating sizeable funds. According to the findings of this study, tax collection has a strong relationship with economic growth. It highlights the need to raise tax collection to attain economic growth and development. This study indicates GDP per capita, exchange rate and imports as the significant predictors of tax collection in Pakistan.

Given the study findings, the following measures may help the government improve tax collection, which will enhance Pakistan's economic growth. Inflation has undesirable effects on economic growth and incurs due to an increase in the prices of goods and services. Therefore, there is a need to focus on direct taxes to boost the country's economic growth. Therefore, the government should increase tax collection through direct and indirect taxes to reduce poverty and improve public welfare. However, an exclusive focus on indirect taxes may lead to a price rise. Consequently, the public suffers due to a decline in real income.

The policymakers should create awareness among the public and businesses about the importance of paying taxes. The economy of Pakistan cannot grow sustainably with existing tax collection. Therefore, the government should build a solid framework for mobilizing additional resources. In addition, there is a need to control the interest rate to encourage taxation and investment and utilize it as a monetary instrument for controlling inflation in the economy. Furthermore, the government should watch the exchange rates and inflation, import and unemployment.

References

- Ahmad, N., A. Ahmad and K. Yasmeen. 2013. The impact of tax on economic growth of Pakistan: An ARDL approach. *J. Basic. Appl. Sci. Res.* 3, 392-398.
- Ahmad, S. and M.H. Sial. 2016. Taxes and economic growth: an empirical analysis of Pakistan. *J. Bus. Soc. Sci.* 5, 16-29.
- Ali, A. and M. Audi. 2018. Macroeconomic environment and taxes revenues in Pakistan: An appl. *ARDL appr.* 3, 1-11
- Aslam, A., A. Hakeem and W. Ahmed. 2018. Impact of Inflation Rate, Imports, Exports and Tax on the Economic Growth of Pakistan. *Inter. J. Res. Sci. Innov* 5, 51-56.
- Bahl, R. and M. Cyan. 2009. Local government taxation in Pakistan. *Int. Stu. Pro.* 2, 1-90
- Bofah, K. 2003. The impact of tax on investment and business decisions. [*Int. Res. J. Fin. Eco.* 63, 99-116](#)
- Chaudhry, I.S. and F. Munir. 2010. Determinants of Low Tax Revenue in Pakistan. *Pak. J. Soc. Sci.* 30, 439-452
- Chemingui, M.A. and T. Roe. 2008. Petroleum revenues in Gulf Cooperation Council, countries and their labor market paradox. *J. Policy Mod.* 30, 491-503.
- Fahim, O. and Y. Bourdane. 2019. Tax revenue and economic growth in Morocco: Application of ARDL approach. *Repères et Perspectives Economiques*, 3, 137-154
- Furceri, D. and G. Karras. 2008. Tax changes and economic growth: Empirical evidence for a panel of OECD countries. Manuscript, Uni. Illi. , 1:1-29.
- Gashi, B., G. Asllani and L. Boqolli. 2018. The effect of tax structure in economic growth. *Int. J. Econ. Bus. Admin.* 4, 56-67
- Ghuge, N.R. and V. Katdare. (2016). A comparative study of tax structure of India with respect to other countries. Paper presented at the International Conference on Global Trends in Engineering, Technology and Management (ICGTETM-2016).
- Govt. of Pakistan. 2020. Population of Pakistan. Accessed on, Available online with the updates at [http://www.finance.gov.pk/survey/chapter Population Labour Force and Employment](http://www.finance.gov.pk/survey/chapter%20Population%20Labour%20Force%20and%20Employment).
- Ilyas, M. and M. Siddiqi. 2010. The impact of revenue gap on economic growth: a case study of Pakistan. *Int. J. Econ. Manag. Engin.* 4, 1682-1687.
- Immervoll, H. 2000. The impact of inflation on income tax and social insurance contributions in Europe. *EUROMOD Working Paper Series, Insti. Soc. Eco. Res. (ISER)*, Uni. Essex
- Kalaš, B., V. Mirović and N. Milenković. 2018. The relationship between taxes and economic growth: Evidence from Serbia and Croatia. *European. J. Appl. Econ.* 15, 17-28.
- Kulkarni, U.Y. and D.R. Hinge. 2019. impact of GST on Indian economy: *Int. Multidicp. Rse. J.* 9, 70-71
- Saeed, M. Y., Ramzan, M., & Hamid, K. (2020). Causal and dynamic link between the banking sector and economic growth in Pakistan. *Applied Economics Journal*, 27(1), 102-126.

Sari, D. and Y. Mulyati. 2018. The impact of tax amnesty on tax revenue and tax ratio: Case in Indonesia. *Inter. J. Eng. Tech.* 7, 245-247.

The Express Tribune. 2021. NAT (Number of active taxpayer). Accessed on. Available online with the updates at <https://tribune.com.pk/story/2286964/number-of-active-taxpayers-falls-30>

Worlu, C. N., & Nkoro E. (2012). Tax Revenue and Economic Development in Nigeria: A Macro econometric Approach. *Acad. J. Interdiscip. Stud.* 1, 211. 223

Saeed, Y., M., Ramzan, M., & Hamid, K. (2018). Dynamics of banking performance indicators and economic growth: long-run financial development Nexus in Pakistan. *European Online Journal of Natural and Social Sciences: Proceedings*, 7(3 (s)), pp-141.

Zaidi. S. A. 2015. **Issues in Pakistan's Economy**, 3rd Ed. Oxford University press, Karachi.



Analysis of Rural Women's Participation in Income Generating Activities in District Mardan

***Naila Awan**, Ph.D., Scholar, the Agriculture University Peshawar, Pakistan

Shahrukh Inam, Scholar of MSc (Hons), The Agriculture University Peshawar, Pakistan

Afeera Saeed, M.Phil. Scholar, the University of Agriculture Peshawar, Pakistan

*Corresponding author's email: nailaaawan@aup.edu.pk

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ABSTRACT

Purpose: The contemporary research was intended to survey the countryside women's participation in monetary creating activities and had explored socio-economic obstacles faced by them while carrying out their home activities.

Methodology: Survey was carried out in two purposively selected villages in the Mardan district of Khyber Pakhtunkhwa province. by Usage of a simple random technique, targeting a total of 112 women respondents' primary data were collected with the help of a semi-structured interview schedule and analyzed with the help of descriptive statistics techniques.

Findings: The study found that the literacy rate was low among the sampled respondents therefore livestock rearing and embroidery work was the most common income-generating activities among the respondents. There were no formal and recognized training centers or any other guidance providers for the women in the study area. Moreover, the lack of marketing facilities had restrained the respondents to sell out their products at cheaper prices, therefore, sampled respondents faced problem/s in performing income-generating activities in the study area.

Implications: credit and marketing facilities can also be promoted for the sustainable business advancement of the rural women so they can sell their products at reasonable prices to improve their socio-economic conditions.



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Introduction

Housewives are dependably financially and socially reliant on men. Notwithstanding, profound social and economic changes happened amid the industrial revolution, prompting new norms and values and avoiding old customary examples that used to constrain women inside the homes and their activities just to the family so it is important to empower women to have their feelings about

their families, homes and, consequently, to settle on their own decision. Therefore, women's business is the key mechanism to help them to get their particular ideal to take part to settle decisions for their families (Bagheri et al., 2008).

Women's independence in making decisions and income-generating activities is correlated with variables like their ages, number of living children, education, and employment. In rural areas women have no educational background, therefore, they are incapable of fulfilling their economic and financial needs which impact their participation in making decisions in the household. Women who seek a high level of education as compared to women with less education involved are positively in the decision-making process about their health care, family planning, schooling system, and so on. (M. M. Ahmmed& N. Chakraborty 2012).

Women play a key role in creating a better economic situation for their family members. Women carry out different tasks in their families. In the traditional joint family, the eldest male members concentrated in the position of decision-making powers. It is extremely important in the viewpoint of empowerment of women that they must have the power to make decisions because it is frequently seen that always a male member of the family is dominating especially in the village side area. They play a key role in the socio-economic welfare of the household and they are an essential part of a household. Females involved in household activities, as well as agriculture households, assist the farmers in the fields. They also participate in all agrarian activities like crop production, resource distribution, processing, and storage. (Rao, 1982)

Brief Statement of the Problem

As we know that females play a key role in the development and growth of future generations. But the problems were lack of education, age, and socioeconomic structure. Women have an exceptional position in every social aspect and no overall population can progress without women. Women's interest in each field of life is imperative. However, Pakistani society is moderate to some degree. Similarly, just like any underdeveloped country, Pakistan has additionally a male dominating society, and women's involvement in the decision-making process is low. (Sairazafar, Zahirabatool, 2005).

Justification of the Study

Now a day women play an extraordinary part in the enhancement of a country but in Pakistan, the contribution of women in various sectors is very low. Pakistan has likewise a male-commanded society and the female role in decision-making is less than the developed countries. Because of this reason Pakistan is still considered an underdeveloped country.

Major Objectives

- To analyze women's participation in income-generating activities in the Mardan district.
- Suggestions and recommendations to enhance women's participation in income-generating activities.

Review of Literature

Kavithaa et al. (2016) explored the part of farm women in the decision-making process in dairy farming activities. A total of sixty farm families who were effectively associated with dairy farming practices were chosen for the investigation with the assistance of neighborhood pioneers and Veterinary Assistant Surgeons. The information was gathered through a primary interview strategy and subjected to measurable investigation. The measurable device like frequency and percentage were utilized for analyzing the gathered information. The discoveries of the study revealed that rural farm women were dominated in decisions making process in non-financial activities like construction of sheds, treatment of animals, vaccination and deworming, management of newborn calves, sick and pregnant animals, milking and processing of milk,

utilization of dung. Also, it is apparent from the study that rural farm women were less dominated in decision-making activities regarding economic aspects, so there is have to make them mindful of budgetary direction, credits, protection of animals, and promoting structure.

Escradibul et al (2016) analyzed whether interest in the education of the two ladies and men serves to engage spouses bringing about more adjusted family unit choices being gone up against issues identified with utilization and financial management. They consider that family unit decision-making can be made by for the most part the spouse, fundamentally the husband or the couple acting mutually. We at that point apply multinomial probity models to the Spanish Living Conditions Survey of 2010. Results show that, when controlling for family characteristics, the level of education of both the husband and wife has a positive effect in terms of a more egalitarian decision-making process on three areas of expenditure: daily shopping, expensive purchases of consumer durables, and significant expenditure on children. However, only women's education has a positive effect on borrowing money and no effect of education is observed on the use of savings.

Hypotheses

The study tested the following hypothesis;

H0: There is no effect on women's participation in income-generating activities in the study area.

H1: There is an effect of women's participation in income-generating activities in the study area.

Research Methodology

Universe of the study

The study is conducted in the Mardan District of Khyber Pakhtunkhwa province, Pakistan. Geologically, Mardan is the second most populous (heavily populated) city in the province, situated at 34°12'0N 72°1'60E and an altitude of 283 meters (928 ft) in the southwest Mardan Mardan is considered the rural area of K.P. It has one of the world's best irrigation systems, Bakhshali is a town and union committee in Mardan District of Khyber-Pakhtunkhwa in Pakistan. It is situated at 34°17'0N 72°9'0E and has an elevation of 307 meters (1010 feet).

Sampling and Sample Size

The research study took place in union council Sawaldhair. Due to financial and time constraints only two villages Ghazi Baba and Sreekh were selected purposively. Because women's participation in income-generating activities was assumed to be less as compared to males A random sampling technique is used for sample selection and Yamane (1967)'s formula is used for taking sample size.

$$S = N/1 + N(e^2)$$

Where,

- S = sample size
- N = total number of beneficiaries
- e = Precision which is set at 5 percent (0.05)

Assuming $e = 0.05$ (5 percent) and using $N = 160$, the given formula suggests a pattern of 112 respondents. After deciding on the sample size, the accompanying relative distribution inspecting formula is utilized to decide women's participation in income-generating activities.

$$n_i = \frac{n}{N} S$$

Where,

- $i (1,2) =$ ith area
- $S =$ Required sample size
- $N =$ Total amount of women's participation in income-generating activities
- $n_i =$ respondents selected from ith area

Rural Women's Participation in Income Generating Activities

District	Selected Area	No. of respondent	Sample size
Mardan	Sreekh	62	43
	Ghazi baba	98	69
Total		160	112

Source: Sawaldhair Union Council (2016-17)

Data Collection

A comprehensive structured interview schedule/questionnaire was planned to achieve the objectives of the research question and for this purpose, data were collected from the selected study area. All respondent was interviewed by arranging one-to-one correspondence.

Data Analysis

After the collection of required data from the selected respondents, the data was punched into SPSS-22 software. The Chi-square test is applied to the association of different factors with women's participation in different activities of day-to-day life.

$$\chi^2 = \sum \frac{(O_i - E_i)^2}{E_i}$$

Results and Discussion

Sampled Respondents Involved in Income Generating Activities.

In the study area, respondents were actively involved in income-generating activities. Reasons for involvement in various income-generating activities were poverty, large family size,

Table 4.1 Distribution of Sample Respondents according to their Age

Village	Age of Sample Respondents								Total	
	Below20		21-30		31-40		Above 40		No.	%
	No	%	No	%	No	%	No	%		
Sreekh	9	8	11	10	16	14	7	6	43	38
Ghazi baba	4	3	18	17	37	33	10	9	69	62
Total	13	11	29	27	53	47	17	15	112	100

Source: Field Survey 2017

According to table 4. in village sreekh 8% of respondent lies in below 20 categories and 10%, 14%, 6% lies in 21-30, 31-40, and above 40 accordingly. Similarly, in village ghazi baba 3% of respondents lie in the category below 20, 17% lie in 21-30, 33% in 31-40, and 9% lie in above 40 respectively.

Table 4.2 Association between Marital Status of Sampled Respondents and their Monthly Income Generating Activities in the Study Area

Marital status	Monthly income from income-generating activities						Total	Chi-square Value & P-value
	Below 500	R.s 1001-2000	R.s 2001-3000	R.s 3001-4000	Above 4000	R.s		
Single	1	8	9	1	2		21	25.561 & 0.012
Married	0	16	26	16	18		76	
Divorced	0	0	1	2	1		4	
Widow	1	0	3	7	1		11	
Total	1	24	39	26	22		112	

Source: Field Survey 2017

Table 4.2 reveals an association between the marital status of sampled respondents and their

monthly income in the study area. According to the table in the set of single respondents, the number of respondents in the income category of R.s 1-1000 is 1, in the second category of income R.s 1001-2000 the number of respondents is 8, and in the third category of income R.s 2001-3000 the number of respondents is 9, in the fourth category of income R.s 3001-4000 the number of respondents is 2 while in fifth category of income Above R.s 4000 the number of respondents is 2. Similarly, in the set of married respondents, the number of respondents in the income category of R.s 1-1000 is 0, in the second category of income R.s 1001-2000 the number of respondents is 16, and in the third category of income R.s 2001-3000 the number of respondents is 26, in the fourth category of income R.s 3001-4000, the number of respondents is 16 while in fifth category of income Above R.s 4000 the number of respondents is 18. Same as single and married respondents in the set of divorced respondents in income category of R.s 1-1000 the number of respondents are 0, in the second category of income R.s 1001-2000, the number of respondents is 0, in the third category of income R.s 2001-3000 the number of respondents is 1, in the fourth category of income the number of respondents is 2 while in fifth category of income the number of respondents is 1 respectively. In the same way in a set of windows in the category of income 1-1000, the number of respondents is 1, in the second category of income R.s 1001-2000, the number of respondents is 3, and in the second category of income R.s 2001-3000, the number of respondents is 3, in the fourth category of income the number of respondents is 7 while in fifth category of income above R.s 4000 the number of respondents is 1. The Chi-square value is 25.561 and the p-value is 0.012. So the result shows a great association between the marital status of sampled respondents and their monthly income from income-generating activities and the association is highly significant.

Table 4.3 Association between Educational Level of Sampled Respondents and their Monthly Income Generating Activities in the Study Area

Educational level	Monthly income from income-generating activities					Total	Chi-square Value & P-value
	Below R.s500	R.s1001-2000	R.s2001-3000	R.s3001-4000	Above R.s4000		
Primary	1	9	9	0	2	21	31.043 & 0.000
Secondary	0	0	11	3	3	17	
Higher Secondary	0	0	0	3	0	3	
Total	1	9	20	6	5	41	

Source: Field Survey 2017

Table 4.3 reveals an association between the educational level of sampled respondents and their monthly income in the study area. According to the table in the educational level of primary, the number of respondents in income category R.s 1-1000 are 1, in the second category of income R.s 1001-2000, the number of respondents is 9, in the third category of income R.s 2001-3000 the number of respondents is 9, in the fourth category of income R.s 3001-4000 the number of respondents is 0 while in fifth category of income Above R.s 4000 the number of respondents is 2 respectively. Similarly, at the secondary level, the number of respondents in the income category of R.s 1-1000 is 0, in the second category of income R.s 1001-2000 the number of respondents is 0, and in the third category of income R.s 2001-3000, the number of respondents is 11, in the fourth category of income R.s 3001-4000 the number of respondents is 3 while in fifth category of income Above R.s 4000 the number of respondents is 3 accordingly. Same as a primary and secondary level of education in higher education the number of respondents in the income category of R.s 1-1000 is 0, in the second category of income R.s 1001-2000 the number of respondents is 0, in the third category of income R.s 2001-3000 the number of respondents is 0,

in the fourth category of income R.s 3001-4000 the number of respondents is 3 while in fifth category of income Above R.s 4000 the number of respondents is 0 respectively. The Chi-square value is 31.043 and the p-value is 0.000. So, the result shows a highly significant association between the educational level of sampled respondents and their monthly income in the study area.

Table 4.4 Association between Type of Family of Sampled Respondents and their Monthly Income Generating Activities in the Study Area

Type of family	Monthly income from income-generating activities					Total	Chi-square Value & P-value
	Below R.s 500	R.s1000-2000	R.s2000-3000	R.s 3000-4000	Above R.s 4000		
Nuclear	1	22	14	2	5	44	48.713 & 0.000
Joint	0	2	17	20	13	52	
Extended	0	0	8	4	4	16	
Total	1	24	39	26	22	112	

Table 4.4 implies an association between the type of family of sampled respondents and their monthly income in the study area. According to the table nuclear family, the number of respondents in income category R.s 1-1000 is 1, in the second category of income R.s 1001-2000, the number of respondents is 22, in the third category of income R.s 2001-3000 the number of respondents is 14, in the fourth category of income R.s 3001-4000 the number of respondents is 2 while in fifth category of income Above R.s 4000 the number of respondents is 5 respectively. Similarly, in a joint family system, the number of respondents in the income category of R.s 1-1000 is 0, in the second category of income R.s 1001-2000 the number of respondents is 2, and in the third category of income R.s 2001-3000, the number of respondents is 17, in the fourth category of income R.s 3001-4000 the number of respondents is 20 while in fifth category of income Above R.s 4000 the number of respondents is 13 accordingly. Same nuclear and joint family, in the extended family system the number of respondents in the income category of R.s 1-1000 are 0, in the second category of income R.s 1001-2000, the number of respondents is 0, in the third category of income R.s 2001-3000 the number of respondents is 8, in the fourth category of income R.s 3001-4000 the number of respondents is 4 while in fifth category of income Above R.s 4000 the number of respondents is 4 respectively. The Chi-square value is 48.713 and the p-value is 0.000. So the result shows a positive and significant relationship between the family type of sampled respondents and their monthly income in the selected study area.

Table 4.5 Association between Number of Dependent Persons on Sampled Respondents and their Monthly Income Generating Activities in the Study Area

Number of dependent persons	Monthly income from income-generating activities					Total	Chi-square Value & P-value
	Below R.s500	R.s 1000-2000	R.s 2000-3000	R.s 3000-4000	Above R.s 4000		
1-5	0	13	15	6	7	41	37.870 & 0.000
6-10	0	11	14	13	9	47	
Above 10	1	0	10	7	6	24	
Total	1	24	39	26	22	112	

Table 4.24 reveals an association between the number of dependent persons on sampled respondents and their monthly income in the study area. According to the table in dependent persons from 1-5, the number of respondents in income category R.s 1-1000 is 0, in the second category of income R.s 1001-2000, the number of respondents is 13, in the third category of income R.s 2001-3000 the number of respondents is 15, in the fourth category of income R.s 3001-4000 the number of respondents is 6 while in fifth category of income Above R.s 4000 the

number of respondents is 7 respectively. Similarly, in 6-10, the number of respondents in the income category of R.s 1-1000 is 0, in the second category of income R.s 1001-2000 the number of respondents is 11, in the third category of income R.s 2001-3000 the number of respondents is 14, in the fourth category of income R.s 3001-4000 the number of respondents is 13 while in fifth category of income Above R.s 4000 the number of respondents is 9 accordingly. Similarly in the above 10, the number of dependent persons on respondents in the income category of R.s 1-1000 is 1, in the second category of income R.s 1001-2000, the number of respondents is 0, in the third category of income R.s 2001-3000 the number of respondents is 10, in the fourth category of income R.s 3001-4000 the number of respondents is 7 while in fifth category of income Above R.s 4000 the number of respondents is 6 respectively. The Chi-square value is 37.870 and the p-value is 0.000. the resultant positive and significant association between the number of dependent persons on sampled respondents and their monthly income in the study area.

Table 4.6 Sampled Respondents Involved in Income Generating Activities in the Study Area

Village	Name of IGA`s activity/s						Total	
	Livestock		Embroidery		Livestock & Embroidery		No	%
	No	%	No	%	No	%		
Sreekh	15	13	18	16	10	9	43	38
Ghazi baba	20	18	23	21	26	23	69	62
Total	35	31	41	37	36	32	112	100

Source: Field Survey 2017

According to the table, 4.7 respondents were actively involved in income-generating activities, which also reveals that the majority of respondents were involved in more than one activity at a time. As from table 4.7 in village sreekh 13% of the total respondents were involved in livestock, 16% were involved in embroidery and similarly, 9% were engaged in livestock and embroidery as mentioned in the table. Similarly, in village ghazi baba 18% were involved in livestock, 21% were involved in embroidery and 23% of the total respondents were involved in livestock and embroidery respectively. Reasons for the involvement of women in various IGA`s were poverty, large family size, to fulfill the requirements and basic needs of life.

Income Generation Role in Decision Making

Decision-making is a critical element in the status of family members since it involves the respondents in income-generating activities. To assess the importance of income-generating activities for respondents' decision-making process, the respondents were asked to reveal who in their family holds the dominant position in making a decision regarding expenditure at the grocery, purchase of seeds, fertilizers, slecting the crop, harvesting of crops/fruits, hiring labor, weeding and threshing of crops. Respondents in the study area show the attention that income-generating activities are important for decision making. So, the table 4.19 indicates the distribution of sample respondents by IGA`s is important for respondent decision-making in the study area:

Table 4.7 Distribution of Sample Respondents by IGA`s Are Important for Respondent Decision Making in the Study Area

Village	IGA`s are Important for women decision making				Total	
	Yes	%	No	%	No	%
Sreekh	41	37	2	2	43	39
Ghazi baba	62	55	7	6	69	61
Total	103	92	9	8	112	100

Source: Field Survey 2017

According to table 4.19 in village serekh, 41% of the total respondents state that income-generating activities are important for women's participation in the decision-making, while 2% of the respondents did not agree that income-generating activities are important for women's participation in decision-making respectively. Similarly, in village ghazi baba 55% of the respondents indicates that income-generating activities are important for women's decisions making while 6% stated that there is no importance of income-generating activities for decision making. So from the result, it was found that income-generating activities have enhanced the decision-making power of the respondents.

Table 4.8 Association between Per Month Saving of Sampled Respondents and their Monthly Income Generating Activities in the Study Area

Per month saving	Monthly income from income-generating activities					Total	Chi-square Value & P-value
	Below R.s500	R.s1001-2000	R.s 2001-3000	R.s 3001-4000	Above R.s4000		
R.s 1- 1000	1	16	3	2	0	22	73.824 & 0.000
R.s 1001-2000	0	8	22	7	5	42	
R.s 2001-3000	0	0	8	14	4	26	
Above R.s 3000	0	0	1	5	7	13	
Total	1	24	34	28	16	103	

Table 4.8 shows an association between per month savings of sampled respondents and their monthly income in the study area. According to the table per month saving R.s 1-1000 in income category R.s 1-1000 the number of respondents is 1, in the second category of income R.s 1001-2000 the number of respondents is 16, in the third category of income R.s 2001-3000 the number of respondents is 3, in the fourth category of income R.s 3001-4000 the number of respondents is 2 while in fifth category of income Above R.s 4000 the number of respondents is 0 respectively. Similarly, in R.s 1001-2000 the number of respondents in the income category of R.s 1-1000 is 0, in the second category of income R.s 1001-2000 the number of respondents is 8, and in the third category of income R.s 2001-3000, the number of respondents is 22, in the fourth category of income R.s 3001-4000 the number of respondents is 7 while in fifth category of income Above R.s 4000 the number of respondents is 5 accordingly. Similarly, in R.s 2001-3000 the number of respondents in the income category of R.s 1-1000 is 0, in the second category of income R.s 1001-2000, the number of respondents is 0, in the third category of income R.s 2001-3000 the number of respondents is 8, in the fourth category of income R.s 3001-4000 the number of respondents is 14 while in fifth category of income Above R.s 4000 the number of respondents is 4 respectively. Similarly, in Above R.s 3000 the number of respondents in the income category of R.s 1-1000 is 0, in the second category of income R.s 1001-2000, the number of respondents is 0, in the third category of income R.s 2001-3000 the number of respondents is 1, in the fourth category of income R.s 3001-4000 the number of respondents is 5 while in fifth category of income Above R.s 4000 the number of respondents is 7 accordingly. The Chi-square value is 73.824 and the p-value is 0. 000. consequently, the linkage between per month savings of sampled respondents and their monthly income in the study area is highly significant

Participation of women in Economic Matters of Household in the Study Area

Village	Participation in social and economic matters of household				Total	
	Yes	%	No	%	No	%
Sreekh	10	9	33	29	43	38

Ghazi baba	28	25	41	37	69	62
Total	38	34	74	66	112	100

Source: Field Survey 2017

According to table 4.17 in village serekh, it was found that 9% of the total participated in social and economic matters of the household while 29% did not participate in any matters of household respectively. Similarly, in village ghazi baba 25% of the total respondents participate in social and economic activities of the household while the majority 41% of the respondents did not participate in any activities respectively.

Conclusion

The present study was executed in two villages, Sreekh and Ghazi baba situated at approximately the same distance from Mardan. A total of 112 respondents were interviewed. In the survey, it was found that the majority of the respondents in village Sreekh and Ghazi baba were actively involved in income-generating activities. Among these main income-generating activities were livestock and embroidery. 43 and 69 respondents were selected from both villages respectively to estimate the women population involved in income-generating activities. Nearly all of the respondents were involved in more than one income-generating activity. Almost all the respondents were involved in livestock and embroidery. In both villages, about 31% of respondents reported their participation in livestock, 37% involved in embroidery, and 32% were involved in both activities that are livestock and embroidery. The majority of the respondents were engaged in household chores as well as help in increasing income sources at the same time. It was also found that these activities were performed by respondents inside their homes. It was also found that respondents in village Sreekh and Ghazi baba had their savings due to earning income from different income-generating activities. The data collected also show that all the respondents were in favor of women earning their income. All of them had admitted the effect of participation in income-generating activities on their living standard and increased decision-making power.

Recommendations

Based on the findings and conclusions of the study, the following recommendations are made.

1. The income and savings tended to be less in the study area than their consumption. But, with proper guidance and direction given to them about investment and saving, they will be capable of raising their living standard too.
2. Training centers should be set up, which can train respondents in various income-generating activities e.g., embroidery, tailoring, kitchen gardening, etc. There is also a need for respondents to acquire new skills and information. So, efforts should be directed towards the enhancement of existing skills or to introduce of new skills, so that respondents can exploit their full potential and could get fair rewards for their efforts.
3. Last but not least, promoting income-generating activities is not only sufficient to produce, but the decision-making power factor also plays a vital role in the enhancement of the monetary value of a household.

References

- Albert, C., & Escardíbul, J. O. (2016). Education and the empowerment of women in household decision-making in S pain. *International Journal of consumer studies*, 41(2), 158-166.
- Ahmmed, M. M., & Chakraborty, N. (2012). Women's status and early childhood mortality in Bangladesh. *Retrieved on August, 4*.
- Bagheri, M., Moltafet, H., & Sharifian, H. (2008). Evaluating the effects of women's employment on the pyramid of power in the family. *Journal of Family Research*, 5(18), 247-252.
- Kavithaa, N. V., & Rajkumar, N. V. (2016). Dicision-making behaviour of farm women in dairy

- farming activities in erode district of tamilnadu. *Management*, 22(36.66), 38.
- Rao, V. P., & Rao, V. N. (1982). *Marriage, the family, and women in India*. New Delhi: Heritage..
- Zafar, S., Batool, Z., & Bano, S. (2005). Female participation in decision-making process in family matters in district Faisalabad, Pakistan. *Journal of Agriculture and Social Sciences (Pakistan)*.



Governing the Corporation: Regulations in the Era of Scandals and Globalization

Naheeda Ali, Assistant Professor, Department of Law, The University of the Punjab, Gujranwala Campus, Gujranwala, Pakistan

***Kanwal Iqbal Khan**, Assistant Professor, Institute of Business & Management, University of Engineering and Technology Lahore, Pakistan

*Corresponding author's email: kanwal.khan@uet.edu.pk

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ABSTRACT

Purpose: This study evaluates the effects of the global financial crisis rooted in ethical deterioration. However, the worldwide regulatory reform agenda has largely overlooked this factor and focused on the technical needs. Also, look at the relative influence of various players within the corporate governance and regulatory equation to determine the shape that enforcement takes.

Design/Methodology/Approach: The qualitative method is used in this study by analyzing statutes, local and international protocols, conventions, and treaties.

Findings: In this work, the magnitude of the global financial disaster has shown how erroneous market ordering optimism. The tangible and conceptual certainty linked with finance capitalism's primacy has vanished. This has created a debate regarding the privileged and the general public. The critical question is how to respond. Rules are too readily transacted around, and principles lack the granularity to be enforceable to address ethical flaws.

Implications/Originality/Value: We must pay considerably greater attention to the moral dimension of market activity or how people live their lives professionally. It is a chore we should avoid at all costs.



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Introduction

The implosion of the securitization markets exposes the fallacy of the rules vs principles dichotomy as the main distinguishing feature in regulatory architecture (Ali and Khan, 2022). Neither supervisory regime taught the ethical restraint needed for market integrity. Business, legal, and political forces point to a single empirical clash. This issue is based on the possible

contradiction between private and public law securities regulation. In the past, professional and unskilled investors masked this underlying problem (Pargendler, 2020). While efficiency and effectiveness are measured internally within a strategic action field, legitimacy requires more considerable outward support of exclusive bargaining arrangements. The global financial crisis exposed false market optimism. It is turn-of-the-century. Finance capitalism's tangible and intellectual certainties have evaporated. This has established a forum for elite, privileged, and public debate. Good news! How to react is crucial. Too often, rules are easily circumvented, and principles lack the precision to be enforceable. To overcome ethical problems, we must pay more attention to the moral dimension of market activity or professional life. It is a chore we should avoid (Gadinis & Miazad, 2020).

A well-managed business sector is crucial for economic progress, social and political cohesion, and foreign finance. After a global company scandal, governance and regulatory changes can provide proven, substantial financial gains while restoring market and public confidence. Poor structural changes might increase costs and legitimize conflicts of interest. Behind the illusion of change, control systems may be hollow. This can lead to poor resource allocation in the fight against corporate malfeasance and misfeasance (BergerWalliser & Scott, 2018). Regulators, lawmakers, and academics must ease public apprehension while preventing market panic. The increased securitization of the global economy has made managing this process more difficult. The primary corporate and public policy concern is whether an emerging global financial architecture would result in normatively more muscular governance structures or promote the global export of pathological gaming that characterized US capital markets. Changing US regulatory practice makes worldwide regulatory reform inevitable.

Washington's regulatory strategy leverages the country's geopolitical dominance and deep and liquid capital markets. This improves institutional players' potential to influence the development of internationally applicable standards by participating with the SEC and other regulatory organizations like the PCAOB. US listing requirements serve as a benchmark for global capital markets, affecting international capital flows and national regulatory architecture (Guttermann, 2019). Any policy innovation impacting financial regulation promotes business transparency and market accountability. It asserted that "the underlying truth of the 21st century is a corporate system founded on uncontrolled self-enrichment." The demimonde's hiring of Galbraith may signify old age's contrariness or a more profound comprehension of the problem. Many contributors in this book agree with Galbraith's bleak appraisal of current reality, but they challenge it with genuine methodologies for critically assessing and deconstructing issues that influence public policy (Gadinis & Miazad, 2020).

George Gilligan's research of how regulatory systems attain widespread appeal illustrates this phenomenon. He thinks teamwork can boost norms. He feels a greater understanding of the social and political construction of what is acceptable is needed. Gilligan calls legitimacy 'elastic' and ideological. The state's and institutions' limited power to modify the prism defines its focus. Multilateral framework It also helps us to analyze "how gatekeepers form, function, and adapt their strategies and structures" (BergerWalliser & Scott, 2018). Enron and WorldCom's downfall proves this strategy works. After a catastrophic loss of trust at a pivotal juncture in the election cycle, something had to be done or shown to be done. The speed with which domestic events spurred political, legislative, and judicial responses had global implications. Codification clarifies that corporate governance reform has been successful (Guttermann, 2019). Given the urgency, it is remarkable how few academic studies of corporate governance and financial regulation discuss normative democratic philosophy. Power's influence on public policy formulation and re-calibration is often ignored as a procedural matter. This blindness is no longer viable because of a catastrophe. It prevents unaccountable and unmanageable authority in corporate form (Van Driel, 2018).

Systemic Corporate Governance & Regulation Concerns in Global Markets

This study investigates why global markets' fundamental and systemic corporate governance and regulation concerns remain unsolvable. As a result, they theoretically compound the practical problems expressed by the SEC chairman. Lisa Whitehouse's central point is that "academics and politicians alike appear to have lost sight of or failed to accept the basic danger to democracy presented by corporate power." The ability of a business functioning as a private entity to disrupt democratic standards occurs in various ways, many of which are typically unaccountable. These vary from the distorting of the deliberative process produced by excessive political fundraising to the disregard for legal standards generated by calculating the rewards of recidivism, as criminologist Laureen Snider points out here (Jacoby, 2020).

Triangulated Tension Between Business, Government Rhetorical Mission & Corporate Contempt

The worldwide crisis results from a triangulated tension between business and government rhetorical mission claim, corporate contempt for these goals, and legislation or regulatory tool limitations to change behaviour. Despite the ideational certainty of enfranchised self-regulation of financial markets through 'associational governance,' its continuous failure poses a severe legitimacy challenge. Giving power to organizations whose primary goal is to define, organize, secure, and advance the goals of its most outspoken and prominent members without the help of outside policing produces an unsolvable conflict of interest. Rather than providing normative advances in policymaking, Streeck and Schmitter's proposed paradigm increases the possibility of state capture through inertia rather than regulatory empire building (Rezaee, 2019).

Scandals Caused by; Professional Associations, Accountants, Attorneys & Business Directors

The scandals in states were caused mainly by this dynamic. Professional associations - accountants, attorneys, and business directors – operating as political groups emphasized the societal advantages of further liberalizing the market system's machinations without considering the need to strengthen the regulatory architecture. After discussions, technical conformity with regulatory instruments was agreed upon, but a total deviation in spirit swamped the system. The ensuing tension was unsupportable, allowing structural implosion to occur; as Dobel's pointed out, usage of the "perfect storm" simile was disastrous. Business executives frequently use this weather metaphor to avoid clear causal accountability. The refusal of corporate leaders to accept direct responsibility for how their emasculation of supervision led to the crisis, according to Dobel, ensures that regulatory gaming remains unsolved. The state's fundamentally subordinate posture resulting from market self-governance is not limited to the Atlantic's eastern shore. According to some critics, this is a distinguishing feature of globalization. States and state institutions rapidly become transnational neoliberalism agents (Berger-Walliser & Scott, 2018). States and state actors may pursue allegedly different agendas and employ various techniques, but these are not so much competing national models as diverse paths to neoliberal globalization. McCann's research of corporate governance reform in the United Kingdom and Germany reveals how this dynamic operates across two European Union countries. 'Economic change produces the desire for reform, and politics is concerned with its accommodation.' Regulation politics tends to be a politics of symbols, with comfort replacing actual and decisive behavior adjustment. The changes only tangentially address the core causes of the crisis: gatekeeper failure, excessive CEO remuneration, and the regulatory architecture's incapacity to sustain the far more complex financial system built with securitization's mortar. These flaws are partly masked by a proclivity to focus on form over content, a reaction intimately tied to select preferences for the overall administration of the market system (Jacoby, 2020).

Cost-Benefit Calculus Based on the Rationality of Substantive Recidivism

I am applying a cost-benefit assessment based on substantive recidivism caused by worldwide

market control failure. If corruption thrives when motive and opportunity outweigh the probability of getting discovered, the worldwide market control failure was due to a cost-benefit analysis based on substantive recidivism. This approach reveals critical design faults in the two main regulatory techniques used to address the growing debate (Katelouzou & Zumbansen, 2020).

The First Method, Legislative and Regulatory Codification

It is primarily US-based and promotes more legislative and regulatory codification. The passage of Sarbanes-Oxley marked a turning point. It combines four goals. It adds new procedures to regulate the audit process and profession, protects whistleblowers better, enhances board obligations and criminal responsibility, and improves the SEC's market-policing jurisdiction. Sarbanes-Oxley restricts corporations' access to US capital markets. All enterprises, regardless of domicile, must follow the Act's stricter requirements to access major market liquidity (West, 2001). Under a more assertive SEC, they must also follow more exacting exchange listing rules. The fact that the US system was overrun while having one of the most codified securities markets internationally shows the transactional approach's shortcomings. Prohibition may backfire. Statutory compliance reorganizes the board's acceptable areas. It fails to shift ethical imperatives within firms or, more importantly, within professions which have an emasculated view of fiduciary commitment, as McBarnet and Dobel note (Jacoby, 2020).

State Reluctance to Hold Capital Accountable

State unwillingness to hold capital accountable in the past has spawned a succession of regulatory cycles, beginning with a high-profile occurrence — a bridge collapse or ferry tragedy, a series of scams, or significant company bankruptcies, as Laureen Snider notes in her research of recidivism. High-profile speeches and draught legislation usually follow the event. Changes lead to new laws. They are often weaker than promised and sometimes unenforceable. Skilful media manipulation can assist judicial and regulatory activism gain popularity by providing the public with the image of decisive action while maintaining the defects that produced the initial crises intact (Utz, 2019).

No One is Beyond Law's Equal Application

The humiliation of once-heralded executives now paraded in handcuffs is a public example of the enforcement myth that no one is beyond the law's equal application. More tough difficulties emerge when you get behind the surface-level study of the media. The executives are mainly being prosecuted on the more straightforward and more accessible to prosecute accusations of lying to or obstructing government investigators. The struggles of Frank Quattrone, a former chief technology banker at Credit Suisse First Boston, and Martha Stewart, the CEO of her own company, are instructive in this regard. While the Quattrone cases (the first of which resulted in a mistrial) exposed widespread corruption in granting lucrative initial public offers (IPOs), this fundamental problem was not included in the indictment and, therefore, faded from public awareness (Rezaee, 2019).

Stewart's time as a director of the New York Stock Exchange and CEO of Living Omnimedia came to an abrupt end when he made a personal stock transaction in a friend's pharmaceutical firm the day before the FDA declined to license one of the company's essential products. Despite an early focus in the media on suspicions of insider trading, this lapse was not included in the indictment. Stewart used the media to his advantage by appealing the guilty judgment but reporting to prison. From a business standpoint, it was a wise decision. It gave her emotional closure and prevented her company from withering due to the uncertainty of a criminal founder's interim freedom. Her behavior changed after she was reported to jail. Stewart was released from jail in March 2005, tapping into the American Zeitgeist of personal regeneration and redemption through acceptance of guilt and punishment. Unlike other prisoners, Stewart was freed late at

night and driven to a waiting executive aircraft by a convoy. According to a note on her website, the event was life-changing and life-affirming. I hope to have the opportunity to share more about all that has happened, the incredible people I have met here, and everything I have learned. I can tell you today that I consider myself extremely lucky to have been raised by a loving family, received an excellent education, and had the chance to chase the American dream. You can be sure that the friends I have made here, all they have done to support me over the last five months, their children, and the tales they have told me will be with me forever.

It used a refashioned journalistic narrative to portray the demigod of home design as a model of restored virtue (Carminati, 2018). The example of Stewart is far from isolated. Following the New York Attorney General's probe of widespread conflicts of interest in 2002, Henry Blodget, an internet analyst who was disqualified from the securities business for life due to his manipulation of research reports, resurfaced as a media pundit during the Stewart trial. Despite presiding over a firm that was and continues to be involved in controversy over its participation in the financial scandals, Sanford Weill, the CEO of Citigroup, was selected to serve on the New York Stock Exchange board in 2003, only after concerns from a state regulator did he withdraw from consideration (Aksoy & Aksoy, 2020).

Malfeasance and Misfeasance Bear the Risk of Blowback

The mixture of malfeasance and misfeasance bears the risk of blowback, as prosecutors in New York discovered to their dismay in the defenestration of Dennis Kozlowski, former CEO of Tyco. The jury failed to decide after a six-month trial in 2004, and the judge declared a mistrial. Corporately sanctioned but ethically dubious ostentation may be a popular rhetorical tool, but it has little chance of breaking through the protective barrier of creative conformity in a courtroom. The New York District Attorney re-evaluated Kozlowski's case, removing the details of his extravagant spending sprees from the indictment, if not the public record. The second jury, which convicted Kozlowski and his chief financial officer in June 2005, rejected Kozlowski's claim that this was a politically driven case and that the board supported his activities (Jacoby, 2020). The former WorldCom CEO accused of executing the greatest accounting scam in history, Bernie Ebbers, said he was the victim of unscrupulous subordinates. The prosecution mocked this defense in closing statements to the jury, saying, "You have been fed the 'aw shucks, I am not sophisticated' defense." It insults your brain that Ebbers could have created this firm from the ground up in ten years and still have no idea how profitable it is.' The jury agreed, finding him guilty on all counts—a similar situation. Ken Lay, the former chairman of Enron, is expected to use a similar defense when he goes on trial in Texas. The federal and state courthouses in Manhattan and Houston are the best places to go for epicures of crime, greed, and arrogance in 2006. However, the ensemble selected for the reality version of a renewed morality play has a glaring void. Like Banquo's ghost, the system is absent from the proceedings (Berger-Walliser & Scott, 2018).

As Doreen McBarnet wisely observes, the fundamental lessons of Enron must be internalized. She claims that while the company may have been stingy with the truth, "it is conceivable that much of Enron's off-balance-sheet operations did not violate the regulations." This is not meant to be a defense of Enron. Instead, it is only to fine-tune the prices.' McBarnet's insight offers a much-needed counterbalance to the frenzy surrounding the corporation's actions as a singularly destructive entity. It shifts the focus of critical inquiry to the level of accountability that systemic player should bear: complicit investment bankers and corporate attorneys eager to offer 'legal' letters of assurance. Corporations are not required to reveal how many legal or investment firms they combed before obtaining the required letter. 'If change is to occur, we must address the law and the attitude toward law taken by those subjects and the wider culture that encourages it,' McBarnet says. She proposes that an ethical component in strategic decision-making must be institutionalized to change that attitude (Katelouzou & Zumbansen, 2020).

Second Method of Corporate Governance Reform

This topic enthralled the supporters of the second method of corporate governance reform. It is based on articulating broad rules of best practice, but it gives organizations much leeway in implementing the principles in different situations. These ideas, on the other hand, have changed with time. Indeed, the UK's corporate governance reform history, which has long been seen as a "thought-leader" in industry-driven change (Solomon and Solomon 2004), exemplifies the threat. The drive of associational groupings to avoid external monitoring has been the single most crucial causal element promoting reform. Of course, this is proto-formalization in and of itself. It also shows that relying on ambiguous and unenforceable claims of purpose as a defence against regulatory gaming is ineffective—a unique interpretation. When organizations wrestle with ethics in a corporate setting, creative interpretation becomes the currency of choice for legal minds (Jacoby, 2020). Despite appearances, neither policy response provides enough protection against predatory management aided by professionally hired gunmen and confronted solely by somnambulant boards, who have now been called into duty at the new frontline in the battle against corporate malfeasance. Even if the European project can secure the maintenance and enforcement of broader corporate governance standards, it will still have to cope with the issues produced by the critical theoretical flaws connected with the principal-agent paradigm's implementation. The actuality of organizational forms in both insider and outer models of corporate control diminishes the exculpatory culpability of management as agents if dispersed ownership weakens the authority of principals. This is due to double or multiple agency ties inside the business's divisions and between the corporation and networked partnerships (Van Driel, 2018).

This makes determining the principal's identification problematic and the quest for appropriate accountability and control measures. The complexity of multinational organizations and the marketplaces in which they compete has rendered hierarchical organizational structures obsolete. Furthermore, a hierarchy has flaws due to subordinates' proclivity to filter out undesirable information. Without the institutionalization of cultural discipline, relying on a hierarchical board serves only a symbolic function (Rezaee, 2019). The soap-operatic scheming for control of Hollinger across the United States and Canada, the implosion of the Italian dairy-foods conglomerate Parmalat following alarming failures of due diligence in the placement of corporate bonds in New York, or the banking scandals in the Irish Republic demonstrate that enforceable restraint is difficult to come by. As Melis and Melis point out, blaming the excesses inside Parmalat on the Tanzi family's heinous behaviour is untenable. The firm's demise should be seen as a talismanic illustration of systemic corporate governance failure caused by regulatory gaming and purposeful blindness. Those presumably have a residual fiduciary obligation to maintain market integrity (Katelouzou & Zumbansen, 2020).

Establishment of Control Mechanisms

One of the most central design problems is highlighted here. Establishing control mechanisms that limit opportunity is required for codification and more granular articulation of broad concepts. Neither method addresses motivation and rationalization's twin issues, arguably far more troublesome and vital concerns. As a result, both major regulatory types continue to rationalize misbehaviour as part of the accepted rules of the game. The drive to satisfy financial goals for personal (stock option) or organizational advantage (avoid analytic disapproval) continues to be a source of incentive for misfeasance, the type of rude behaviour that all too frequently turns into wrongdoing. In evaluating the design blueprint undertaken here by Comptroller General of the United States, David Walker, this worry is a solid supporting reason. As head of the Government Accountability Office, Walker is uniquely positioned to map the changing regulatory landscape. Walker, a former Arthur Andersen partner, believes that codification will not be a cure unless coupled with advances in human ethics and honesty (Jacoby, 2020). If stability is to be ensured, he admits that while the fulcrum for the fundamental

change must begin with the board, the centre of gravity must stretch outwards to include all those involved in state or quasi-state fiduciary oversight (Aksoy & Aksoy, 2020).

William McDonough, Chairman of the Public Company Accounting Oversight Board, articulates the moral hazards of the actual game these institutional actors participate in with zeal. The issues, according to McDonough, originate from the reality that corporate executives have lost their moral compass. He criticizes obscene remuneration packages related to a misplaced desire for ever-increasing and predictable quarterly earnings. These are full remarks for a former chairman of the Federal Reserve Bank of New York (Vogel, 1992). The moral hazard is exacerbated by the short-term tactical matching of Wall Street metrics in markets defined by dispersed ownership, an increasing prevalence of hedge funds over traditional firms, and hyper-competition in the supply of professional services. They erode integrity over time (Rezaee, 2019).

Ethical Component in Strategic Decision-Making

According to recent survey findings, including an ethical component in strategic decision-making is increasingly the norm. He calls this a business priority. However, corporate executives' determination to abolish or weaken external monitoring is also concerning depending on various factors; in response to the claim that governance change has grown too costly, overly assertive regulators bolstered by excessive expectations that danger can be eliminated by legislation (Van Driel, 2018). As the rhetoric progresses, Regulators are feeling the heat with ever-shrinking tones. The public and political emphasis have gone on now that Congress has acted and enacted what, on paper, amounts to the most comprehensive securities reform since the 1930s, leaving the specifics to technical specialists under continual but subtle pressure to comply with industry norms (Hill, 2005). The underlying message is that complacency with what is regarded as improper and unwanted intrusions into the private affairs of corporate citizens is temporary. The pessimism expressed in the Donaldson speech exemplifies how little corporate America has learned from recent events (Lee et al., 2020).

To some extent, the regulators are only responsible for themselves. Because of an overemphasis on the form of regulations rather than their underlying purpose, the governance modifications implemented after Enron's demise have failed to achieve their claimed goals. This weakened view of governance foreshadows future ethical breaches while providing intellectual ammo to critics of external monitoring who claim that the changes are essentially a blueprint for job creation in the legal and accounting professions. As a result, it is critical to look into the limitations of the corporate governance paradigm as it is now understood and the role of the regulation (Hail et al., 2018).

Corporate Governance, Direction, and Control of Businesses

Corporate governance is primarily concerned with the 'direction and control of businesses. The scope and obligations of the players participating in that process, on the other hand, are determined by the larger national socio-legal context in which the business is headquartered or where its shares are predominantly traded. They can go beyond a strictly formal definition to include standard company procedure and implicit and explicit commitments to employees and other stakeholders. However, Anglo-American frames of reference have had a significant effect on the argument over the normative bounds of corporate governance investigation. This focuses entirely on the three-way interaction between the board, management, and shareholders, implying that corporate governance is essentially private concern. Even when that relationship is expanded to include stakeholders' interests such as workers, the areas in which it operates (as manifested via corporate social responsibility programs), or broader society, rights are prioritized, and legal priorities are ordered accordingly. The relative power of ideational notions granted legitimacy through national, supra-regional, and international organizations determines the extent to which critical viewpoints are given voice and significance (Rezaee, 2019).

Impact of Corporate Governance Legislation on Society

Given the importance of the corporation and corporate power in today's world, as Lynch-Fannon points out, corporate governance legislation has a significant impact on the character of society. She criticizes academic study in the United States for tending to support a hegemonic view of the business as a private entity. She claims this favours managerial prerogative and presents few managerial and corporate responsibility obligations. According to her, individual privacy rights are contrasted with a more "communitarian conception of corporate function" in the European Union, outside of the United Kingdom, and (to a lesser extent) in the Republic of Ireland (Van Driel, 2018). Because of the dominance of epistemic communities, the forces of globalization put undue demand on the ability of governments or even regional groups to maintain diverse responses. 'The state is being sliced across by multidimensional networks of influence, interests, and decision-making, and entwined in more complicated and hybrid webs of governance,' writes political economist Philip Cerny. Dermot McCann's research of corporate governance reform in Germany verifies this tendency. 'The goal of increasing shareholder value is far more essential to management thought than in the past,' he claims. Similarly, the OECD Principles on Corporate Governance make it quite apparent that protecting the interests of shareholders is a top priority in both traditions. As a result, governance is reduced to a procedural tool for controlling management (Katelouzou & Zumbansen, 2020).

Discussion

As a result, the expanding strength of equity markets and the resulting securitization of the global economy puts a significant demand on organizational variety, a point implicitly acknowledged by Alexander Schaub, the European Commission's Director of Internal Markets. Convergence is essential to both investors and issuers, according to Schaub. Regardless of whether they invest in the EU or the US, investors must be assured of the same degree of security. Businesses require a fair playing field with their rivals. Convergence helps rebuild trust and restore confidence in our markets (Cioffi, 2000). Recognizing the opposing forces of mistrust toward European integration, Schaub proposes a band-aid solution based on being hard on corporate governance principles but flexible in applying them. Whether or not this will be enough to mitigate the negative impact of immoral behaviour on the stock markets remains to be seen (Rezaee, 2019).

The economic value of integrity and the necessity to anchor company practices and governance inside a framework capable of overriding systematic gaming are at the heart of this volume's argument between regulators and academics. 'Restoring public trust and confidence over the long term would involve continual and deliberate measures by multiple parties to address prior systemic deficiencies in corporate governance, accountability, and associated institutions,' as David Walker points out (Van Driel, 2018). This necessitates a complete reorganization of corporate governance structures that integrate transparency, accountability, and integrity through leadership and innovation. This is unquestionably a bold course of action. While ethics cannot be legislated, it implies that society can guarantee that markets are appropriately regulated. The challenge is whether this can be accomplished within a reasonable time frame. The question is whether this can be accomplished within the widely unchallenged conceptual framework that makes self-regulation an operational and strategic priority (outside of the auditing profession) (Lee et al., 2020).

Regulation Fair Disclosure compels company leaders to either reveal their material business information to no one or to everyone to avoid triggering the disclosure requirement (Hail et al., 2018). The former inhibits protected speech, whereas the latter forces undesirable speech. Regulation FD infringes on the right to freedom of association and expression of business leaders in any scenario. (Berger-Walliser & Scott, 2018) Spitzer's significance stems from the fact that the conflicting forces of federalism have acted as a check on the industry's ability to bully the primary federal regulatory agencies. O'Brien, (2012) shows Spitzer's criticism of the Securities

and Exchange Commission's first stunning inactivity and the extreme carelessness demonstrated by the New York Stock Exchange during the now-disgraced Dick Grasso, which is now subject to state court adjudication, has many merits. While the methods used to position the State Attorney General as a critical manufacturer of federal market regulation have been contentious, regulators and businesses alike recognize that the systemic flaws revealed as a result require change, if only to limit the interference of a State Attorney General in need of press coverage to fund his recently announced 2006 gubernatorial campaign (Baumann-Pauly et al., 2017). A passivity is no longer an option, as William Donaldson recently stated in a lecture in London. Regardless of their nationality or investment location, most investors want honesty and integrity (Carminati, 2018). They expect boards of directors to take their fiduciary responsibilities very seriously. They demand that businesses have the internal controls to ensure that their financial disclosures are accurate. When securities laws or regulations are broken, investors have every right to expect regulatory authorities to actively pursue enforcement action (Katelouzou & Zumbansen, 2020).

Corporate failure and fraud are unavoidable aspects of doing business. Fraud is meant to be unnoticed by its very nature. The investigative process has to be significantly redesigned to cope with a corporate structure that is "hopelessly corrupt," as senior investment bankers in New York have privately confided in this author. Despite the Sarbanes-Oxley changes, the financial reporting paradigm relies on certification and verification with reduced presumptions of good management faith. Taking up Walker's challenge for the construction of effective control systems, Nick Hodson emphasizes the necessity for a fundamental cultural and conceptual transformation in the audit process itself. His metaphorical usage of the difficulty of finding the classic "needle in a haystack" aptly illustrates the differences in abilities between the forensic investigator and the auditor (Coffee, 2018). When confronted with this problem, the audit experience would lead to sampling the hay to support the conclusion that it was what it claimed to be, within sampling precision and confidence limits. Renting a metal detector would be the result of investigative experience. The difference is that the focus has switched from hay to needles, and understanding how to identify needles is critical to the investigation's success (Rezaee, 2019). While Hodson favours the PCAOB's inception, he is concerned about the lack of assignment and responsibility for risk management systems. He wants explanations that "could include the specific articulation of the audit committee's role relative to the possibility of senior management collusively subverting financial reporting procedures." This is a necessary precursor because, without them, accountability is absent, which is frequently a precondition for fraud. Hodson blames the current state of affairs for failing to incorporate ethical programs into strategic management, a flaw Whitehouse, McBarnet, and Dobel have identified (Utz, 2019).

The academic community has a role in the redesign, but only if the intellectual ghettoization is rejected. The academic literature, which is primarily influenced by the law and economics tradition, tends to confine governance discussion to procedural issues. Ethics and corporate social responsibility (CSR) programs are typically viewed as voluntary agreements aimed at accomplishing strategic goals by portraying the firm as responsible (Hail et al., 2018). According to the present paradigm, a company's limited understanding of its obligations and responsibilities toward broader society does not automatically imply inadequate corporate governance. CSR provides a way out of this suffocating legality (Khan & Mushtaq, 2020). The primary benefit of CSR, according to Whitehouse, is that, while it recognizes the creative potential of individuality, wealth, and markets, it does not give them primacy (John et al., 2022). To become an effective policing mechanism, the CSR movement must recognize that the focus of corporate citizenship must be reduced to "how the use of public authority may be legitimated to defend all principles associated with a liberal democracy." (Na & Younies, 2020).

Sarbanes-Oxley, ironically, provides two interconnected tools to accomplish this goal. Copies of

corporate ethics programs must be filed with the Securities and Exchange Commission, and any deviation from its terms must be disclosed. The reform, implemented to prevent egregious acts from being sanctioned by board-authorized derogation, is perhaps one of the most essential but underreported internal control measures. It provides not just a baseline against which strategic decision-making may be measured. Its effectiveness as a restraining force, on the other hand, would be amplified if regulators worked to guarantee that the ethics program was included in the disputed section 404 of the Act's internal control systems. This can catapult ethics to the forefront of the enforcement agenda in a single stroke. Of course, saying it is easier than doing it. Citigroup, the world's largest financial services company, recently restructured its internal code of ethics and announced hiring a Director of Ethics, demonstrating how difficult it is to break the culture of technical compliance. The code of conduct, announced with great hoopla, focuses on three fundamental business goals (Aksoy & Aksoy, 2020).

Conclusion and Recommendation

Schwartz says an ethical code must 'permeate' policies, processes, projects, structures, systems, and objectives. Measure the success of Citigroup's strategy; it is essential to distinguish between 'form,' 'execution,' and 'administration' Citigroup's code of conduct warns against using structured financing instruments like Enron's to control profits. Each of our customers must agree to rapidly disclose to the public the net effect of any significant Citigroup financing transaction that is not intended to be recorded as debt in the client's financial statements. Citigroup will not execute a covered transaction if a customer does not submit mandatory disclosures. This statement may be accepted since third-party misconduct should not damage a service provider who is officially following the law.

Placing structured finance's creative accounting under good game rules externalizes the material and moral costs of non- or creative compliance, absolving financial designers of crimes or moral side-restraints. Deception is in the inappropriate application of an aggressive, possibly deceptive instrument, not in its design. Citigroup's ethics are libertarian. Ethics, if implemented. It is only justifiable if it boosts profits. Citigroup's example shows the limits of ethics in a commercial setting as it is now understood. However, it also presents an opportunity for proactive policing, crucial for institutionalizing cultural change. Under Sarbanes-Oxley, regulators and campaigners (including institutional investors) can exploit the mismatch between a company's presentation and reality to verify claims of responsible activity.

Compliance procedures can reduce corporate corruption if properly executed. Early warning systems avert catastrophic damage to a company's reputation and assure investors proper risk management. If governance devolves into "box-ticking" within the enterprise, it falls into the same quagmire that has hampered business ethics and corporate social responsibility (CSR) initiatives. Effective corporate governance requires a cultural revolution, says Buck. In an age of global marketplaces, good corporate governance and regulatory monitoring require an ethical framework that transcends technical conformance. A functional ethical framework systematizes and rationalizes business reasoning. It outlines how to handle concerns or moral risks caused by excessive discretion. Effective leadership requires balancing culture, law, ethics, and responsibility. It needs trust and honesty. Corporate accountability can only be achieved if values are used to determine value.

References

- Ali, N., & Khan, K. I. (2022). Corporate governance, financial accounting information and control mechanisms: A way to combat corruption. *Journal of Business and Social Review in Emerging Economies*, 8 (1), 197-208.
- Aksoy, T., & Aksoy, L. (2020). Increasing importance of internal control in the light of global developments, national and international standards and regulations. *Sayıştay Dergisi*,

- (118), 9-40.
- Baumann-Pauly, D., Nolan, J., Van Heerden, A., & Samway, M. (2017). Industry-specific multi-stakeholder initiatives that govern corporate human rights standards: Legitimacy assessments of the Fair Labor Association and the Global Network Initiative. *Journal of Business Ethics*, 143(4), 771-787.
- Berger-Walliser, G., & Scott, I. (2018). Redefining corporate social responsibility in an era of globalization and regulatory hardening. *American Business Law Journal*, 55(1), 167-218.
- Carminati, L. (2018). Between ethics and law: TNCs' behaviour in modern economic globalization. *Society and Business Review*, 14(1), 2-11.
- Cioffi, J. W. (2000). Governing globalization? The state, law, and structural change in corporate governance. *Journal of Law and Society*, 27(4), 572-600.
- Coffee, J. C. (2018). *The globalization of entrepreneurial litigation: law, culture, and incentives. In Research Handbook on Representative Shareholder Litigation*. Edward Elgar Publishing.
- Gadinis, S., & Miazad, A. (2020). Corporate Law and Social Risk. *Vanderbilt Law Review*, 73, 1401.
- Gutterman, E. (2019). Banning bribes abroad: US enforcement of the foreign corrupt practices act and its impact on the global governance of corruption. *European Political Science*, 18(2), 205-216.
- Hail, L., Tahoun, A., & Wang, C. (2018). Corporate scandals and regulation. *Journal of Accounting Research*, 56(2), 617-671.
- Hill, J. G. (2005). Regulatory responses to global corporate scandals. *Wis. Int'l LJ*, 23, 367.
- Jacoby, S. M. (2020). Executive pay and labor's shares: Unions and corporate governance from Enron to Dodd-Frank. *Accounting, Economics, and Law: A Convivium*, 10(3) 1-48.
- John, A., Shahzadi, G., Khan, K. I., Chaudhry, S. & Bhatti, M. S. R. (2022). Charity begins at home: Understanding the role of CSR and HR practices on employees' attitudes during COVID-19 in the Hospitality Sector, *Frontiers in Psychology*, 13, 828524.
- Katelouzou, D., & Zumbansen, P. (2020). The new geographies of corporate governance. *University of Pennsylvania Journal of International Law.*, 42, 51.
- Khan, K. I., & Mushtaq, A. (2020). Corporate social responsibility and firms credibility: A comparative study of family and non-family firms; Evidence from Pakistan stock exchange, *Review of Socio-Economic Perspectives*, 5(2), 59-86.
- Lee, T. A., Clarke, F. L., & Dean, G. W. (2020). *Scandals*. In *The Routledge Companion to Accounting History* (pp. 482-506). Routledge.
- Na, T., & Younies, H. (2020). Corporate governance: On the crossroads of meta-regulation and social responsibility. *Journal of Financial Crime*, 27(3), 801-820.
- O'Brien, J. (2012). Normal science and paradigmatic shifts: political and regulatory strategies to develop investor protection in the aftermath of crisis. *Accounting & Finance*, 52, 217-231.
- Pargendler, M. (2020). The grip of nationalism on corporate law. *Ind. LJ*, 95, 533.
- Rezaee, Z. (2019). *Business sustainability, corporate governance, and organizational ethics*. John Wiley & Sons.
- Utz, S. (2019). Corporate scandals and the reliability of ESG assessments: Evidence from an international sample. *Review of Managerial Science*, 13(2), 483-511.
- Van Driel, H. (2018). Financial fraud, scandals, and regulation: A conceptual framework and literature review. *Business History*, 61(8), 1259-1299.
- Vogel, D. (1992). The globalization of business ethics: Why America remains distinctive. *California Management Review*, 35(1), 30-49.
- West, M. D. (2001). The puzzling divergence of corporate law: evidence and explanations from Japan and the United States. *University of Pennsylvania Law Review*, 150(2), 527-601.



Role of Islamic Banking in Economic Growth of Pakistan

***Muhammad Abdullah Idrees**, Lecturer, KASB Institute of Technology, Karachi, Pakistan

Asad Ali Minhas, Lecturer, Bahria University, Karachi, Pakistan

Javeria Naveed, Lecturer, Bahria University, Karachi, Pakistan

Ayesha Khan, Senior Lecturer, Bahria University, Karachi, Pakistan

*Corresponding author's email: idrees@kasbit.edu.pk

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ABSTRACT

Purpose: This paper is all about the advancement of Islamic Banking and its impact on economic growth of Pakistan. In recent years it has been observed that overall growth in the Islamic Banking has increased over conventional banking in Pakistan. The primary goal of this research is to find the impact of Islamic Banking products on the economic growth of a country.

Approach: This report examines a new approach to defining the success of the system of the Islamic banking industry in the context of Pakistan. After Utilizing econometrics examination, quarterly time-arrangement information of financial loaning and all out resources an intermediary for the advancement of Islamic banking and GDP as an intermediary for monetary development.

Findings: The study's result closes that there is long-standing co-integration between the variables. The report finds indication here that Islamic finance is strongly and greatly associated with economic development in the long term. Several research results indicate that Islamic banking is an important way of building an equitable monetary structure for the country's economic development and advancement.

Implications: This research would aim to expand the reach of brief discussions at various levels in the Islamic banking and economics field. The research was carried out to determine the effect of Islamic banking on Pakistan's economic development and the impact of Islamic banking goods on economic growth.



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Introduction

The word monetary alludes to monetary exercises which conform to Islamic law (sharia). It is one of Islam's center primary establishments and furthermore the Islamic construction of account.

Notwithstanding the preclusion of the riba, the denial of installment and gathering of the riba (interest) incorporates numerous other fundamental provisos that may impact the monetary exchange. This incorporates the preclusion of "gharar" (vulnerability), stowing away and selling of prohibited products (for instance, pork and liquor).

Islamic money has created as a significant and available strategy for subsidizing development around the planet over the previous decade. Solid verification is being revealed by significant capital business sectors that Islamic money has effectively been incorporated into the worldwide monetary framework. Over the previous many years, the Islamic money industry has developed dramatically, rising yearly at 10-12 percent. Then, sharia-agreeable monetary stores crossing banks and non-bank monetary foundations are esteemed at around \$2 trillion today. Currency markets for monetary business sectors and protection (taka full). Islamic financial stores have risen quicker than traditional met in numerous lion's share Muslim nations. Islamic money is value based, resource sponsored, moral, supportable, monetarily dependable, financially and socially capable. It supports hazard sharing, attaches the money business with the genuine economy and stresses government backed retirement and monetary incorporation. Islamic financial area is a spellbinding area of capital interest in numerous nations due to its advantage free items. There are sure highlights of Islamic financial which give a base for bigger level of danger sharing, lesser reliance on advance instruments and limit the hole between present moment and long term financing. Islamic financial industry stayed reinforced in its resource bases indeed, even in the period of downturn and more capital interest in Islamic items has been noticed (Rogoff, 2011). Thus, different eyewitnesses have suggested that ordinary banking has a few possibilities to gain from Islamic banking.

Islamic account is administered by the accompanying primary standards:

- 1) Interest restriction on buys (riba).
- 2) Interest money on advances (materiality).
- 3) Illicit support in an exploitative or morally problematic association (for instance: liquor creation).
- 4) It is essential to relate gets back to hazards.

Branch Network of Islamic Banking Industry

Toward the finish of March 2020, the Islamic financial industry network comprised of 22 Islamic financial establishments, 5 undeniable Islamic manages an account with isolated Islamic financial auxiliaries (IBBs) and 3,250 branches dispersed across 120 areas. Notwithstanding a few changes, the significant portion of branches is as yet gathered in Punjab Province and Sindh as found in Figure 01. The quantity of Islamic financial windows worked by conventional keeps money with IBBs was 1,375.

Assets and Liability Structure

Islamic financial industry resources rose by Rs: 76 billion during the quarter of January to March 2020, and were enlisted in the past quarter at Rs: 3.360 billion to Rs: 3.284 billion. Accordingly, the piece of the pie of the resources of the Islamic financial area in the absolute resources of the financial business developed from 14.9 percent for the year finished December 2019 to 15.2 percent before the finish of March 2020. Financing and venture stayed the center parts of Islamic financing resources and related resources

The bifurcation of properties among IBs and IBBs is appeared as demonstrated in Figure 02. The stores of undeniable Islamic banks rose by 4.1 percent (Rs: 78 billion) and were enlisted at Rs:2.005 billion, while IBB resources diminished by more than Rs:2 billion and were accounted for at Rs:1.354 billion before the finish of March 2020. There was a little ascent in the portion of IBs, which represented 59.7 percent before the finish of March 2020, contrasted and 58.7%

toward the finish of December, 2019. The portion of IBBs in the all-out resources of the Islamic financial industry during the time under audit was 40.3 percent.

Financing and Related Assets

Islamic financial area subsidizing and related stores (net) developed by Rs: 12 trillion to cross Rs: 1,634 trillion before the finish of March 2020, in (figure 02) as Shown Data separation between undeniable Islamic banks and conventional banks' Islamic financial divisions shows that IB subsidizing and related resources (net) diminished by 1% Rs: 9 billion during the time under investigation and remained at Rs: 923 trillion. Then again, however financing and related resources (net) of IBBs, experienced development of 3% Rs: 21 billion and arrived at Rs: 711 billion before the finish of March 2020. Reducing share regarding method of savvy financing with a portion of 31.85, Musharaka stayed the biggest in the general subsidizing of the Islamic financial industry, driven by Musharaka (19.4%) and Murabaha, as found in the figure.

The year 2000 incorporates moving all areas equal, customary and Islamic. The strict development behind the foundation of Pakistan, which held the way of thinking of an Islamic state where Muslims can make the most of their lives under Islamic qualities, can be the authentic development of the Islamic financial framework in Pakistan. The State Bank of Pakistan was opened in 1948 by Muhammad Ali Jinnah, the author and the main Governor General of Pakistan. For the endorsement of monetary exchanges, agreements or instruments, moral sufficiency requested the hypothesis building approach in Islamic financial aspects dependent on the monetary cases of the Quran, Hadith and Sunnah prompts a structure that sets up a cycle to achieve the evident feeling of the Islamic financial framework's development. Hypothetical ramifications of the outcomes of Islamic counts on monetary advancement for contributors, controllers, administrators, directors and borrowers of the Islamic monetary framework are drawn up in late writing. The hypothetical components of this examination, in any case, are centered on financial hypothesis. Two separate methodologies are Islamic monetary hypothesis and customary financial speculations. There are numerous perspectives on the two theories.

Under the country's political reasons, the Islamic Commission (later the Council of Islamic Ideology) was set up in 1957 under Articles 198(1-4) of the 1956 Constitution of Pakistan, to present Islamic reconstruction. This was a specialist body to help the public authority in issue identifying with Shariah. The nation, then, begun presenting double Islamic banking in Pakistan in 2002 and adjusted its approach to consistently turn the economy without critical unsettling influence (Saba, 2017). Islamic banking was dispatched authoritatively in Pakistan in 2002. At the point when the Three Points Policy for Economic Development and the Advancement of Islamic Banking was actualized by the Meezan Bank of Pakistan.

- 1) Endorsement for the launch of new completely fledged private area Islamic banks.
- 2) Endorsement for the making of Islamic financial branches by conventional banks.
- 3) Approval to open independent Islamic heating branches or windows by the new conventional bank.

Problem Statement

The Purpose Resolution was embraced in 1949, which directs that our constitution depends on the educating of Islam (Hoodbhoy & Nayyar, 1985). The constitution was set up in 1973, which explicitly elevates policymakers to focus on the expulsion of Riba from Pakistan's monetary construction (Shah, 2012). With past examination, unmistakably there is a connection of circumstances and logical results between Islamic account and financial turn of events. This article, subsequently, investigates this relationship in Pakistan.

Research Objective

The goal and objective of this examination are as per the following:

- 1) As a matter of first importance, I might want to sort out the impact of Islamic relying upon Pakistan's monetary turn of events.
- 2) Furthermore, regarding monetary turn of events, address Islamic financial merchandise.
- 3) Address the highlights and models of Islamic banking in Pakistan, specifically its monetary instruments for the assembly and conveyance of money related capital (stores and resources).
- 4) To fix methods for guaranteeing that financial tasks are shariah-guarantee.

Research Questions

- Does Islamic finance in Pakistan contribute to economic growth?
- Is there a major connection between Islamic finance and long-term economic development in Pakistan?
- Does Islamic finance have an effective association with Pakistan's GDP?
- Does Islamic Total Assets Financing have a major relationship with Pakistan's GDP?
- Does lending to Islamic Finance have a substantial partnership with Pakistan's Gross Fixed Capital Formation (GFCF)?
- Does Total Assets of Islamic Finance have a major partnership with Pakistan's GFCF?

Literature Review

We need to do a ton of studies on the exploration directed by various researchers worldwide on Islamic banking and its effect on monetary improvement in Pakistan to proceed with the report. Since this type of banking came during the 1990s, we didn't need to return ever, researchers like Hassan and Bashir (2003), Samad & Hassan (2000), Rosly & Abu-Bakar (2003), Samad (1999), Samad (2004), Sufian (2007) and some of fascinating investigations by Kazarian, E. (1991) on Finance in Islamic banking and in monetary development. Right off the bat, I picked Samuelsson (2000) to explain how Muslims think and take the expressions of Allah (God) comparative with the western resident to start the significance after thorough investigation. At that point go to the investigation of the historical backdrop of Islam and Islamic banking and its effect on Pakistan's monetary advancement Warde (2000), Archer, (2002) and Scharf, T. (1983). What's more, we focused on the investigation of Al-Omar (1996), who further distinguished four center Islamic financial framework ideas and featured the Islamic financial framework instrument by the researcher Zineldin, M. (1990), who zeroed in on observational examinations. What's more, I utilized the hypothesis of monetary items given by Islamic banking from Islamic banking to check Islamic banking and its impact on financial development in Pakistan Usmani (1999), Imtiaz A. (1990) and Zineldin, M. (1990). Musharakah, Mudarabah, Murabaha and Ijara are the things that work on the impact explained by Al-Omar (1996). I contemplated the estimations of Islamic banks in Pakistan and their impact on Pakistan's economy. In a few nations, the Islamic financial industry is an enrapturing area of capital spending because of its advantage free merchandise. There are a few qualities of Islamic financial that give the premise to a higher level of danger sharing, a lower reliance on layaway instruments, and a diminishing in the contrast between present moment and long haul financing. Especially in the period of withdrawal, the Islamic financial industry stayed fortified in its resource bases and further capital spending in Islamic merchandise was noticed (Rogoff, 2011). Various examiners have thusly recommended that conventional banking has a few assets to gain from Islamic banking. A country's monetary advancement is an ascent in assembling and administrations starting with one time then onto the next. It very well may be controlled by methods for ostensible conditions under which swelling is comprehensive, while expansion is adjusted in genuine terms. Strength, security and human

prosperity can be promptly gotten a handle on by following each nation's economy (Rafay and Farid, 2019). On the off chance that the country's economy is prosperous and rising consistently and a few foundation programs have as of late been finished, it shows that the nation is steady, quiet and that the nation's kin carry on with a respectable life. The economy is a combination of variables that are full scale and microeconomic. Numerous instruments and strategies have been utilized to confirm the proficiency of the economy. Gross domestic product is the most well-known and legitimate hotspot for computing each country's economy. It clarifies the yearly creation of a nation's products and enterprises. On the off chance that GDP rises, the flourishing economy is considered to be (2012 by Chow and Li). The western business banking framework is exclusively founded on revenue, while intolerable sin is explicitly prohibited and broadcasted in light of a legitimate concern for Islamic banking. Islamic banking was created to give an elective space liberated from Gharar (outright possibility of result), Myser and Qimar (a type of betting), pork deals and absence of benefit and misfortune sharing (Salman Ahmad Sheik, 2012).

Enhancements in an economy's monetary framework contrastingly affect its real creation development. This outcome in an improvement in the economy's burning through potential and investment funds volume (Goldsmith, 1969). The estimation of the Islamic financial framework was asserted during the nineteenth century comparable to the measure of public pay and advancement rate for a given country's monetary development close by the Islamic financial framework. Of late, with the goal of investigating explicit, this particular examination has been further experimentally explored. The way of thinking of Islamic banking depends on the thought of revenue free banking, as premium is restricted in Islam. Islam has given ideas identifying with the construction and activity of the financial framework (Tabash et al., 2022).

Theoretical Framework

The examination showed that there is a stockpile side connection in Pakistan between financial turn of events and Islamic banking. This examination offers significant information on the components that could impact and prompt the dynamic selection of Islamic financial frameworks and their effect on the country's monetary turn of events, for example (Islamic financial items). The research likewise showed that the Islamic financial area hugely affected monetary turn of events.

Theory of Islamic Banking

Principles of Islamic Banking

Islamic banks are a mix of business and venture banks until they become confounded; however, they work as per Islamic standards (Tabash et al., 2022). The center of this is that the loan fee, as a technique for apportioning monetary capital, is supplanted by the pace of return on singular exercises, which has a scope of danger based and benefit sharing systems and devices (Sharing Benefit and Loss-PLS) (Zineldin, M. 1990, p.11). PLS works in an extremely clear way where benefit is divided among the bank and the colleague, and afterward benefits from the banks is divided among the bank and speculation store holders (Zineldin, M. 1990). The Four Islamic Banking Values (Al-Omar, 1996, p.24)

Ideally, all assets should back financially helpful projects whether credits are utilized in monetary or beneficial ventures, there should be a danger. Premium is rejected in light of the fact that, paying little heed to the consequence of the business endeavor in which the cash is utilized, there is a foreordained, fixed sum owed to the financial backer. • Financial danger should lie completely with the capital loan specialist and not with the capital moneylender.

Financial Products offered from Islamic Banking

Musharakah

As indicated by Usmani (1999), Musharakah is Arabic word which proposes sharing, this is an ideal distinctive way for interest based for the most part subsidizing. "Musharakah will assume a significant part in partner degree economy upheld Muslim standards" (Usmani, 1999, p.203). Besides, musharakah doesn't have secured pace of return, the speed of return depends on genuine benefit achieved by the endeavor and it will endure misfortune if the endeavor neglects to succeed (Usmani, 1999). Steady with Usmani (1999), the profits of the financier in Dated: 31-05-2011 fifteen Author: Avais Pervez musharakah zone unit joined straightforwardly with real result nonheritable by the undertaking. Musharakah might be a relationship that is set up through common agreement between the gatherings. The agreement is done with free assent of the gatherings with none extortion or misdirection. Additionally, reliable with Usmani (1999), the extent of benefit is disseminated between accomplices is joined at the hour of agreement of musharakah, if it's not decided by then the agreement of musharakah isn't substantial. besides, the quantitative connection of benefit is chosen with extent to the specific benefit to the business and isn't partitioned with extent of capital blessed by the individual or accomplice, benefit will not tend a great deal of if the supplied capital is a ton of for the inverse. It'll be isolated on the reason of understanding. It's not permitted fixing an installment amount or giving the benefit on fix rate to anybody of the accomplice, or any pace of benefit extent to the speculation of the accomplice in agreement of musharakah. Also, predictable with Usmani (1999), in agreement of musharakah, on the off chance that misfortune occurs inside the business, the misfortune is imparted reliable to the quantitative connection of the venture, for instance in the event that entrepreneur has invested thirty percent of the capital inside the business, the accomplice ought to endure thirty percent of the misfortune, less or less in any case the agreement can get invalid. The benefit quantitative connection will differ from the speculation subsequently to the agreement understanding between the accomplices while misfortune ought to be split between the accomplices in real extent of venture. Predictable with (Usmani, 1999, p.208), "Benefit depends on the understanding of the gatherings; anyway misfortune is regularly dependent upon the quantitative connection of venture".

Mudarabah

Mudarabah is a course of action between the moneylender (the rabbul-maal, the financial backer) and the business visionary (the mudrib, the person who takes the credit or the bank), as indicated by Imtiaz (1990), in which the financial backer offers the assets to the business visionary who utilizes those assets either to fire up a business without any preparation or to create existing organizations with the goal of making benefit. The advantage is separated by a set rate by the two sides, however the lender needs to bear the weight alone on account of misfortune. As indicated by Usmani (1999), the financial backer carries on as a dozing partner in mudarabh and has no privilege to join or have a job in organization the executives. It is done distinctly from the bank. In examination, the deficiency of the asset is just the facial hair of the moneylender and not the chief, so if the misfortune was made by the supervisor's blunder, the misfortune is the facial hair of the bank director. As though work had been to no end and no achievement had been refined by his work. Furthermore, if the loan specialist wishes to sell the stake or drop the arrangement, the director doesn't get his work share except if the firm is sold for benefit thus the chief isn't qualified for guarantee his offer (Zafar and Sulaiman, 2020).

Ijara

Ijara refers to the arrangement in which Islamic bank buys an asset and then it provides it to customer on rent (Sihotang and Hasanah, 2021), and the rent agreement shows the renting period, amount, time of payments and responsibilities of all collections during the presence of the rent. Financing Ijara, where the bank purchases the resource and urges the designer to utilize it at a fixed cost. In a lease to-claim bargain, the responsibility for resource either stays with the bank

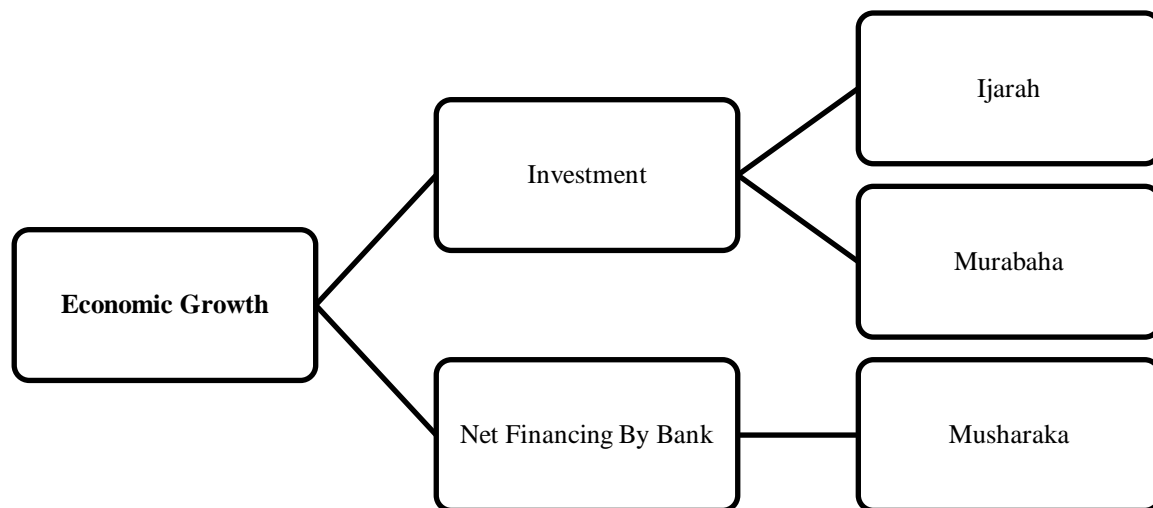
or is in the long run passed to the business visionary. The regular agreement for what is known as renting today is Ijara financing. As per Imtiaz (1990), financing and running are separated by the Ijara game plan amid Islamic banks. Islamic bank acts as warrantor of resource in providing lease and the customer is solely responsible for the endeavor of utilization of the resource and its upkeep. In the opposite side, in financing the agreement, "the client should haggle together with the producer and supplier in issue identifying with leased properties and the chance of loss of proprietorship under the particulars of the rent understanding" (Imtiaz, 1990).

Riba (Interest)

As per the Holy Qur'an, paying and receiving of interest (riba) is prohibited and seen as a major evil. Interest ban is a medium through which justice is made sure between the finance provider and the businessman. Investors are assured an optimistic return without having to bear the cost (Gani and Bahari, 2021). There are three main reasons for the ban of interest intervals. Convectional arrangement between borrower and lender is based on interest where the borrower has the possibility to have all the gains along with the possibility to bear all the losses that can occur, whereas moneylender earns money whatever (Warde, 2000). Riba is exploitative as it aids the rich as a wealth excess is what causes the destitute and the fragile to borrow money (Warde, 2000).

Research Methodology

The goal of this research is to explore the effects of Islamic banking on Pakistan's economic development. The quantitative method has been used here to assess the relationship between Islamic banking and the economy, as well as economic growth (GDP). The GDP and GFCF data are taken from the World Economic Indices.



Hypothesis

H1: There is an important long-term relationship between Islamic Banking and economic Growth.

H2: There is an important long-term relationship between Islamic banking and Islamic Banking Products.

H3: The Islamic banking and Total Asset shave a significant long-term relationship.

Research Design

The Quantitative methodology was used in this paper to calculate the connection between Islamic Banking and Economic Development. For this study, two dependent variables were chosen to measure the relationship between Islamic Finance and the (GDP) Economy: GDP and Islamic Financial Goods, and two independent variables: private loans by Islamic banks and total assets held by Islamic banks.

Data Collection

Data derived from numerous authentic sources is included in this text. The State Bank of Pakistan has released a quarterly Islamic banking bulletin from which the gross assets and net funding of Islamic banks are derived. The secondary data approach is employed to analyze the 30 observations based on periodical time series statistics on Islamic finance and economic growth proxies selected to verify the relationship between exogenous and endogenous variables. This research focuses on a period of nine years between Oct 06 and Sep 15.

This study, in line with Oqool, Okab, and Bashayreh (2014), based on the literature review, has chosen the relationship between Economic Growth and Islamic Finance through the subsequent models:

On following equations, the statistical procedure for calculation and analyses done:

$$IB(PK)=\beta_0+\beta_1R+\beta_2P+\beta_3T+\beta_4GDP+eit, IB(PK)=\beta_0+\beta_1R+\beta_2P+\beta_3T+\beta_4GDP+eit, \quad (1)$$

$$E(PK)=\beta_0+\beta_1R+\beta_2P+\beta_3T+\beta_4GDP+eit, E(PK)=\beta_0+\beta_1R+\beta_2P+\beta_3T+\beta_4GDP+eit, \quad (2)$$

$$G(PK)=\beta_0+\beta_1IB(PK)+\beta_2E(PK)+eit, G(PK)=\beta_0+\beta_1IB(PK)+\beta_2E(PK)+eit, \quad (3)$$

Here GP refers to progress of Pakistan Islamic monetary system while IB(PK) and E(PK) represents goods of Islamic banks growth of the country.

Independent variables:

- $M(PK)$ = Mudarabah
- $DM(PK)$ = Falling Musharaka
- $T(PK)$ = time intermission
- $GDP(PK)$ = Gross Domestic Product

Mediating variables:

- $IB(PK)$ = Islamic Banking Products.
- $E(PK)$ = NAV / Islamic equity fund.

Dependent variable:

- $G(PK)$ = Impact of growth of Islamic banking.

Data Analysis and Results

Descriptive Statistics

Table 1 represents the detailed summary of all the factors of the research through detailed data provided by Pakistani database. This reflects the standard deviation, skewness, mean, kurtosis, and alteration of every factors on opted Islamic financial institution of Pakistan that include

survey banking goods, Net Asset Value and four variables of development. The mean is the Variable showing average level of data. Detailed data propose impression of difference in yield (M=7.61, SD=.387) is additional to disparities in GDP development. In short, statistics of Pakistan showed that population and Mudarabah have more influence equated to free variables discussed in this research. The growing of capital account is linked with progress of Islamic banking to a much level. Although there is an optimistic association between equity and progress of Islamic financial system, it is smaller compared to bank resources. Amount of change reveals correct way towards economic development. Thus, the (+) sign shows positively tilted data and (0) symbol means that the data are steady.

Table 1: Descriptive Statistics

Variables	Mean Statistics	Std. Deviation Statistics	Variance Statistics	Skewness Statistics
Time	.656	.318	.101	-1.04
Mudarabah	7.61	.387	.150	.427
Diminishing Musharaka	8.56	.280	.079	.880
Ijara	2.84	.210	.046	-2.560
GDP	.532	.340	.116	-2.779
Growth	18.67	.660	.430	-.046

Validity and Reliability Constructs

A measure of variance portrays that greater distribution for a time intermission (.101) and return (.150), individually, from data central tendency. The right direction toward economic progress is shown by skewness coefficient. Hence, for definitely tilted statistics, the (+) symbol direction plus 0 sign portray that the statistics are constant. However, identifying research approaches possess hereditary limits, biased intrinsic in study results in drop in dependability plus accuracy of findings of results. Thus, the reliability and validity of this study are definite in the statistical test specifications.

For investigating the reliability of the variables, the Cronbachs alpha was used. The reliability coefficient of the data collected for each Pakistan data sample variable is shown in the table here. In addition, results show angels from low to moderate coefficient level, i.e. .200 to .620 for underlying items in cronbachs alpha, i.e. population, growth, growth, Equity outcomes are at an acceptable level for GDP (>.6).

Table 2: Cronbach's Alpha Coefficient

Variables	Cronbach's Alpha Coefficient
Time	.200
Mudarabah	.617
Diminishing Musharaka	.605
Ijarah	.614
GDP	.620
Growth	.166

Structural Equation Model

The next stage is to clarify the

concepts' dimensions by discovering reliability and accuracy of data. Analysis has been provided to the measurement model for the Pakistani dataset. Structural Equation modeling refers to an amalgamation of multiple regressions and exploratory factor analysis (EFR). For confirmatory factor analysis, though, SEM proves ideal in terms of CFA. In this section, model measurement evaluates the built model of this study. The AMOS software is being carried out to estimate. A model dataset was stated first.

6 observed variables (Timing, Mudarabah, Population, Gross Domestic Product, and growth, capital Net Value Asset and growing of the Islamic financial system) were employed for SEM while exogenous variables included Time, Mudarabah, Population and Gross Domestic Product. Banking assets, Net Value Asset of equity and growth with 3 error terms were endogenous variables in this study.

Statistically, for various incentives, the fit indices were recommended. As per the Hooper et al, in the face of a vast volume of research output, readers and critics are burdened.

The GFI, CFI and RMSEA have been employed in most literature to assess and measure the effect of Islamic banking on economic development and apt statistical indices for data.

Table 3: Level of Model Fit

Level of Model Fit	Recommended for further analysis if
Relative Chi square to degree of freedom χ^2/df (CMIN/DF)	> 2
Goodness-of-fit index (GFI)	< .90
Normed fit index (NFI)	< .90
Incremental fit index (IFI)	< .90
Tucker–Lewis index (TLI)	< .90
Comparative fit index (CFI)	< .90
Root mean square error of approximation (RMSEA)	> .05

Firstly, six variables were defined for the model. The SEM model encompasses six variables. The square variable (Timing, Mudarabah, Ijrah, and Diminishing Musharaka) reflects the variables observed and the circles (e1, e2, and e3), describing the terms of error. The exogenous variable number was 6, while the endogenous variable number was 3. The input data consists of 297 observations while the path diagram, with standardized regression coefficient, was built to interpret the structural model fit for data.

Discussion, Conclusion and Recommendations

Banking Product Mudarabah

The coefficient for the Structural Equation Modelling path between monetary products and mudarabah in last model deliver strong important support for H1.

The philosophical hypotheses of literature are reinforced by these outcomes. It is matched with the data. These findings also confirm that the efficacy of macroeconomic factors and mudarabah in Islamic banking is also significant for boosting the growth of the Islamic financial system. This also meant that more of the total industry's share also means more leverage for the bank to manage the prices and services it delivers to maintain clients.

Banking Products and Time

The hypothesis H2 was not confirmed by the beta coefficients for the Structural Equation Modelling path between financial commodity variables and the time interval with a non-significant value of $p = .924$.

These results of empirical research also affect the trust of Islamic banking investors, which brings a positive direction to the level of growth. Till now, this research reflects the priceless connection between time and Islamic banking products. The sample features and difficulty of SEM model to assess the variables may be a reason of such findings.

Banking Products and GDP Rate

Gross domestic product (GDP) and economic growth are generally linked to the definition of financial assets and positively linked to each other. The relationship between increases in the proportion of bank deposits to GDP is discussed in a vast amount of literature.

Still, in this study, the hypothesized connection between Islamic banking products and GDP is not important at the .05 level. The H4 was not supported by the SEM model results. This finding castoffs the mediating part of products and services in firming the GDP-IF growth relationship.

The outcome of final model for the association between Islamic banking and GDP is also rather unique. This inferred that the exterior environment factor, GDP, has direct influence on rising and falling of the size of assets of Islamic banking organizations and its products.

Banking Products and Diminishing Population

The SEM direction coefficient between the financial product and the population with a non-significant value of $p = 0.76$ did not support the H2.

This discusses the philosophical hypotheses of literature linked to the relationship between the population and Islamic banking goods. Islamic banking and its products are going in the right direction, so that the society is interrelated with Islamic banking products.

Banking Products and Development of Islamic Banking

The SEM direction coefficients between Islamic banking products and the IF growth vector in the concluding model offer good support for H10. The development of the Islamic banking system in Pakistan is directly affected by Islamic banking goods.

One percent rise in Islamic banking products contributes to a 59 percent increase in Islamic finance, which further implies that this study's vector Islamic banking product confers that Islamic product are an important factor in the country's overall growth. The philosophical hypotheses of past literature arise from these observations.

Conclusion

The research was carried out to determine the effect of Islamic banking on Pakistan's economic development and the impact of Islamic banking goods on economic growth. The study's result closes that there is long-standing co-integration between the variables. The report finds indication here that Islamic finance is strongly and greatly associated with economic development in the long term. Economic development is positively encouraged in the study of Islamic banking goods by "Ijarah, Mudarabah, and Deminishing Musharakah". Several research results indicate that Islamic banking is an important way of building an equitable monetary structure for the country's economic development and advancement. Currently, Islamic financial goods in most essential markets around the world and 3.3 percent of global banking resources are rising at 15-20 percent a year. With the advent of Islamic banking economics worldwide, the study of development is increasingly growing and all variables have gradually appeared in the last few decades. This idea improved both depositors and investors' understanding and knowledge to incorporate ethical, spiritual preferences in their saving and business motivations to improve the country's growth rate. This research verified the arbitrating position of Islamic banking goods and the firming up and constructive association between the level of economic growth and Islamic banking. The outcome of the SEM final model revealed that, as discussed above, H1, H2, H3, H4 are supported. H1 is agreed here, i.e. that specifically shows that there is a substantial relationship that affects profitability calculating. H5, thus, reflects a considerably similar association between data variables affecting Islamic banking and investment. Overall, 4 directions were considered to be important in the final model and the country's growth/progress seems optimistic. This research gives a valuable understanding of the factors that could have a beneficial effect and lead to the strong implementation of the Islamic banking system and its influence on the country's economic

development, but the focus of this study is restricted to Pakistan's financial banking system. It can be extended in this topic by contrasting the growth of various countries with approximately.

Recommendations

This research would aim to expand the reach of brief discussions at various levels in the Islamic banking and economics field. First, based on previous experience, this is a clear review in relation to the examination of Pakistan's economic influences in the Islamic banking and finance field. As this thesis not only explored the role of growth factors at a general level, it also opened a path in a particular direction for future studies.

Secondly, Islamic banking goods and services are built on the basis of the principles of Shariah compliance. The study of development factors impacting Islamic financial institutions gives an understanding into the drawbacks resulting from particular economic factors.

Third, the interaction between inner and outer development drivers with Islamic banking success provides the strong point for the importance of new Islamic agency concept contracts. The results of this paper increased the consciousness among Pakistani organizations of the significance of solid identification of the existing Islamic banking system as a mechanism for the economic growth.

References

- Tabash, M. I., Abdulkarim, F. M., Akinlaso, M. I., & Dhankar, R. S. (2022). Islamic banking and economic growth: fresh insights from Nigeria using autoregressive distributed lags (ARDL) approach. *African Journal of Economic and Management Studies*, (ahead-of-print).
- Zafar, M. B., & Sulaiman, A. A. (2020). Islamic banking in Pakistan: emergence, growth, and prospects. In *Growth and emerging prospects of international Islamic banking* (pp. 61-77). IGI Global.
- Gani, I. M., & Bahari, Z. (2021). Islamic banking's contribution to the Malaysian real economy. *ISRA International Journal of Islamic Finance*.
- Sihotang, M. K., & Hasanah, H. (2021, February). Islamic Banking Strategy In Facing The New Normal Era During The Covid 19. In *Proceeding International Seminar Of Islamic Studies* (Vol. 2, No. 1, pp. 479-485).
- Rafay, A., & Farid, S. (2019). Islamic banking system: a credit channel of monetary policy—evidence from an emerging economy. *Economic research-Ekonomska istraživanja*, 32(1), 742-754.
- Cameroon, R., Crisp, O., Patrick, H. T., & Tilly R. (1967). *Banking in the early stages of Industrialization: A study of Comparative Economic History*. New York: Oxford University Press.
- Hye, Q. M. A. (2012). Long Term Effect of Trade openness on economic growth in the case of Pakistan. *Quality & Quantity*, 46(4), 1137-1149.
- Imam, P., & Kpodar, K. (2016). Islamic Banking: Good for Growth? *Economic Modeling*, 59,387-401.
- De Gregorio, J., & Guidotti, P. E. (1995). Financial development and economic growth. *World Development*, 23(3), 433–448.
- Fase, M. M. G., & Abma, R. C. N. (2003). Financial environment and economic growth in selected Asian Countries. *Journal of Asian Economics*, 14(1), 11-21.
- Arestis, P., & Demetriades, P. (1997). Financial Development and economic growth: Assessing the evidence. *The Economic Journal*, 107(442), 783-799.
- Ali, S. (2014). Foreign Capital Flows and Economic Growth in Pakistan: An Empirical Analysis. *World Applied Science Journal*, 29(2), 193-201.
- Kenourgios, D., & Samitas, A. (2007). Financial Development and economic growth in a

- transition economy: Evidence for Poland. *Journal of Financial Decision Making*, 3(1), 35-48.
- Ali, M. A., & Hussain, T. (2017). Murabaha Perceptions OF Islamic Bankers: Case of Pakistan. *COMSATS Journal of Islamic Finance*, 2(2), 42-58.
- Bendjilali & Khan. 1995). Perpetual Modaraba and Musharaka Contracts: Problems of Application to Ongoing Enterprises, *Economic of Diminishing Musharakah*, CH. L. Working Paper No. 31., Jeddah, app.11-15.
- Ansari, S. (2014). *Islamic Banking in Pakistan: Past, Present and future*.
- Goaied, M, & Seifallah, S. (2010). *Financial Development and Economic Growth in the MENA Region: What about Islamic Banking Development*.
- Janjua, M. A. (2004). *History of the State Bank of Pakistan*. Karachi: SBP. Vol. 3(1977,1988), 2003 and Vol. 4(1988-2003), 2004 (Chapter on Islamization of Economy).
- Kalim, R., Mustaq, A., & Arshad, N.2016). *Islamic Banking and Economic Growth: A Case of Pakistan*. *Islamic Banking and Finance Review*, 3(1), 14-28.
- Lateef, A. W., Shukur, S., & Tajudin, A. A. (2017). Maqasid Al- Shariah in Ijarah (Leasing) Contract of Islamic Banking System. *Journal of Islamic Finance*,6(2),38-44.
- Ling, H.-Y., & Reichert, A. (2006). The Relationship between Economic Growth and Banking Sector Development. *Banks Bank Systems*, 1(2), 19-35.
- Nyazee, I. A. K. (2009). *Murabahah and the Credit Sale (Islamic Banking Series no. 2) (p. 49)*. Islamabad: Institute of Advanced Legal Studies.
- Saleem, S. (2007). *Role of Islamic Banks in Economic Development*



Assessment of Food Security and Its Implication on Urban Poor People in District Peshawar

***Afeera Saeed**, M.Phil. Scholar, the University of Agriculture Peshawar, Pakistan

Naaila Awan, Ph.D., Scholar, the Agriculture University Peshawar, Pakistan

Shabeer Ahmad, Scholar of Msc (hons), the University of Agriculture Peshawar, Pakistan

Shahrukh Inam, Scholar of Msc (hons), the University of Agriculture Peshawar, Pakistan

*Corresponding author's email: afeerasaeed@gmail.com

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ABSTRACT

Purpose: This study was carried out to address the issue of food security and the factors affecting it in the semi-urban area of district Peshawar, Khyber Pakhtunkhwa, Pakistan. More specifically the study reviewed the food security situation among urban poor households using their food expenditures patterns and further investigated its various dynamics.

Methodology: Data were collected with the help of interviewing techniques from randomly sampled 100 households in the Peshawar suburb. Household food security was assessed using the food security index adopted from Omonona (2007). Using the Omonona index, the threshold which differentiated the food secure from the food-insecure households in the study area was Rs. 1500 per month (i.e., 2/3 of mean food expenditure).

Findings: The result legitimized using the Omonona food security index as a smart indicator in determining food security status at the household level.

Implications: To help the urban poor in improving the situation of food security efforts are needed to enhance awareness of food security by promoting education regarding livelihood strategies, self-sustainability programs, and the importance of proper diet.



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Introduction

Food security issues have gained importance over the last few decades as it is not just about having enough production available in the markets. Recently it stands for ensured and sufficient food consumption for every individual, globally as well as on household level and national level too. Initially, "food security" was used to discuss the country that whether they have enough food to meet dietary energy necessities or produce enough food to meet its population demand. But the availability of food in the economy does not guarantee access to food and eating only calories does not mean achieving a healthy life. When measuring food security at the household or

national level, it has to address food access. This was widely recognized by scholars, globally. Basically, there are four pillars of food security i.e., availability, accessibility, utilization, and sustainability. There are endless 200 definitions and 450 food safety indexes which are given by different scholars working in different organizations agricultural economists, and nutritional all have a different concept of food security but its recognized definition was presented by FAO (1983) that defined food security as “Ensure that everyone has physical and economic access to the basic food they need at all times.” (Battersby, 2012).

The World Food Summit (1996) Definition suggests access to food, availability, use of food, and stability is used nowadays worldwide. Chambers and Conway (1992), focus on coping strategies to prevent food insecurity. In short, food security has emerged as a social and political issue (Iorlamen et al., 2014). In 2004, the right to adequate food security was realized under the FAO council.

Food Security

Food security is an evasive concept Barrett (2010) defined as Limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways.” (Titus & Adetokunbo, 2007).

Pakistan Food Insecurity

The issue of food security was not handled with much care which is reflected in various statements available in Pakistan from time to time. Few stated that Pakistan achieved food sustainability in the 1980s, (Bashir et al., 2007). Others were of the view that ‘despite the fact that Pakistan produces many exportable foods products but still out of thirteen million people 26 percent of its population is undernourished (FAO, 2008). These are mostly based and lived in Punjab with unexpectedly 70 percent of its lowliest population. To increase their lifespan standard, most of them are involved in deeds that are not so good and inappropriate from earning point of view. Such families suffer more from insecurity in food. Pakistan always neglects the issues of food security by focusing only on the production of goods and rural area status but not focusing on the consumption and affordability of goods to each Pakistanis household (Khan, et al., 2011; Asghar & Muhammad, 2013; Khan et al., 2018).

Pakistan Agricultural Services and Supplies Corporation (PASSCO) was founded in 1973 with the task of producing agricultural commodities with the help of new techniques, to ensure an easy supply of food at the country level, In 2006, 4.34 million tons of agrarian and eatables goods were supplied with such agencies (PASSCO and provincial food departments). In order to measure and assess the level of food security, the World Food Program (WFP) Pakistan took steps to explore the question of food security for rural Pakistan in 1986 and again in 2003. The final results concluded that a "state of food insecurity" dispersed in Pakistan

The Benazir Income Support Program (BISP) and the Food Support Program (FSP) are two major social security schemes arranged by the Pakistan Government to improve food access among poor people. In 2009, BSP was launched to upturn the financial capacity of the poor. The Food Support Program (FSP) was launched in 2002-2003 with the intention of refining the living standards of a poor households. About 1.25 million underprivileged families received aid. Survey of Pakistan 2007-2008).

Urban Household

Food security is an issue fundamentally present in urban poor as well as rural areas poor populations, especially in the developed countries. Today, scholars refereed urbanization as the “Global Population bomb” (Liotta & Miskel, 2013; Buhaug & Urdal, 2012). Generally, the urban population, at 53.6 % in 2014, is estimated to rise to 67.2 % in the future most expect to be in

2050 (UN, 2014), making countries shift their attention from the manufacture of a good to the intake of foods. Poor Countries also have a harmful impact due to increases in food prices (Alexandros, 2008)

OECD (2012) defined urbanization as an “A process when large numbers of people living in relatively small areas, forming cities where people are lacking access to safe and healthy food in terms of physical, social or economically”. This situation in turn diminishes and stopped the growth of actual urban people (Bort et al; 2002).

In the definition of UN-Habitat, urban poor is termed as “slums “which consist of any households lacking access to water, sanitation, having small rooms to live and so on. Recent estimates suggest that in 2014 there were 881 million people living in slums and a figure expected to reach 2 billion by 2030.

Urbanization and food availability

Urbanization and availability of food are linked to the arrangement of food consumption and the supply of food. Increasing numbers of megapolis mean that people living in a location that is not suitable for the production of food commodities will need to have more food. Usually, all metropolitan area households are net purchasers of food, because they cannot produce food to nourish their families and are unable to endure their good lifestyle (FAO, 2008).

Urbanization and Food Access

In the old days when a majority of people used to live in rural areas where food was produced, physical food access was not a big issue. However, people migrating to urban areas have constrained their accessibility to food as their money income is less to fulfill all needs when purchased at full prices. Like urban inhabitants have to buy good quality food instead of generating their own food from their own means and capacity and thus become prey to price spears. So income plays a significant role in determining whether food can be acquired and cannot afford to buy food at high prices. (Steven et, al 2014).

Urbanization and Food Utilization

Urbanite growth can have a major effect on a household's food security status. As normally food is grown in a rural area, an urban area is paying high prices for food. Sometimes they have to adjust other expenses to fulfill the basic everyday requirements of the family. Poor urbanity may have compromised with the low food quality in addition to a lack of awareness regarding nutrients value that also makes them prey to food insecurity. As a result, poor families in the sub-urban area are at risk of catching many diseases as well. Feeding on low-quality processed food by urbanites due to low affordability and accessibility to quality food has been reported common among urban poor people (Abu Hatab et al., 2019; Tacoli, 2019)/

Urbanization and Food Stability

Finally, stability of food for urban people is essential as it may also help in becoming prey to food insecurity and it is because of unavailability of food and high prices spears, natural tragedy, relocation to an urban area by poor people only, to gain better occupation and remunerations which lead to urban paucity. Because of the high rate of urban poverty, many risks to food insecurity, financial limitations on food, and the obtainability of food are predictable to remain greater in metropolitan areas than in countryside areas but, diminishing risk of food security may help countries to become more developed (Walker et, al 2010).

Significance of the study

This present study was expected to help to sort out factors and problems related to an urban poor household resident in Peshawar Khyber Pakhtunkhwa. This study helped whether food

consumption is important for them or whether living and coping with city life is more important this study also tell that affordability, nutrition, or availability of food is important for urban poor people what are their views whether they are aware of food security all the pillars or they are only trying to feed their stomach.

The research is useful because it would not only assess the food security issues with food expenditure patterns of urban poor people but also observed the awareness of food security among them as fewer studies have been done on urban poor households.

Statement of the Problem

Food security is a composite term reflecting its supply, affordability, nutrition value, and sustainability for all. Occasionally, it has been focusing on different aspects in different countries. Advanced countries mostly see it in terms of nutrition value and obesity issues etc., while for less developed countries it marks not only a shortage of food supplies but common man's inaccessibility due to low purchasing power, unemployment low incomes, and government aids schemes in a pursuit to address them. In developing countries like Pakistan, Bangladesh, and Nigeria the low purchasing power has been marked as a major concern for poor households in accessing food. Another important question is the unanimity on the tool to clearly determine the food security status of a household. Various organizations and researchers have measured it using diverse designs which occasionally blur the situation. As recently the economy has been transforming gradually from rural to urban, the present study tried to explore food security issues among poorer households living in the suburbs of the capital city of Khyber Pakhtunkhwa, Peshawar. It was further hypothesized that by living in an urban area poor people could face higher prices not only for food supplies but also for other needs such as water, electricity, transportation, schooling, health, etc. All these issues are highly integrated and amenable to research but the focus of this study remained on access to food through kitchen expenditure patterns in the study area. In this regard, the major aims of the study are discussed in the section below.

The study objectives

- To measure the household food security using a food security index.
- To suggest recommendations regarding the food security status of urban poor people based on findings of the study.

Literature Review

Food Security

Food security was highlighted as a significant question in the 1980s because of the food famine and accessibility problems that occurred in the 1970s. The UN declared it as the essential component for a good standard of living. As said earlier the first explanation was given by FAO. But Sen. A. (1981) changed the concept and opinion of food security and discuss it in terms of demand i.e., approachability of food to poor people, based on their right to feed. After Sen's work, some other indicators were introduced including ease of access to food in markets. The accessibility of food from markets to houses became a key concept worldwide.

(Maxwell 1996) Urban policy-makers don't report food security as for them it means to debate about the restricted economical means

Ejaz. 2009, found for rural Pakistan area, out of f Pakistan's 120 districts (for rural areas), only 40 are food-proof districts, while 80 are food-proof. 38 districts in these food-insecure districts suffer from severe food insecurity. Only Sindh's position is good in food security status as compared to other districts.

As we are also concerned about urban food security issues, the research emphasized by (Ahmed et al; 2007) in Bangladesh shows that only 12 of the 18 experimented countries that were unindustrialized countries had greater food insecurity levels than rural areas, despite the fact that their metropolitan household earns more wages. Bates (1981) argued that urbanity could advantage of social security in developing countries. Therefore, urban and rural poor people did not use a penny from these policies, and poverty, and food insecurity prevailed in the area.

Pakistan's Food Security Situation

In 2008, the Planning Commission of Pakistan took a step to overcome some food insecurity regions. BISP was formulated in 2008 with the allocation of Rs.34 billion, the programmer aimed to provide Rs.1, 000 per month to those families whose earnings are less than Rs.6, 000 who can't afford the basic necessities of life. According to the Economic Survey of Pakistan 2014-15, the budget of the program increased from 1.76 million to 5.0 million after 2015. It has been also concluded that deficiency of food would increase manifold year after year in Pakistan which clearly portrays the food insecurity issue.

Pakistan Household Economic Survey collected data by implying the food energy intake (FEI) indicator, to be Rs. 637.54 per person as the estimated official poverty line of the economy. (Economic Survey of Pakistan 2015-16). MNFSR stands for Ministry of National Food Security and Research was established on 26th October 2011 for the attainment of maximum food security level.

According to the report presented (2009) by the WFP world food program, 45 districts of Pakistan are included in food-insecure regions, it was doubled in 2009 when compared to 2003 survey data i.e (from 16 to 35) which make the position clear than obviously, the food secure districts are becoming less in Pakistan i.e. from 34 percent to 20 percent.

The world food program also evaluated KP regions Almost 6.3 million people which cover half of the population of KP, were observed to have less food intake, most people with less food depletion are found in the Malakand division (58 % and FATA 46 %. Of the total 6.3 million food-insecure people only, 1.3 million are included as being food insecure.

About 42 million people in Pakistan have a scarce income to consume a proper diet. The government of Pakistan has started Family Farmers Support program; ii) Income Generation Support Program, and iii) Nutrition Support Program., National Zero Hunger Program. The focus of these programs is to achieve aims like upgraded procedures to produce food, better food distribution, system, reducing starvation in the economy. (Economic survey 2016-2017)

Methodology

The provincial capital Peshawar was selected as the universe for the present study due to the fact that lately, a large number of people have migrated from other areas to Peshawar with various aims. Moreover, union councils 48 and 42 were purposively selected from Town-II Peshawar for the purpose of data collection through a questionnaire and interview. Using the random sampling method technique, the selection of responding households was completed using the formula by (Yamane, 2014);

$$n = \frac{N}{1 + Ne^2}$$

Where; n=sample Size
N=population size (191)
e=error margin (0.05)

Having a 5 percent error margin, a sample size of 114 was derived out of the total 191 households. Details are provided in table 1;

Table 1 The Details of Sampled Households by number, in the Study Area

Selected UC	Union Council	Total household	Sampled household
Darmangai(48)	Darmangai I	129	75
Gari sher dad (42)	Pirbala	62	25
	Total	191	100

Source: PBS census government of Pakistan (population and household detail from block to district level KP (Peshawar district) (2019)

Measurements of Food Security Status of Sampled Households

Theoretical Framework for Food Security Indexation

There are numerous methods mentioned in the literature to measure food insecurity, globally. This study uses the food insecurity index which was used by Omonona and Agoi. 2007 for the first time. It provided help to easily recognize the food secure from food-insecure households based on their food expenses. Zhou, et al (2019) used it to measure food insecurity incidence in Pakistan.

Omonona was of the view that measuring household food security at the household level is different from measuring the whole economy's point of view. As food security at the household level means having access to food by their own means i.e., either by producing better or by generating more income by different means which show the ability of household the way they utilize their own resources to pursue their activities thus achieving better food security status.

While measuring per capita at the national level doesn't ensure the accessibility of food to each citizen or each household. So here we take the food security at the household level as a subset of food security at the state level.

Thus, the household was divided into food secure and food insecure based on their per capita food expenditure which further investigated the factors socio-economic affecting food security/insecurity of a household in the area.

Omonona used this index to find the food insecurity incidence of the household as well concluded that 'finding food insecure households from minimum required food expenditure is an important indicator of combating food insecurity status.

Further "the *threshold of food security was defined on the criteria of a two-third of the mean per capita food expenditure of the total household's expense*".

Omonona's Food Security Index (adopted by this Study)

As discussed in the last sub-section, there were several indicators helping in finding whether a household is food secure or otherwise. The study adopted an indicator that was used by Omonona in 2007 and later on by Irolem R.K. 2014. The Index classifies a household's status into food secure and/or food insecure by measuring its food security by using the formula below;

$$F_i = \frac{\text{per capita food expenditure for the } i\text{th household}}{2/3 \text{ mean per capita food expenditure of all household}}$$

Where F_i = food security index

When $F_i \geq 1 \Rightarrow$ ith household is food secure

$F_i < 1 \Rightarrow$ ith household is food insecure.

According to Omonona "a household would be food secure if its food expenditure is

proportionately greater than at least by two-thirds of the mean per capita food expenditure per month when compared to sampled households". In this way, a food-insecure household is one that on average lies below table 2 two-thirds of the total food expenditures of the sampled area.

Table 2 Food security situation among urban poor people

Study area	Food secure	Food insecure	Total
Darmangi	28	47	75
Pirbala	15	10	25
Total	43	57	100

Results

Food Security Index Analysis Results

The food security status of households can be analyzed by using the food security index but keeping in mind, their mean per capita expenditure on food, but first, consider the expenditure on food items. i.e., the Average or mean per household was Rs.12953 and the maximum was Rs. 36000 with a standard deviation of Rs. 6866.37 per month.

Table 3 Food expenditure pattern of sampled household

Expenditure (Rs)	Darmangi	Pirbala	Total
< 10000	33	0	33
10000-20000	38	21	59
21000-30000	3	4	7
> 30000	1	0	1

Table 3 presented the data summary on household spending on food and its effect on household food security. The result in table 4.10.1 that 33% of the households spent less than RS 10000 on food. Also, about 59% and 7% of the households spend between RS 10000 to RS 20000 and more than 20000 respectively on food items. However, only 1% of the sampled households in the study area spent above RS 30000 on food per month. The result showed the average food expenditure of the households to stand at RS 12953.

Table 4 Summary of food security status in the study area

Expenditure (Rs.)	Darmangi	Pir Bala	Total
Total expenditure on food	847300	4480000	1295300
Mean per capita food expenditure	1503.99	746.51	2250.50
2/3 per mean capita expenditure of household	991.98	492.70	1500

2/3 of mean food expenditure=8635.33

The result in Table 4 shows that A food-secure household can be easily recognized if the household per capita food expenditure is equal to two-thirds of the mean per capita food expenditure i.e. if it spends 1500 or above 1500 rupees on each member of the household then that member is considered as food secure member of the household, in other words, we can simplify it that if the household attains the at least two-third of mean food expenditure of sampled household which is 8635.33 rupees than that household is food secure household. On the other hand, a food-insecure household can be considered if the household per capita food expenditure is less than two-thirds of the mean per capita food expenditure that is if it spends below rupees 1500 on each member of the household or if that household spends at least 8635.33 as 2/3 of mean food expenditure per month

Discussion

Food security is a severe problem prevailing in Pakistan and considered a top trending topic as well but unfortunately, academically less awareness exists about this problem. Though many programs were chalked-out in Pakistan on the policy level, to eradicate the problems little progress was seen practically in implementing them. Due to such carelessness and irresponsible perusal of such a sensitive issue, the situation is getting adverse currently.

Secondly, people eat what they want to eat without understanding the need for good quality and balanced food. As discussed earlier, production may not be the main issue in an agrarian economy of Pakistan but the purchasing power and access to food is an established problem due to poverty. It had been misconceived that poor people only belong to the rural areas but in this research, it was proved that urban poor are also suffering parallel to their rural counterparts. Occasionally more starved than the rural people who arranged to get food by keeping livestock or other natural sources found in forests for free. In urban areas, poor have to cope with many situations where due to fewer residential areas they can't keep livestock or hunt etc. In cities, their concern for food choices has been grounded in compromise with the urban lifestyle.

Conclusion and Recommendation

The study also concluded that the food security index can be easily applied to see the food security status at the household level. This will also give information on food expenditure patterns and non-food expenditures. Moreover, based on this specific study, the following recommendation and commendation were made: Self-sustaining programs for the family should encourage reducing the expenditure on the food of a household. Not only people should ensure to have something on the table, a more advanced family who is able to produce an additional income from home consumption, even minor income, can earn extra income. Further research is also required because the result currently presented may not be the proper representation of food security keeping in view food expenditures. Therefore, extending this study to cover other union councils and areas may be necessary.

Reference

- Abu Hatab, A., Cavinato, M. E. R., & Lagerkvist, C. J. (2019). Urbanization, livestock systems and food security in developing countries: A systematic review of the literature. *Food Security*, 11(2), 279- 299.
- Ahmed, A. U., Hoddinott, J. F., Roy, S., Sraboni, E., Quabili, W. R., & Margolies, A. (2016). *Which kinds of social safety net transfers work best for the ultra poor in Bangladesh? Operation and impacts of the transfer modality research initiative*. International Food Policy Research Institute.
- Alexandratos, N. (2008). Food price surges: possible causes, past experience, and longer term relevance. *Population and Development Review*, 34(4), 663-697.
- Asghar, Z., & Muhammad, A. (2013). Socio-economic determinants of household food insecurity in Pakistan.
- Battersby, J. (2012). Beyond the food desert: Finding ways to speak about urban food security in South Africa. *Geografiska Annaler: Series B, Human Geography*, 94(2), 141-159.
- Barrett, C. B. (2010). Measuring food insecurity. *Science*, 327(5967), 825-828.
- Bashir, M. K., Schilizzi, S., & Pandit, R. (2012). *The determinants of rural household food security in the Punjab, Pakistan: an econometric analysis* (No. 1784-2016-141882).
- Buhaug, H., & Urdal, H. (2013). An urbanization bomb? Population growth and social disorder in cities. *Global environmental change*, 23(1), 1-10.
- Chambers, R., & Conway, G. (1992). *Sustainable rural livelihoods: practical concepts for the 21st century*. Institute of Development Studies (UK).
- FAO, A. (2008). An introduction to the basic concepts of food security. *FAO, Rome, Italy*.
- Household Integrated Economic Survey. (2013-14). Government of Pakistan Statistics Division Pakistan Bureau of Statistics Islamabad May- 2015 www.pbs.gov.pk

- Iorlamen, T. R., Abu, G. A., & Lawal, W. L. (2014). Assessment of expenditure on food among urban households and its implication for food security: Evidence from Benue State, Nigeria. *African Journal of Food, Agriculture, Nutrition and Development*, 14(2).
- Liotta, P. H., & J.F Miskel. (2012). *The real population bomb: Megacities, global security & the map of the future*. Washington, DC: Potomac Book
- Khan, M. A., & Akhtar Ali Shah, S. (2011). Food insecurity in Pakistan: causes and policy response. *Journal of agricultural and environmental ethics*, 24(5), 493-509.
- Khan, Q., Umar Farooq, M., & Rizwan Yaseen, M. (2018). Socioeconomic Determinants of Food Security: Evidence from Jhang District of Punjab, Pakistan. *European Online Journal of Natural and Social Sciences: Proceedings*, 7(3 (s)), pp-109.
- Maxwell, S. (1996). Food security: a post-modern perspective. *Food policy*, 21(2), 155-170.
- Organisation for Economic Co-operation and Development. (2013). *OECD Regions at a Glance 2013*. OECD.
- Titus, B., & Adetokunbo, G. (2007). An analysis of food security situation among Nigerian urban households: Evidence from Lagos State, Nigeria. *Journal of Central European Agriculture*, 8(3), 397-406.
- Tacoli, C. (2019). The urbanization of food insecurity and malnutrition. *Environment and Urbanization*, 31(2), 371-374.
- Sen, A. K. (1981). *Poveny and Famines-An Essay on Entitlement and Deprivation*.
- Walker, R. E., Keane, C. R., & Burke, J. G. (2010). Disparities and access to healthy food in the United States: A review of food deserts literature. *Health & place*, 16(5), 876-884.
- World Food Summit, 1996. In *World Food Security* (pp. 347-360). Palgrave Macmillan, London.
- Zhou, D., Shah, T., Ali, S., Ahmad, W., Din, I. U., & Ilyas, A. (2019). Factors affecting household food security in rural northern hinterland of Pakistan. *Journal of the Saudi Society of Agricultural Sciences*, 18(2), 201-210.



Corporate Social Responsibility and Financial Performance in the Manufacturing Sector in Pakistan: Moderating role Gender Diversity of Board

Mahnoor Shafqat, Department of Business Administration, Fatima Jinnah Woman University Rawalpindi

***Huma Ayub**, Assistant Professor, Department of Business Administration, Fatima Jinnah Woman University Rawalpindi, Pakistan

*Corresponding author's email: huma_ayub@fjwu.edu.pk

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ABSTRACT

Purpose: The study examines the impact of corporate social responsibility on financial performance with the moderating role of gender diversity in the context of the manufacturing sector in Pakistan.

Design/Methodology/Approach: The study is quantitative by using secondary data from 33 manufacturing firms listed on the Pakistan stock exchange for the time of 2015-to 2020. CSR disclosure index is calculated through the content analysis technique. Traditional and market-based proxies are used to measure financial performance. The study used the Panel data analysis technique by employing the GMM model.

Findings: Results shows that corporate social responsibility positively influences the performance of firms, which implies that engagement in CSR will improve a firm's performance. Moreover, results reveal that gender diversity strengthens the relationship between corporate social responsibility and financial performance, which suggests that having female board members will benefit the firm to engage in CSR.

Implications/Originality/Value: The study is valuable for corporate executives for captivating the initiatives concerning CSR and gender diversity on boards.



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Introduction

The involvement in CSR initiatives has been long debated in contemporary literature that may influence the firm monetary performance but the results are still inconclusive (Irshad *et al*, 2021). Corporate social responsibility may result in cost-effective returns by expanding organizational brand value, increasing customer satisfaction, and increasing customer loyalty by altering its

buying behavior (Klein & Dawar, 2004; Mohr and Webb, 2005). CSR not only increases stakeholders' satisfaction but may also help in increasing the financial performance of the firm. For instance, consumer satisfaction would not only bring repeated purchases but they will also spread positive word of mouth, employee satisfaction would bring more motivation to workers that leading them to work more efficiently and effectively which ultimately increases the financial performance (Bouichou, Wang & Zulfiqar, 2022, Ali *et al*, 2021)).

CSR is a phenomenon that inspires organizations to add environmental and societal concerns to their firm's operations by taking part in the social expansion and voluntary activities to help in environmental projects (Kadlubek, 2015). There are a diversity of tactics and fields where businesses pay back to people by optimal use of water, reducing greenhouse gases, and taking control over waste management.

Board characteristics such as board size, independence, and gender diversity may be shaped in a way that has high priorities for societal and environmental responsibilities (Post, Rahman & Rubow, 2011). According to the resource dependence theory, board characteristics play an essential role in the implementation and formulation of a firm's strategic goals.

Among other board characteristics, Gender diversity gained more attention as literature supports that the female executives are more ethical and responsible for their duties as compared to males and are also socially and naturally responsible (Pucheta-Martinez & Gallego-Alvarez, 2019). Thus, female presence on the board may help in making decisions regarding corporate social responsibility or can inspire the board to engage in CSR activities (Javeed, Latief & Lefen, 2020) analyzed the impact of corporate social responsibility and financial performance with the moderating role of CEO power and ownership structure in the manufacturing sector of Pakistan. In this context, the current study aims to bridge the gap by investigating the relationship between corporate social responsibility and financial performance by considering gender diversity as a moderator in the manufacturing sector of Pakistan. The study focuses on firms in manufacturing industries as they are perceived to vigorously contribute to air and water pollution, as well as ecological disturbances.

There is limited research in the Pakistani context that uses the panel data analysis technique to determine the relationship between CSR and financial performance with the moderation role of gender diversity. Therefore this study is a pioneering study to highlight the missing moderating effect of gender diversity. Another novelty of this study is to use of rigorous methodology by considering accounting-based and market-based ratios of financial performance. The construction of a CSR index for manufacturing firms in the context of a developing country is another unique contribution of the study. The study aims to address the following two objectives;

1. To determine the relationship between corporate social responsibility and financial performance.
2. To identify whether gender diversity moderates the relation between corporate social responsibility and financial performance.

The research paper has been structured as follows; section 2 presents the literature review; Section 3 illustrates the theoretical framework; Section 4 discusses methodology; section 5 depicts the results and discussions followed by a conclusion and recommendations.

Literature Review

The contribution of CSR to firm performance is still a debatable topic. Theoretically, CSR initiatives may contribute to the financial results of firms by reducing the chance of a drop in the share price (Saeed, Noreen, Azam & Tahir, 2021) and improving the reputation of the firm with its stakeholders that may lower the transaction costs and make the access to information easier for conducive innovation (Bendell, 2005). Capital providers are also interested in buying shares of

companies with CSR initiatives that uphold the symmetry of information. Signaling theory supports that the firm with better CSR results is expected to issue CSR reports (Clarkson, Richardson & Vasvari, 2008).

Contrary to this, supporters of economic liberalism criticize the scheme to spread out business commitments beyond financial goals. Friedman (2007) and propagates (Saridakis, Angelidou & Woodside, 2020) support that the businesses are only accountable for practices aimed at growing their profit. They support the legitimacy of CSR as long as it is intended at increasing profitability by improving the corporate image. Investment in CSR initiatives may have negative implications for the financial health of firms by posing additional costs that may hinder short-term profitability.

In contemporary literature, various studies employ return on equity, return on assets, operational profit, and return on sales for determining financial performance. These studies have found a positive relationship between CSR and the financial performance of organizations by modifying firms' CSR investments as an optimistic-minded rationale (Karaye, Ishak & Che-Adam, 2014). Inoue and Lee (2011) also investigated the impact of CSR on financial performance by separating CSR into five dimensions using return on assets (ROA) and Tobin's Q and discovered that corporate social responsibility improves the financial performance of organizations. Ramzan, Amin & Abbas (2021) have also studied the impact of CSR on financial performance, financial inclusion, and financial stability in the banking sector of Pakistan. Their findings show a significant positive relation between CSR and the financial performance of banks, which shows that CSR makes a positive insight in the mind of consumers which supports attracting new customers that ultimately increased the financial performance of banks. Several studies found a positive relation between CSR and financial performance (Keffas & Olulu-Briggs, 2011).

Not all studies support positive outcomes for the impact of CSR on financial performance. The research of Brammer, Brooks, and Pavelin (2006) support a negative impact of CSR on financial performance, using stock returns as a measure of financial performance. Their results imply that engaging in CSR will lower the financial performance of a firm. Similarly, Szegedi, K., Khan, Y., & Lentner, C. (2020) studied the relationship between CSR practices and Tobin's Q in Thai and Pakistani firms and found a negative impact of CSR on the financial performance of the firm. Sayed, Malik, Ahmed & Ali, (2017) considered the impact of corporate social responsibility on financial performance variables (ROA, EPS, Tobin's Q, and price to earnings ratio) in the financial sector of Pakistan. The results show that there is no association between corporate social responsibility and financial variables, except ROE and Tobin's Q, which are negatively associated with CSR.

Malik and Nadeem (2014) considered the impact of CSR on the financial performance of the Pakistani services industry. The result supports that the banking sector of Pakistan is lagging in CSR initiatives. Schreck (2011) found no significant effects for the impact of CSR on financial performance using Tobin's Q and ROE as dependent measurable. However, when testing the particular effects of higher corporate governance and environmental management scores, the results showed significant improvements in Tobin's Q.

Based on the above discussion following hypothesis has been drawn;

H1: Corporate social responsibility positively influences the financial performance of firms in the manufacturing sector of Pakistan.

Board characteristics are increasingly recognized as influencers of organizations' financial performance. Board characteristics are one of the mechanisms of corporate governance. Corporations with good and noble corporate governance get the advantage of improved and

increased firms' financial performance (Claessens and Yurtogly, 2013). In the literature, the board size, board independence, diversity, and CEO duality were found as the most used characteristics of the board (Endrikat, Guenther & Titus (2020). Board independence positively affects organizations' CSR disclosure (Harjoto & Jo, 2011). According to De Villiers et al. (2011), independent members of the board are more focused on the long-term financial stability of a firm rather than on short-term financial performance. Moreover, board size positively influences the level of corporate social responsibility disclosure (De Villiers et al., 2011). The advantage of a bigger board size is that there must be more resources, information, knowledge, and expertise (Ahmadi, 2018). While Villiers (2011) adds that the bigger the board size the higher the probability of problems in corporate social performance. Board members might have the experience to cope with the hurdles of CSR and make better decisions regarding CSR contribution.

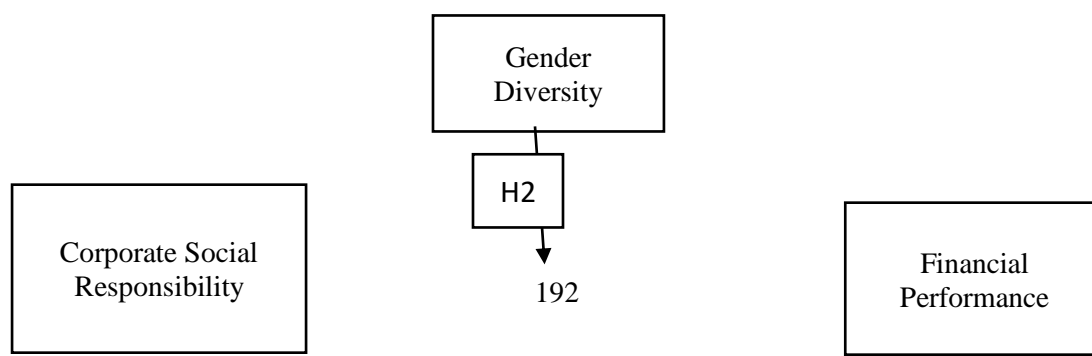
Various researchers found a significant relationship between firm performance and board characteristics (Kiel & Nicholson, 2003). Few have confirmed the direct correlation between high board members' independence and high firm performance (Kyereboah-coleman & Biekpe, 2006). At last, Coles et al. (2008) concluded that there's a positive relationship between board size and firm performance.

Several studies in the literature support that the Gender diversity i.e. having a female director on board plays a significant role in fostering social practices that may lead to an improved financial performance by improving the firm's value and reputation and enhancing the relationship between stakeholders has sustained increased attention in the firm (Rumery and Rogelberg, 1996; Lucke Rath Rover, 2013; Pucheta Martinez and Olicina Sempere, 2016). Research by Hafsi and Turgut (2013) supports that females are more responsible and sensitive about participating in CSR activities. Whereas, Bear, Rahman & Post (2010) state that a large number of females on a board upsurges the responsiveness of a firm in CSR contribution.

According to stakeholder theory, women's inclusion on the board of directors may be perceived positively by society as society or individuals feel that the firm is oriented towards stakeholders as they think that females are more concerned and engaged in CSR initiatives of the firm (Ibrahim and Angelidis, 1994). Moreover, Hillman, Cannella and Haris, 2002 and Larrieta-Rubín de Celis, Velasco-Balmaseda, Fernández de Bobadilla, Alonso-Almeida, & Intxaurburu-Clemente (2015) argue that women's inclusion on board as directors may raise CSR practices of firms as females are perceived as more explicit compared to male directors that may support the stakeholder's interest. Females on board are also perceived as capable of convincing firms to engage in social and environmental projects. Based on the above discussion following hypothesis has been drawn;

H2: Gender diversity moderates the relation between corporate social responsibility and the financial performance of firms in the manufacturing sector of Pakistan.

According to stakeholder theory, CSR increases financial performance as well as non-financial performance. Whereas, according to resource dependence theory, researchers focus on the impact of corporate governance on CSR.



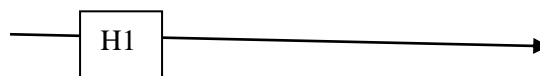


Figure 1 Theoretical framework

Methodology

This study uses a sample of thirty-three (33) manufacturing firms comprised of the textile industry, food and personal care product industry, and cement in the manufacturing sector listed on the Pakistan Stock Exchange from 2015-to 2020. The study uses secondary data from the companies' annual financial statements. It also takes into account two proxies of financial performance i.e. accounting and market-based measures. CSR disclosure is measured through the Content Analysis technique by using diverse unit analyses including sentences, word count, and pages. (Majeed & Saleem, 2015). A CSR instrument has been generated for this purpose using previous research in a similar area (Ehsan, Nazir, Nurunnabi, Raza, Tahir & Ahmed, 2018). The instrument contains 40 items and has been divided, for carrying out content analysis, into categories like environment-related issues, activities for employees, product/ services statements, other contributions, health sector contribution, and education sector contribution, and work during natural calamities.

The following model is selected to test the first hypothesis: i-e corporate social responsibility positively influences financial performance.

$$FP_{i,t} = \alpha_0 + \beta_1 CSRDI_{i,t-1} + \beta_x Controls_{i,t} + \epsilon_{i,t}$$

Where; FP = financial performance, CSRDI = CSR disclosure index, Controls = Firm size, sales growth, and leverage ratio. In line with the research of (Kabir and Thai, 2017) following model is selected to test the second hypothesis i.e. gender diversity moderates the relation between corporate social responsibility and financial performance.

$$FP_{i,t} = \alpha_0 + \beta_1 CSRDI_{i,t} + \beta_2 Board Size_{i,t} + \beta_4 Board Independence + \beta_6 Gender Diversity + \beta_7 CSRDI_{i,t} * GD_{i,t} + \beta_x Controls_{i,t} + \epsilon_{i,t}$$

Where; FP_{i,t} = Financial performance of firm, CSRDI_{i,t-1} = CSR disclosure index, CSRDI_{i,t} * GD_{i,t} = Moderating term of gender diversity, Controls_{i,t} = Firm size, sales growth and leverage ratio

Measurement of the variables

Corporate Social Responsibility

According to the literature, past scholars has used different methods to measure CSR. Liu and Zhang (2017) has used content analysis technique for the measurement of CSR. Content analysis is studying an organization's websites, annual reports and defining a particular term, for instance, corporate social responsibility. While using content analysis techniques, the more the particular term is used in the reports or websites, the higher will be the corporate social responsibility performance of the particular firm. This research also used content analysis to measure CSR.

For the measurement of CSR, a CSR instrument is created in line with (Cowen, Parker & Ferrari, 1987; Nazir, 2011; & Guthrie, 1990). CSR disclosure includes 40 statements and is divided by the categories used for the content analysis.

Following are the categories that are carried out for content analysis.

1. Communal wellbeing.
2. Education and health sector.
3. Environment and energy significance.
4. Goods/service and consumers.
5. Labor force.

Every organization is coded for these five categories for 6 years and with 40 items. If the single item mentioned in the CSR disclosure is reported in the yearly report of the firm in a specific year is coded and "1" and if not is coded as "0", lastly the scores are added to get the final score of the

specific organization.

Financial Performance

Financial performance is one of the main variables in this study as the research is conducted to find whether a higher CSR performance would improve the firms' financial performance. This research uses Return on Equity (ROE), Return on Assets (ROA) as the accounting-based proxies and Stock Return and Tobin's Q as market-based proxies for the measurement of financial performance.

Table 1 Measurements of the variables

Variable name	References	Measurement
Corporate Social Responsibility	Ehsan, Nazir, Nurunnabi, Raza, Tahir & Ahmed (2018)	CSR disclosure index
Financial Performance		
Return on Equity	Kabir & Thai, 2017	Net income / stockholder's equity
Return on Assets	Wang & Sarkis, 2017	Net income / total assets
Tobin's Q	Harjoto & Jo, 2011	(Market value of equity + book value of liabilities) / book value of total assets
Stock Return	Kabir and Thai, 2017	((Stock price year-end – stock price year start + dividend) / stock price year start)
Board Characteristics		
Board Size	(Chang, Oh, Park & Jang, 2017).	Total number of board members
Board Independence	Jo & Harjoto (2012)	Number of independent directors / total number of board members
Gender Diversity	(Chang, Oh, Park & Jang, 2017).	Number of female board members / total board members
Control Variables		
Firm Size	Inoue & Lee, 2011	Natural logarithm of total assets
Sales Growth	Wang & Sarkis, 2017	Percentage change in sales
Leverage Ratio	Wang & Sarkis, 2017	Total debt / total assets

Results and Analysis

Descriptive Statistics and Correlation Analysis

Table 2 shows the summary statistics i.e. mean, the standard deviation of variables of the study.

Table 2 Descriptive Statistics

Variables	Mean	Std. Dev	Min	Max
CSRDI	17.89	11.22	0	40
ROA	6.339	11.20	-47.63	38.11
ROE	3.144	9.881	-3.967	65.98
SR	18.26	69.88	-74.57	436.6
TQ	11.05	47.80	1.000	350.7
BS	8.136	1.458	6	12
BI	.2232	.1452	.0833	.8571
GD	.1034	.1117	0	.4285
SG	6.985	53.02	-94.55	691.1
LR	3.469	45.94	-216.6	121.8
FS	23.29	1.454	19.00	25.66

Correlation Analysis Table 3 shows the correlation between the variables which is significant at 0.05 level which shows that there is no problem of multi-collinearity.

Table 3 Pearson correlation

	CSRDI	BS	BI	GD	SG	LR	FS
CSRDI	1.00						
BS	-0.048	1.00					
BI	-0.033	-0.073	1.00				

GD	0.140*	-0.084	-0.006	1.00			
SG	-0.009	-0.010	-0.012	0.027	1.00		
LR	-0.064	-0.104	0.013	-0.080	0.005	1.00	
FS	0.460*	-0.015	-0.177*	-0.074	-0.029	0.318*	1.00

Note; Obs. =198; *. Correlation is significant at 0.05 level (2-tailed).

Regression results

Endogeneity test is carried out after the regression of instrumental variables to check whether there is an Endogeneity problem in the data exist or not. Table 4 presents the p values of Durbin and Wu-Hausman test are 0.0029 and 0.0033 which shows that the problem of endogeneity exists in the data and the null hypothesis is rejected. To solve the problem generalized method of moments (GMM) is used.

Table 4 Endogeneity Test

Durbin (score) chi2 (1) = 13.9884 (p =0.0029)
Wu-Hausman F (3,187) = 4.73852 (p =0.0033)

Table 5 shows the results of the Arellano-Bond (1991) GMM estimator and Hansen-J statistics. The null hypothesis of this test implies that all of the instruments are valid if the p value is greater than 0.05. The table 5 shows that the p value of Hansen-J stats is 0.069 which is greater than 0.05, implies that all instruments are valid.

Table 5 GMM

Arellano-Bond test for AR(2) in first differences	0.934
Hansen-J test of over-identifying Restrictions	0.069

Model I & II in table 6 shows the results by considering accounting base measures of short-run firm performance i.e. ROA and ROE. The result shows that the proxy of CSR i.e. CSRDI has a significant positive impact on firm performance i.e. ROA ($\beta =0.28$, $t=1.87^*$) and for ROE ($\beta =0.08$, $t=2.35^{**}$). The results are robust with market based performance measures i.e. Tobin's Q and Stock Return as shown in Model III and IV. CSRDI has a significant positive impact on firm performance Tobin's Q i.e. ($\beta =0.62$, $t=15.19^{***}$) and for Stock Return ($\beta =0.87$, $t=2.34^{**}$). Based on results, hypothesis H1 is supported. According to the stakeholder's theory, corporate social responsibility improves financial performance as well as non-financial performance. When organizations participate in environmental welcoming customs like contributions in CSR ultimately give benefits to business leaders and will improve the organization's survival competencies and social acceptability. Furthermore, these results suggest that corporate social responsibility could enhance and improve the financial stability of Pakistani firms. In the Pakistani context, the results of this study imply that contributions in the activities of corporate social responsibility will enhance the financial performance of Pakistani firms.

Model I & II in table 6 shows the results of gender diversity which shows significant positive relationship with all the proxies of firm performance. The result shows that the proxy of CSRDI*GD has a significant positive impact on firm performance i.e. ROA ($\beta =0.73$, $t=4.51^{***}$) and for ROE ($\beta =0.98$, $t=1.97^{**}$). The results are robust with market based performance measures i.e. Tobin's Q and Stock Return as shown in Model III and IV. CSRDI has a significant positive impact on firm performance Tobin's Q i.e. ($\beta =0.08$, $t=2.77^{***}$) and for Stock Return ($\beta =0.74$, $t=2.72^{***}$). The results of this study depict that gender diversity significantly moderates the relationship between CSR and financial performance. According to the resource dependence theory, female executives are more ethical and responsible for their duties as compared to males and are also socially and naturally responsible (Pucheta-Martinez & Gallego-Alvarez, 2019). Thus, females may help in making decisions regarding corporate social responsibility or can inspire the board to engage in CSR activities. The finding of this study implies that the financial performance of Pakistani firms is improved by having a member of diverse gender on the board.

A firm's having a female board of directors is likely to contribute more to CSR as compared to others as the dependence theory depicts that female managers are more responsive to their duties and act ethically as compared to males and are also socially and naturally responsible. Thus, having females as board members could help Pakistani firms in making decisions regarding corporate social responsibility or can inspire the board to engage in CSR activities.

The results of control variable firm size shows that there is a significant positive impact of firm size on firm performance i.e. with ROA model ($\beta = 0.59$, $t = 5.55^{***}$) and for ROE model ($\beta = 0.63$, $t = 1.73^*$). The results are robust with market based performance measures i.e. Tobin's Q and Stock Return as shown in Model III and IV. Firm Size has a significant positive impact on firm performance Tobin's Q i.e. ($\beta = 0.88$, $t = 3.42^{***}$) and for Stock Return ($\beta = 0.75$, $t = 4.74^{***}$). This result is in line with the work of Inoue and Lee (2011).

The results of control variable Leverage ratio shows that there is a significant negative impact of firm size on firm performance i.e. with ROA model ($\beta = -0.03$, $t = -1.93^*$) and for ROE model ($\beta = 0.00$, $t = 0.29$). The results are robust with market based performance measures i.e. Tobin's Q and Stock Return as shown in Model III and IV. Firm Size has a significant positive impact on firm performance Tobin's Q i.e. ($\beta = 0.00$, $t = 0.19$) and for Stock Return ($\beta = -0.33$, $t = -1.91^*$). This result is in line with the work of Inoue and Lee (2011) who also argue that a high leverage ratio will lead to problems for supervisors about participating in CSR opportunities. Hence, this may have a negative impact on financial performance.

The results of control variable sales growth shows that there is a significant positive impact of firm size on firm performance i.e. with ROA model ($\beta = 0.05$, $t = 10.23^{***}$) and for ROE model ($\beta = 0.01$, $t = 2.11^{***}$). The results are robust with market based performance measures i.e. Tobin's Q and Stock Return as shown in Model III and IV. Firm Size has a significant positive impact on firm performance Tobin's Q i.e. ($\beta = 0.00$, $t = 0.48$) and for Stock Return ($\beta = 0.02$, $t = 1.14$). This result is in line with the work of Inoue and Lee (2011).

Table 6 Generalized Methods of Moments

Variables	ROA Model I		ROE Model II		Tobin's Model III		Stock Return Model IV	
	β	t-stats	β	t-stats	β	t-stats	β	t-stats
CSRDI	0.28	1.87*	0.08	2.35**	0.62	15.19***	0.87	2.34**
BS	0.50	1.73*	0.35	1.93*	0.25	0.48	0.21	2.26***
BI	-0.07	-0.69	-0.58	-7.65***	-0.68	-5.87***	-0.42	-0.06
GD	0.412	4.23***	0.92	1.90*	-0.25	-1.27	-0.14	-1.42
CSRDI*GD	0.73	4.51***	0.98	1.97**	0.08	2.77***	0.74	2.72***
FS	0.59	5.55***	0.63	1.73*	0.88	3.42***	0.75	4.74***
SG	0.05	10.23***	0.01	2.11***	0.00	0.48	0.02	1.14
LR	-0.03	-1.93*	0.00	0.29	0.00	0.19	-0.33	-1.91*
ROA(-1)	0.46	5.09***						
ROE(-1)			0.72	37.40***				
TQ(-1)					0.23	34.06***		
SR(-1)							0.23	4.18***

Note; ***, ** and * represents the significance level at 1%, 5% and 10%

Lastly, table 7 shows the summary of the hypothesis.

Summary of Hypothesis

Table 7 Hypothesis Accepted or Rejected

S.no	Hypothesis	Accepted / Rejected
1.	Corporate social responsibility positively influences financial performance	Accepted
2.	Gender diversity moderates the relation between corporate social responsibility and financial performance	Accepted

Conclusion and Recommendations

This paper examines the impact of CSR on the Financial Performance of manufacturing sector firms. Moreover, the moderating role of gender diversity has been examined. Based on stakeholder's and resource dependence theory results are still inconclusive. Results of this study confirms a positive relationship between corporate social responsibility and financial performance. The findings of this research help manufacturing sector industries to engage more in CSR as it leads to enhance their financial performance. Furthermore, gender diversity strengthen the relationship between corporate social responsibility and financial performance.

This research has policy implications for managers, researchers, and policymakers. There is a need of making a policy regarding corporate social responsibility by an advisory method including gender diversity, independent members of the board, academia, shareholders, all board members, and the stakeholder's group, as the opinion from several groups will benefit in recognizing the promising need for development in CSR in Pakistan and will cope with the challenges in making policy that needs attention.

References

- Ahmadi, A., Nakaa, N., & Bouri, A. (2018). Chief Executive Officer attributes, board structures, gender diversity and firm performance among French CAC 40 listed firms. *Research in International Business and Finance*, 44, 218-226.
- Ali, W., Danni, Y., Latif, B., Kouser, R., & Baqader, S. (2021). Corporate Social Responsibility and Customer Loyalty in Food Chains—Mediating Role of Customer Satisfaction and Corporate Reputation. *Sustainability*, 13(16), 8681.
- Arellano, M., & Bond, S. (1991). Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. *The review of economic studies*, 58(2), 277-297.
- Bendell, J. (2005). In whose name? The accountability of corporate social responsibility. *Development in Practice*, 15(3-4), 362-374.
- Brammer, S., Brooks, C., & Pavelin, S. (2006). Corporate social performance and stock returns: UK evidence from disaggregate measures. *Financial management*, 35(3), 97-116.
- Bear, S., Rahman, N., & Post, C. (2010). The impact of board diversity and gender composition on corporate social responsibility and firm reputation. *Journal of business ethics*, 97(2), 207-221.
- Chang, Y. K., Oh, W. Y., Park, J. H., & Jang, M. G. (2017). Exploring the relationship between board characteristics and CSR: Empirical evidence from Korea. *Journal of Business Ethics*, 140(2), 225-242.
- Claessens, S., & Yurtoglu, B. B. (2013). Corporate governance in emerging markets: A survey. *Emerging markets review*, 15, 1-33.
- Clarkson, P. M., Li, Y., Richardson, G. D., & Vasvari, F. P. (2008). Revisiting the relation between

- environmental performance and environmental disclosure: An empirical analysis. *Accounting, organizations and society*, 33(4-5), 303-327.
- Coles, J. L., Daniel, N. D., & Naveen, L. (2008). Boards: Does one size fit all?. *Journal of financial economics*, 87(2), 329-356.
- De Villiers, C., Naiker, V., & Van Staden, C. J. (2011). The effect of board characteristics on firm environmental performance. *Journal of Management*, 37(6), 1636-1663.
- Ehsan, S., Nazir, M. S., Nurunnabi, M., Raza Khan, Q., Tahir, S., & Ahmed, I. (2018). A multimethod approach to assess and measure corporate social responsibility disclosure and practices in a developing economy. *Sustainability*, 10(8), 2955.
- Endrikat, J., Guenther, T. W., & Titus, R. (2020). Consequences of strategic performance measurement systems: A meta-analytic review. *Journal of Management Accounting Research*, 32(1), 103-136.
- Friedman, M. (2007). The social responsibility of business is to increase its profits. In *Corporate ethics and corporate governance* (pp. 173-178). Springer, Berlin, Heidelberg.
- Hafsi, T., & Turgut, G. (2013). Boardroom diversity and its effect on social performance: Conceptualization and empirical evidence. *Journal of business ethics*, 112(3), 463-479.
- Henderson, D. (2001). Misguided virtue: False notions of corporate social responsibility.
- Hillman, A. J., Cannella Jr, A. A., & Harris, I. C. (2002). Women and racial minorities in the boardroom: How do directors differ?. *Journal of management*, 28(6), 747-763.
- Ibrahim, N. A., & Angelidis, J. P. (1994). Effect of board members gender on corporate social responsiveness orientation. *Journal of Applied Business Research (JABR)*, 10(1), 35-40.
- Id Bouichou, S., Wang, L., & Zulfiqar, S. (2022). How Corporate Social Responsibility boosts corporate financial and nonfinancial performance: The Moderating role of Ethical Leadership. *Frontiers in Psychology*, 2091.
- Inoue, Y., & Lee, S. (2011). Effects of different dimensions of corporate social responsibility on corporate financial performance in tourism-related industries. *Tourism management*, 32(4), 790-804.
- Irshad, S., Khakwani, M. S. Khalid, U. & Kouser. R., (2021). Gauging the Sustainability of Corporatized State-Owned Enterprises (SOEs) in Pakistan. *Sustainable Business and Society in Emerging Economies*, 3 (4), 567-580
- Javeed, S. A., Latief, R., & Lefen, L. (2020). An analysis of relationship between environmental regulations and firm performance with moderating effects of product market competition: Empirical evidence from Pakistan. *Journal of Cleaner Production*, 254, 120197.
- Jo, H., & Harjoto, M. A. (2011). Corporate governance and firm value: The impact of corporate social responsibility. *Journal of business ethics*, 103(3), 351-383.
- Kabir, R., & Thai, H. M. (2017). Does corporate governance shape the relationship between corporate social responsibility and financial performance?. *Pacific Accounting Review*, 29(2), 227-258.
- Kadłubek, M. (2015). The essence of corporate social responsibility and the performance of selected company. *Procedia-Social and Behavioral Sciences*, 213, 509-515.
- Karaye, Y. I., Ishak, Z., & Che-Adam, N. (2014). The mediating effect of stakeholder influence capacity on the relationship between corporate social responsibility and corporate financial performance. *Procedia-Social and Behavioral Sciences*, 164, 528-534.
- Keffas, G., & Olulu-Briggs, O. V. (2011). Corporate social responsibility: How does it affect the financial performance of banks? Empirical evidence from US, UK and Japan. *Journal of management and corporate governance*.
- Kiel, G. C., & Nicholson, G. J. (2003). Board composition and corporate performance: How the Australian experience informs contrasting theories of corporate governance. *Corporate governance: an international review*, 11(3), 189-205.
- Klein, J., & Dawar, N. (2004). Corporate social responsibility and consumers' attributions and brand evaluations in a product-harm crisis. *International Journal of research in Marketing*, 21(3), 203-217.
- Kyereboah-Coleman, A., & Biekpe, N. (2006). The relationship between board size, board composition,

- CEO duality and firm performance: Experience from Ghana. *Corporate Ownership and Control*, 4(2), 114-122.
- Larrieta-Rubín de Celis, I., Velasco-Balmaseda, E., Fernández de Bobadilla, S., Alonso-Almeida, M. D. M., & Intxaurburu-Clemente, G. (2015). Does having women managers lead to increased gender equality practices in corporate social responsibility?. *Business Ethics: A European Review*, 24(1), 91-110.
- Liao, P. C., Xia, N. N., Wu, C. L., Zhang, X. L., & Yeh, J. L. (2017). Communicating the corporate social responsibility (CSR) of international contractors: Content analysis of CSR reporting. *Journal of Cleaner Production*, 156, 327-336.
- Lückerath-Rovers, M. (2013). Women on boards and firm performance. *Journal of Management & Governance*, 17(2), 491-509.
- Malik, M. S., & Nadeem, M. (2014). Impact of corporate social responsibility on the financial performance of banks in Pakistan. *International Letters of Social and Humanistic Sciences*, 10(1), 9-19.
- Majeed, S., Aziz, T., & Saleem, S. (2015). The effect of corporate governance elements on corporate social responsibility (CSR) disclosure: An empirical evidence from listed companies at KSE Pakistan. *International Journal of Financial Studies*, 3(4), 530-556.
- Mohr, L. A., & Webb, D. J. (2005). The effects of corporate social responsibility and price on consumer responses. *Journal of consumer affairs*, 39(1), 121-147.
- Post, C., Rahman, N., & Rubow, E. (2011). Green governance: Boards of directors' composition and environmental corporate social responsibility. *Business & society*, 50(1), 189-223.
- Pucheta-Martínez, M. C., Bel-Oms, I., & Olcina-Sempere, G. (2016). Corporate governance, female directors and quality of financial information. *Business Ethics: A European Review*, 25(4), 363-385.
- Pucheta-Martínez, M. C., & Gallego-Álvarez, I. (2019). An international approach of the relationship between board attributes and the disclosure of corporate social responsibility issues. *Corporate Social Responsibility and Environmental Management*, 26(3), 612-627.
- Ramzan, M., Amin, M., & Abbas, M. (2021). How does corporate social responsibility affect financial performance, financial stability, and financial inclusion in the banking sector? Evidence from Pakistan. *Research in International Business and Finance*, 55, 101314.
- Rogelberg, S. G., & Rumery, S. M. (1996). Gender diversity, team decision quality, time on task, and interpersonal cohesion. *Small group research*, 27(1), 79-90.
- Sabatier, M. (2015). A women's boom in the boardroom: effects on performance?. *Applied Economics*, 47(26), 2717-2727.
- Saeed, A., Noreen, U., Azam, A., & Tahir, M. S. (2021). Does csr governance improve social sustainability and reduce the carbon footprint: International evidence from the energy sector. *Sustainability*, 13(7), 3596.
- Saridakis, C., Angelidou, S., & Woodside, A. G. (2020). What type of CSR engagement suits my firm best? Evidence from an abductively-derived typology. *Journal of Business Research*, 108, 174-187.
- Sayed, S., Malik, I. R., Ahmed, M., & Ali, M. (2017). Does corporate social responsibility improve the firm's financial performance: a theoretical perspective of agency and stakeholder theory by financial sector of Pakistan. *Journal of Contemporary Management Sciences*, 3, 137-156.
- Schreck, P. (2011). Reviewing the business case for corporate social responsibility: New evidence and analysis. *Journal of Business Ethics*, 103(2), 167-188.
- Szegedi, K., Khan, Y., & Lentner, C. (2020). Corporate social responsibility and financial performance: Evidence from Pakistani listed banks. *Sustainability*, 12(10), 4080.
- Wang, Z., & Sarkis, J. (2017). Corporate social responsibility governance, outcomes, and financial performance. *Journal of cleaner production*, 162, 1607-1616.
- Wu, C. M., & Hu, J. L. (2019). Can CSR reduce stock price crash risk? Evidence from China's energy industry. *Energy Policy*, 128, 505-518.



Analyzing the Demographic Differences in Context of Financial Literacy: Evidence from Quetta City

***Maliha Kasi**, MS Scholar/ Lecturer, Department of Management Sciences Balochistan University of Information Technology, Engineering and Management Sciences, (BUITEMS) Quetta, Pakistan

Noor Muhammad, Professor, BUITEMS Quetta, Pakistan

Bilal Sarwar, Professor, BUITEMS Quetta, Pakistan

*Corresponding Author's Email: maliha.kasi@buitms.edu.pk

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ABSTRACT

Purpose: This paper is aimed to analyze a set of demographic variables in the context of financial literacy. A person possessing the knowledge, skills, and abilities on financial matters can be considered financial literate. It is imperative to have such skills for efficient management of financial resources. Numerous demographic and socio-economic factors jointly determine the extent of financial literacy.

Design/Methodology/Approach: The study is based on the analysis of primary data collected from the residents of Quetta city. Demographic and socio-economic factors are considered independent variables, while financial literacy is dependent. The Analysis of Variance (ANOVA) tests the hypotheses formulated to test demographic differences.

Findings: The salient findings of this research are that Age, personal education, and monthly earnings have a significant difference in the context of financial literacy. However, parents' education and the monthly income of households have an insignificant association with financial literacy.

Implications/Originality/Value: Financial literacy is crucial for financial inclusion, but it has a broad-spectrum impact on enhancing personal financial decisions to society's economic wellbeing of society. This research is significant to the government for forming policies for financial inclusion, financial consumer protection, and financial education. It is also of significance to learning institutions in assessing the discrepancies in the education system and building strong money management skills. And will be of assistance for researchers for a further detailed study on this phenomenon and its impact on other factors



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Introduction

One can narrowly define financial literacy as knowledge, skills, and abilities in financial matters. Financial literacy is considered a fundamental skill for people working in a complex environment, as the management of financial resources is significantly related to the financial wellbeing of any individual. Schagen and Lines (1996) defined financial literacy as the ability of an individual to manage money by making informed and effective decisions. Generally, financial literacy has been measured by using only the items related to financial knowledge or financial education (Huston, 2010). Presently, there is a consensus among the researchers that financial literacy is not confined merely to financial knowledge only. It has a broader perspective on the present situation (Faulkner, 2015; Hung, Parker, & Yoong, 2009; OECD/INFE, 2015). The Organization for Economic Co-operation and Development (OECD/INFE) and International Network on Financial Education (OECD/INFE) defined financial literacy as "a combination of awareness, knowledge, skills, attitude, and behavior necessary to make sound financial decisions and ultimately achieve individual financial wellbeing" (OECD/INFE, 2015, p. 5).

Financial literacy is essential for financial inclusion, but it has a broad-spectrum impact on enhancing personal financial decisions and ultimately improving society's economic wellbeing of society. Financial literacy is a prime component for bridging the gap of financial inclusion, as it assists individuals in understanding and making fundamental financial decisions.

In Pakistan, people lack basic financial knowledge and have a poor understanding of the operation of financial markets (Bashir, Arshad, Nazir, & Afzal, 2013). As a result, young people cannot even manage their expenses (Ahmed, Kashif, & Ali, 2016).

This study aims to explore the impact of demographic and socio-economic factors on financial literacy in the city of Quetta. The primary motivation behind this research is the relative scarcity of literature on this topic in Pakistan generally and Balochistan specifically. This paper is organized in the following pattern. After the introductory section, the second section is dedicated to the literature review, adopted methodology and estimation techniques are presented in the third section, and results and findings are presented in the fourth section. In contrast, the last section of the paper is dedicated to the conclusion.

Literature Review and Hypotheses

Reifner and Herwig (2003) stated that due to globalization, many consumers could not manage their finances properly due to the increasing complexity of financial services, causing social delinquency of over-indebtedness. To understand the short-term and long-term financial affairs and at the same time accomplish financial stability and financial security, one needs to depend on the basics of financial knowledge, which intensifies the urge for financial education as a political and economic agenda for government and policymakers. Financial literacy is required for almost all activities, including daily transactions via credit card, evaluating investment alternatives, and saving for future retirement.

The National Council on Economic Education (NCEE) gave the first definition of financial literacy in 1999 via a survey in the United States. According to NCEE, a financially literate person is acquainted with basic economic principles and knowledge about the economy (cited in Oanea & Dornean, 2012). Later, Lusardi (2008) stated that for an individual to be financially literate, one must know some essential economic terms, like compounding interest, real and nominal value, and have knowledge about risk diversification. Hilgert, Hogarth, and Beverly (2003) defined financial literacy in the context of the financial aspects of daily life by households.

In most previous studies, financial literacy was measured as financial education or financial knowledge only (Huston, 2010; Lusardi & Mitchell, 2014; Robb & Sharpe, 2009). Several researchers consider this description as a narrow definition of financial literacy. Later, Huston (2009, 2010) stated that financial literacy should consist of two essential facets: know-how of personal finance that is possessing financial

knowledge, and use of personal finance, which is the application of financial knowledge. Ghaffar and Sharif (2016) used financial knowledge as a proxy for financial literacy to study the impact on personal saving or personal wellbeing in Karachi, Pakistan. Oanea and Dornean (2012) viewed financial literacy as the amalgamation of financial knowledge about critical economic terms, interest, real and nominal value, ability to understand information, use the knowledge for proper financial planning, and awareness of financial consequences. In another study by Sucuahi (2013), financial literacy of micro-entrepreneur was measured by mean of four fundamental facets such as skills necessary for record keeping, saving behaviours, budgeting and the ability to obtain capital from outside internal sources.

The problem with these definitions was that financial literacy was not operative for comparing different countries. Thus, proceeding studies evaluated the term financial literacy borrowing to the definition of financial literacy provided by the OECD. According to OECD, financial literacy comprises three constructs: financial attitude, financial behavior, and financial knowledge. But on a general level, the Organization of Economic Co-operation and Development (OECD/INFE) and the International Network on Financial Education (OECD/INFE) explored the variables by which the financial literacy of different countries or cultures could be evaluated. The variables considered to measure financial literacy were financial knowledge, financial skills, and financial attitude (Atkinson & Messy, 2012). Later, Gupta and Madan (2016) adopted the same constructs for determining India's level of financial literacy. Potrich, Vieira, and Mendes-Da-Silva (2016) used it in the Brazilian context.

Financial literacy is considered very important and beneficial as it is not meant to make people financial experts. Instead, such a literacy program aims to enhance individuals' financial decision-making. Prior researchers explored that those financially illiterate individuals save less and borrow more money. They can also not understand mortgage costs and usually borrow money at higher rates (Kefela, 2011). They are also incapable of saving correctly for their retirement plan (Van Rooij, Lusardi, & Alessie, 2011).

Thus, Financial literacy is vital for making an informed choice. It helps people manage personal budgets, savings, debt management, financial negotiations, proper knowledge, and bank services and investment decisions (Lusardi, 2008). Atkinson and Messy (2012) emphasized that by improving the level of financial literacy, the financial system could be more efficient, and the development of the economy would be smooth.

Awais, Laber, Rasheed, and Khursheed (2016) analyzed the determinants affecting individuals' investment decisions in the context of Pakistan. According to their study, investment decisions are influenced by the level of financial literacy of the individuals. Ghaffar and Sharif (2016) state that by enhancing financial literacy level, personal savings by the individuals could be increased, which in turn at the macro level leads to benefit the economy of a nation and the wellbeing of society.

Ahmed et al. (2016) analyzed the determinants of students' financial literacy living in a hostel. The study's focus was on non-business students who are not even familiar with the basic concepts of financial management. The results showed that non-business students from higher education institutions did not even know credit cards, ATMs, etc. While discussing the same financial management questions from the focus group students, it was observed that each group had different views about financial literacy. Groups that had minimum knowledge about finances learned from their parents and siblings to properly manage their finances. Those who had friends and family working for another organization or had their businesses could manage finances.

Naeem (2016) investigated the level of financial literacy among bachelor students in Islamabad-Pakistan. It was observed that there was a very slight difference between the level of financial literacy of 1st-semester students and final semester students, which depicted that there is a need for proper impartment of knowledge about managing finance to students. On the contrary, females were better regarding financial literacy.

Atkinson and Messy (2012) collected data from fourteen countries within 4 continents. The variation in the level of financial literacy due to socio-demographic variables were analyzed. Demographic factors that are education level, work status, income, attitudes towards risk, and income stability were assessed. The study results showed varied results of different countries among these variables. Further, the results represented a lack of financial knowledge among these countries. Although financial attitude and financial behavior showed promising results, there was scope for improvement. Further, it was concluded that a low level of education and income were associated with a low level of financial literacy.

The determinants of financial literacy level among the employees of Kenya port authority were analyzed by Mbarire and Ali (2014). The authors' objective was to analyze how well equipped the employees were to make financial decisions. It was concluded that gender influences the financial literacy level, and interestingly their research suggested that females are more financially literate than males. Also, people aged between 30-40 years were considered to possess a higher financial literacy level than others. As supported by previous studies, there was a positive correlation between education and financial literacy. Further, socio-economic factors such as occupation type and personal income were not related to financial literacy.

Another study in India analyzed the socio-demographic determinants of financial literacy among young urban workers. It showed that both men and women have a low level of financial knowledge in India. The study further elaborated that woman tend to possess poor financial behavior than men. In contrast, men were perceived to have a poor financial attitude (Agarwalla, Barua, Jacob, & Varma, 2015).

Potrich, Vieira, and Kirch (2015) investigated the impact of socio-economic and demographic variables on financial literacy in the Brazilian context. The analysis revealed a relationship of financial literacy with educational level, mother's educational level, individual income, and family income. It was also concluded that the parental educational level and occupation do not significantly correlate with financial literacy. It was observed that women, less education, and family income possessed a low level of financial literacy.

Sarigül (2014) investigated the level of financial literacy and its relationship with the personal characteristics of university students in the Konya-Turkey. It was concluded that financial literacy is low among university students of Konya. It was also observed that female students possessed less knowledge than male students.

Tóth, Lančarič, and Savov (2015) researched the students of different departments (Economics major and non-Economics major) studying at Slovakia university. The data was collected from 608 students through a questionnaire related to interest, risk management, financial market, and personal finance. The results show that students with a higher level of education scored higher in financial literacy, and departments that were economics focused also possessed a higher level of financial literacy. However, among the four areas of financial literacy, only personal finance did not change with the change in the level of education and significance they selected.

In Japan, Kadoya and Khan (2016) researched to investigate the factors that affect the level of financial literacy. Their analysis was based on three theories, i.e., social learning theory, consumer socialization theory, and psychological theory. Linear regression was applied, and it was concluded that males were observed to be more financially literate. Age, education, and spouse education also positively affected financial literacy, while parents' education was insignificant in determining financial literacy. Among socio-economic factors, income, assets, and respondents with working experience in finance positively impacted financial literacy. However, employment status did not impact, but occupation slightly impacted financial literacy.

The following hypotheses are postulated based on our research questions:

H₁: There is a significant difference between age and financial literacy.

H₂: There is a significant difference between an individual's education level and financial literacy.

H₃: There is a significant difference between individual fathers' education level and financial literacy.

H₄: There is a significant difference between an individual mother's education level and financial literacy.

H₅: There is a significant difference between personal income level and financial literacy.

H₆: There is a significant difference between family income level and financial literacy.

Theoretical Background

Life Cycle Theory

The life cycle hypothesis by Modigliani and Brumberg (1954) assumes that individuals tend to maximize their wellbeing by making decisions related to consumption and saving. There is a steady dispersal of consumption over the life cycle. It is stated that people save more when they earn more than their basic need for future consumption in old age when they will not be able to earn money.

Based on this theory, financial literacy is supposed to be increasing with age up to a certain level. As a person reaches retirement age, it is believed to diminish (Agarwalla et al., 2015). Similarly, the income level also has a direct association with financial literacy. Individuals with higher incomes have higher financial literacy. To smoothen future spending, individuals try to save or invest it for post-retirement requirements (Agarwalla et al., 2015; Brown & Graf, 2013; Lusardi & Mitchell, 2014; Potrich et al., 2015).

Social Learning Theory

Social learning theory is the amalgamation of cognitive and behaviorist learning theories. It states that an individual's behavior is influenced by the social context, i.e., people learn from observing the behavior of others (Kadoya & Khan, 2016). The financial attitudes and values are influenced by the company people have and the environment they are surrounded by (Mbarire & Ali, 2014).

The theory proposes that people acquire skills, knowledge, and attitudes from the behavior of others such as parents, peers, schools, etc. (Moschis & Churchill Jr, 1978), which significantly affects our financial literacy (Kadoya & Khan, 2016, p. 3). Lachance and Choquette-Bernier (2004) stated that young people learn basic financial knowledge through observation, parental communication, and trial and error.

Martin and Bush (2000) used social learning theory to analyze financial behavior. They state that it plays an essential role in explaining the behavior modeling used in training programs like financial literacy to

yield desired behavior (Kimunduu, Erick, & Shisia, 2016). Thus, social learning theory is based on the concept of cognitive and social surroundings impacts on the behavior and attitude of individuals.

Methodology

The study is based on the analysis of primary data collected from the residents of Quetta city. The Analysis of Variance (ANOVA) is used to explore the significance of the demographic variables used in the study.

This study aims to observe the general phenomenon in a local context; therefore, convenience sampling was an appropriate technique. Convenience sampling is a category of nonprobability sampling. This sampling method collects data from easily accessible individuals (Dörnyei, 2007).

Respondents of the current study were adults residing in the Quetta district, and a sample of 390 participants was approached to explore the research questions of the present study. The study was quantitative, so primary data was collected through a self-administered questionnaire. In this study, to measure financial literacy, each construct is measured by using a Likert scale to find the proper results for the tests to be applied.

Financial attitude and behavior constructs are measured using a Likert scale (Agarwalla et al., 2015; Atkinson & Messy, 2012; Kadoya & Khan, 2016; Mbarire & Ali, 2014; Potrich et al., 2015; Potrich et al., 2016).

Results and Discussion

The data collected consisted of variant information of the respondents. A measure is reliable if the value of Cronbach's alpha is more than 0.70. Another essential consideration in reliability is to check the correlation among variables, which is depicted by the item-total correlation value by being higher than 0.30 (Field, 2009; Hair, Black, Babin, & Anderson, 2010).

The normality test is based on two critical factors are Skewness and Kurtosis. In behavioral studies, it is suggested to estimate the skewness and kurtosis of data. The range of value for Skewness and Kurtosis is from +2 till -2 (George & Mallery, 2008; Weisstein, 2002a, 2002b). The reliability and normality assumption are satisfied, as all values are within an acceptable range.

The mean values of financial literacy for each variable category and the F value and significance for the ANOVA test are given in Table 1.

The results of Analysis of Variance illustration that financial literacy is significantly different among the age groups [$F = 7.909$, $p = .000$]. A review of the mean plot stipulates that financial literacy is higher among respondents age less than 34 years than other age groups.

Further, Post-hoc comparisons using the Tukey HSD test showed that the mean score for respondents aged less than 34 years was significantly higher for age groups 35-54. The respondent's age group, 35-54 years, was found to have an insignificantly lower mean score than less than 34 years. Lastly, respondents aged 35-54 years had an insignificantly lower mean score than respondents of less than 34 years.

Financial literacy was significantly different based on the level of education [$F = 3.905$, $p = .009$]. Financial literacy was observed to be highest amongst those who were highly educated.

The Post- hoc comparisons showed that an individual's education level above 18 years mean score was significantly higher than those who had done only middle schooling, intermediate, and bachelor.

The results for father's educational level and financial literacy were not significantly different, [F = 1.779, p = .151]. Also, financial literacy was not significantly different among the mother's educational levels. As the results for analysis of Variance were [F = 0.306, p = .821].

The results for financial literacy showed significant difference among various levels of personal monthly income, [F = 22.943, p = .000]. The mean plot depicts that financial literacy increases with personal monthly income.

The Post-hoc test further unveils that the financial literacy, the mean score was significantly higher at income level (Rs. 50,001-100,000) and (Above Rs. 100,000) alongside those who do not have personal income.

The mean score for financial literacy was lowest for those who do not possess any source for family income. Whereas the results for financial literacy were not found to be significantly different among family monthly income levels, [F = 0.468, p = .705].

From the present study's findings, it could be analyzed that the mean score for variable age is highest for age group less than 34 years. However, age and financial literacy are opposite in other age groups, i.e., as the age of individuals increases, their financial literacy decreases. The results were observed were not similar to previous studies (Lusardi & Mitchell, 2011; Potrich et al., 2015; Van Rooij et al., 2011), in which evidence displayed that Financial Literacy increases as age increase up to a certain age and after that, it starts to diminish. Although in this study, financial literacy was observed to be increasing with age till 34, whereas it is supposed in prior studies that mid-aged individuals up to age 30-40 are more financially literate than all other age groups (Atkinson & Messy, 2012; Lusardi & Mitchell, 2011).

Hence, it was alleged that young and older adults tend to have a low level of financial literacy. In contrast, middle-aged people were considered to possess a high level of financial literacy. This phenomenon was reliant on the Life cycle theory, which reveals that individuals tend to smooth their spending patterns throughout their lives (Friedman, 1957; Modigliani & Brumberg, 1954).

Table 1. Mean and F value for Financial Literacy

Variable		Mean	Standard Deviation	F Value	Sig.
Age	18 – 34	10.346	1.382	7.909	.000
	35 – 54	9.647	1.682		
	55 – or above	10.183	1.294		
Personal Education	0 – 10	9.568	1.622	3.905	.009
	11 – 12	9.586	1.091		
	13 – 16	10.118	1.486		
Father's Education	18 – onwards	10.401	1.485	1.779	0.151
	0 – 10	10.163	1.395		
	11 – 12	9.777	1.507		

	13 – 16	10.170	1.581		
	18 – onwards	10.374	1.476		
	0 – 10	10.156	1.493		
Mother's Education	11 – 12	10.184	1.474		
	13 – 16	10.326	1.263	0.306	0.821
	18 – onwards	10.013	1.892		
	0-20,000	9.666	1.644		
Personal Monthly Income	20,001-50,000	9.085	1.430		
	50,001-100,000	10.674	1.403	22.943	.000
	Above 100,000	11.362	1.815		
	0-20,000	10.016	1.304		
Family Monthly Income	20,001-50,000	10.101	1.276		
	50,001-100,000	10.281	1.365	0.468	0.705
	Above 100,000	10.212	1.737		

Whereas, one cause that the results of this study do not comply with the previous research might be that age is considered the only determinant of financial literacy that does not have a linear relationship with financial literacy (Potrich et al., 2015). Another reason might be that the young respondents were more familiar with the terms used for evaluating financial literacy than the older respondents.

The results of this study regarding the effect of personal education on financial literacy follow the prior studies (Atkinson & Messy, 2012; Isomidinova & Singh, 2017; Lusardi & Mitchell, 2011; Potrich et al., 2015).

However, parents' education did not turn to have a significant impact on the level of finances, which Jorgensen (2007) portrayed to have a significant impact on an individual's financial literacy.

For this study, the influence of personal monthly income on the level of financial literacy was strong among three significant variables. That signifies that financial literacy increases as income increases, which is again backed by life cycle theory. When people earn more, they invest or save it for future spending (Mwathi, Kubasu, & Akuno, 2017).

The results for personal monthly income and financial literacy were in line with the prior studies (Atkinson & Messy, 2012; Potrich et al., 2015), but contrary to the results of (Mbarire & Ali, 2014), which portrayed no significant relationship among personal monthly income on financial literacy level. Finally, the family income was insignificant to the level of financial literacy.

Conclusion

The structure of the financial system of a country depends on the level of financial literacy. Which grounds a dire need for studying various aspects of this phenomenon. 5.1 The mean score of financial literacy appeared to be increasing with an increase in personal education and personal monthly income. However, the mean score for financial literacy decreased by increasing the age above 30 years of respondents.

Limitation and Future Recommendations

There are several limitations to this study. Firstly, the data was collected through convenience sampling, which might limit the expanded results of the study. Second, most people were reluctant to fill out the

questionnaire as no such research background was available. Moreover, uneducated respondents could not fill out the questionnaire, which restricted their prevalence in the study.

This study helps identify the critical factors that affect financial literacy. However, more in-depth research could be conducted to determine the reason for such effects so that good policies could be established to educate those who are low in financial literacy.

References

- Agarwalla, S. K., Barua, S. K., Jacob, J., & Varma, J. R. (2015). Financial Literacy among working young in urban India. *World Development*, 67, 101-109.
- Ahmed, F., Kashif, M., & Ali, I. (2016). Financial Literacy Among Students: A Case of Higher Education Institution, Pakistan. *RADS Journal of Social Sciences & Business Management*, 3(2), 27-40.
- Atkinson, A., & Messy, F.-A. (2012). Measuring financial literacy.
- Awais, M., Laber, M. F., Rasheed, N., & Khursheed, A. (2016). Impact of Financial Literacy and Investment Experience on Risk Tolerance and Investment Decisions: Empirical Evidence from Pakistan. *International Journal of Economics and Financial Issues*, 6(1).
- Bashir, T., Arshad, A., Nazir, A., & Afzal, N. (2013). Financial literacy and influence of psychosocial factors. *European Scientific Journal*, ESJ, 9(28).
- Brown, M., & Graf, R. (2013). Financial literacy and retirement planning in Switzerland. *Numeracy*, 6(2), 6.
- Dörnyei, Z. (2007). *Research methods in applied linguistics: Quantitative, qualitative, and mixed methodologies*: Oxford University Press.
- Faulkner, A. E. (2015). A systematic review of financial literacy as a termed concept: More questions than answers. *Journal of Business & Finance Librarianship*, 20(1-2), 7-26.
- Field, A. (2009). *Discovering statistics using SPSS*: Sage publications.
- Friedman, M. (1957). *A Theory of the Consumption*. Princeton University Pres.
- George, D., & Mallery, P. (2008). *SPSS for Windows Step-by-Step: A Simple Guide and Reference 16.0 Update*: Allyn & Bacon, Inc.
- Ghaffar, S., & Sharif, S. (2016). The level of financial literacy in Pakistan.
- Gupta, J., & Madan, D. M. (2016). An Empirical Study on Financial Literacy Level of Salaried Females in Delhi. *Pacific Business Review International*, 9(4), 19-25.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis*: Pearson, Upper Saddle River.
- Hilgert, M. A., Hogarth, J. M., & Beverly, S. G. (2003). Household financial management: The connection between knowledge and behavior. *Fed. Res. Bull.*, 89, 309.
- Hung, A., Parker, A. M., & Yoong, J. (2009). Defining and measuring financial literacy.
- Huston, S. J. (2009). Measuring Financial Literacy. SSRN. doi:<http://dx.doi.org/10.2139/ssrn.1945216>
- Huston, S. J. (2010). Measuring financial literacy. *Journal of Consumer Affairs*, 44(2), 296-316.
- Isomidinova, G., & Singh, J. S. K. (2017). Determinants of financial literacy: a quantitative study among young students in Tashkent, Uzbekistan. *Electronic Journal of Business & Management*, 2(1), 61-75.
- Jorgensen, B. L. (2007). Financial literacy of college students: Parental and peer influences. Virginia Tech.

- Kadoya, Y., & Khan, M. (2016). What determines financial literacy in Japan?
- Kefela, G. (2011). Implications of financial literacy in developing countries. *African Journal of Business Management*, 5(9), 3699.
- Kimunduu, G., Erick, O., & Shisia, A. (2016). A Study on the influence of Financial Literacy on Financial Performance of Small and Medium Enterprise in Ruiru Town, Kiambu County, Kenya.
- Lachance, M. J., & Choquette-Bernier, N. (2004). College students' consumer competence: a qualitative exploration. *International Journal of Consumer Studies*, 28(5), 433-442.
- Lusardi, A. (2008). Financial literacy: an essential tool for informed consumer choice? Retrieved from
- Lusardi, A., & Mitchell, O. S. (2011). Financial literacy around the world: an overview. *Journal of pension economics & finance*, 10(4), 497-508.
- Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of economic literature*, 52(1), 5-44.
- Martin, C. A., & Bush, A. J. (2000). Do role models influence teenagers' purchase intentions and behavior? *Journal of consumer marketing*, 17(5), 441-453.
- Mbarire, T. T., & Ali, A. I. (2014). Determinants of financial literacy levels among employees of Kenya Ports Authority in Kenya. *Research Journal of Finance and Accounting*, 5(16), 44-52.
- Modigliani, F., & Brumberg, R. (1954). Utility analysis and the consumption function: An interpretation of cross-section data. *Franco Modigliani*, 1, 388-436.
- Moschis, G. P., & Churchill Jr, G. A. (1978). Consumer socialization: A theoretical and empirical analysis. *Journal of marketing research*, 599-609.
- Mwathi, A. W., Kubasu, A., & Akuno, N. a. R. (2017). Effects of Financial Literacy on Personal Financial Decisions among Egerton University Employees, Nakuru County, Kenya. *International Journal of Economics, Finance and Management Sciences*, 5(3), 173.
- Naeem, K. (2016). Financial Literacy of Social Sciences Students: A Case Study of International Islamic University-Islamabad. *IJAEDU-International E-Journal of Advances in Education*, 2(5), 326-331.
- Oanea, D.-C., & Dornean, A. (2012). Defining and measuring financial literacy. New evidence from Romanian students of the master in finance. *Annals of the Alexandru Ioan Cuza University-Economics*, 59(2), 113-129.
- OECD/INFE. (2015). OECD/INFE toolkit for measuring financial literacy and financial inclusion. Retrieved from http://www.oecd.org/daf/fin/financial-education/2015_OECD_INFE_Toolkit_Measuring_Financial_Literacy.pdf
- Potrich, A. C. G., Vieira, K. M., & Kirch, G. (2015). Determinants of Financial Literacy: Analysis of the Influence of Socioeconomic and Demographic Variables. *Revista Contabilidade & Finanças*, 26(69), 362-377.
- Potrich, A. C. G., Vieira, K. M., & Mendes-Da-Silva, W. (2016). Development of a financial literacy model for university students. *Management Research Review*, 39(3), 356-376.
- Reifner, U., & Herwig, I. (2003). Consumer education and information rights in financial services. *Information & Communications Technology Law*, 12(2), 125-142.
- Robb, C. A., & Sharpe, D. L. (2009). Effect of personal financial knowledge on college students' credit card behavior.
- Sarigül, H. (2014). A survey of financial literacy among university students. *Muhasebe ve Finansman Dergisi*(64).

Schagen, S., & Lines, A. (1996). Financial literacy in adult life: a report to the Natwest Group Charitable Trust: NFER.

Sucuahi, W. T. (2013). Determinants of financial literacy of micro entrepreneurs in Davao City. *International Journal of Accounting Research*, 1(1), 44-51.

Tóth, M., Lančarič, D., & Savov, R. (2015). Impact of education on the financial literacy: a case of Slovakia.

Van Rooij, M., Lusardi, A., & Alessie, R. (2011). Financial literacy and stock market participation. *Journal of Financial Economics*, 101(2), 449-472.

Weisstein, E. W. (2002a). Kurtosis. Retrieved from <http://mathworld.wolfram.com/Kurtosis.html>

Weisstein, E. W. (2002b). Skewness. Retrieved from <http://mathworld.wolfram.com/Skewness.html>



The Impact of Capital Structure and Ownership Structure on Financial Performance: A Study on the KSE-100 Listed Firms in the Pakistan Stock Exchange

***Jamal Shah**, Research Scholar, Institute of Management Sciences (IMS), University of Balochistan, Quetta, Pakistan

Jameel Ahmed, Assistant Professor, Institute of Management Sciences (IMS), University of Balochistan, Quetta, Pakistan

Nadir Khan, Assistant Professor, Institute of Management Sciences (IMS), University of Balochistan, Quetta, Pakistan

*Corresponding author's email: jamalkhan431@gmail.com

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ABSTRACT

Purpose: This research study aimed to examine the impact of capital structure and ownership structure on the financial performance of KSE-100 index firms on the Pakistan Stock Exchange.

Design/Methodology/Approach: 100 listed companies have been selected as sample for the study but due to data limitations, 90 companies' annual data has been used for 2009-2018. Ordinary least square regression was used on the panel data for analysis. Two measures of capital structure (debt-to-equity ratio and debt to total assets) while three measures of ownership structure (Foreign ownership, Institutional ownership, and managerial ownership) have been used to determine their impact on three financial performance measures (return on assets, return on equity, and Tobin's).

Findings: The results of this study showed that there is a significant negative relationship between financial performance and capital structure. Ownership structure and firm financial performance showed a significant positive relationship when measured on the basis of foreign ownership and institutional ownership while insignificant and negatively related to managerial ownership.

Implications: This study suggests that organizations should take financing decisions in accordance with optimum capital structure because more debt decreases financial performance. Furthermore, a decision should be taken the encouragement of foreign and institutional shareholding, while the level of managerial ownership should be lessened to enhance financial performance.



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Introduction

Capital and ownership structure are significant elements that have the potential to influence companies' performance (Berger & Patti, 2006). The capital structure contains long and short-term debt decisions along with equity financing with the intention to achieve the most favorable capital structure for the organization. The capital structure decision is required when a company is newly established or when the organization needs expeditious funds for operations or new projects. The chief financial officer or financial manager of a corporation is assessing the advantages in addition shortcomings of different sources of funds before choosing the best alternative while predicting the optimum capital structure. The literature shows that an optimum capital structure maximizes the organization's total market value or minimizes the overall cost.

The debate concerning the conception of the relation between capital structure and company valuation was initiated by the paper "the cost of capital, corporate finance and the theory of investment" presented by (Modigliani & Miller, 1958), they determined that firm valuation is not relevant to the capital structure, but this supposition was based on an impractical assumption of perfect market competition. After summarizing many studies, it was suggested that factors affecting capital structure depend on variables including tangibility, tax shields on depreciation, size, external threats, advertising, etc. (Harris & Raviv, 1991; Rajan & Zingales, 1995). Therefore, it was examined that capital structure decisions should be investigated to determine their effects on the company's valuation (Pandey, 2004). The relation of capital structure with financial performance was examined in quoted companies from 6 sectors in Pakistan. Results found that business performance has a significant relationship with financial structure (Basit & Hassan, 2017).

The connection between ownership structure and financial performance gives significant consideration in the literature of finance (Jiang, 2004). Ownership structure was defined as the quantity of shares held by managers, executives, institutes, government and overseas stockholders, households, etc. (Ezeoha & Okafor, 2010). The effect of ownership structure on an organization's financial performance is significant while making decisions regarding financing and investment. It is a reality that larger investors could have a substantial position to influence the organization's performance and they affect it through methods, processes, and actions taken by management as per their needs and wants. Therefore, the structure of ownership besides capital structure dominantly affects a company's financial performance.

The association between ownership structure and organizational valuation was introduced and examined by (Berle & Means, 1932). They proposed that firms with an extensive distribution of shareholding tend to perform lesser than expected. Many researchers identified that ownership structure positively affected company performance, while other studies show the confirmation of this link (Kanga & Shivdasani, 1995; Gedajlov & Shapir, 1998; Thomsen & Pedersen, 2000). The research was carried out in Pakistan to examine the relationship between ownership structure, excess control, and business governance on the financial performance of companies. The outcomes indicated that one of the dominant factors that affect firm performance is ownership structure (Ullah, Ali, & Mehmood, 2017).

Performance measurement is defined as the process of conversion of the sophisticated results of performance into organized symbols (Lebas, 1995). Without measuring the results and outcomes it is difficult for the company to estimate growth and stability. Therefore, organizational performance enhancement requires some dimensions to identify the level an organization uses its resources that

affects business performance (Sharma & Gadenne, 2002). Firm performance shows the result of decisions and activities taken by a manager in the operations of the business.

In Pakistan previously researchers studied the relationship between capital structure and financial performance in the specified sector of companies listed on the Pakistan stock exchange like the food, sugar, and textile sector, etc. while others work on determinants and factors of capital structure that affects financial performance (Akhtar, Bakhsh, Ali, & Kousar, 2019; Badar & Saeed, 2013; Muhammad, Shah, & ul Islam, 2014). Contradictory results were found when this relationship was empirically analyzed by scholars. The mentioned limitations stimulate new investigations on the relation between capital structure and financial performance. The literature shows that researchers when determining the effect of ownership structure on company performance, repeatedly emphasizes on shareholding concentration, and managerial and institutional ownership (Ullah, Ali, & Mehmood, 2017; Yasser & Al Mamun, 2015; Wahla, Zulfiqar Ali Shah, & Hussain, 2012). While no single study was found in Pakistan examining the effect of foreign ownership on financial performance. Due to severe growth in foreign investment, foreign ownership in recent times has begun to play a vital role in developing countries.

In this paper, we investigate the impact of capital structure and ownership structure on the financial performance of companies listed on the KSE-100 index of the Pakistan Stock Exchange. Our study provides the first attempt to track the relationship between foreign ownership and financial performance of Pakistani listed companies along with other variables over such a long duration.

The remainder of the paper is arranged as follows. Section 2 will provide a review of related literature on the relations between capital structure, ownership structure, and a firm's financial performance along with hypothesis and empirical models. Section 3 describes the research methodology in terms of research design, data collection and variables of the study, sampling, and research analysis tools. Section 4 analyses the empirical results of the study while Section 5 concludes the paper with final remarks on our findings along with the theoretical as well as practical implications.

Literature Review

Both capital structure and ownership structure have an impact on business performance. The relation between capital structure and company value is described by the efficiency risk hypothesis. The efficiency risk hypothesis stated that better performance companies might use debt funding to avoid changes in the structure of shareholders (King & Santor, 2008).

Capital structure and Firm Financial Performance

Capital structure has been observed as one of the important factors that affect a firm's financial performance (Gambo, Ahmad, & Ahmad, 2016).

It was investigated that higher leverage leads to competing organizations being more aggressive while making investment decisions (Brander & Lewis, 1986). Similarly, in India, it was examined that capital structure was negatively related to business performance (Majumdar & Chhibber, 1999). The research was conducted on 77 listed organizations on Dhaka Stock Exchange and resulted in financial structure significantly affecting business performance as well as showing a strong positive correlation (Chowdhury & Chowdhury, 2010). When the analysis was applied to the financial data of 237 corporations quoted in the Bursa Malaysian Stock Exchange, over the period of 1995 to 2011 resulted that debt shows negative relation to profitability but growth indicated a positive linkage with performance (Salima & Yadav, 2012).

The research was conducted on Nigerian firms and found that profitability and leverage were negatively related to each other (Oino & Ukaegbu, 2015). Analysis was made on the data of Vietnamese companies

for 2007-2012 for investigation of the relation between capital framework and company performance. The results of the study show a strongly significant negative relation between firm performance and all leverage measures (Le & Phan, 2017).

In Pakistan Capital Structure & Firm Performance

The effect of capital structure on organizational profitability was investigated on 94 quoted companies on the Islamabad Stock Exchange (ISE) from 1999-2004. The study used regression analysis besides Pearson's correlation. It was found that financial structure significantly impacts firm profitability (Raheman, Zulfiqar, & Mustafa, 2007). After analysis, it was found that the company's performance and leverage were significantly but negatively related (Amjed, 2011). The research was performed on the engineering sector of Pakistan and revealed that company debt and business performance show a significant negative relation when measured by Tobin's Q and ROA (Khan, 2012)(Imran & Kouser 2019, Kouser et al. 2012)

The research was conducted on 213 non-financial companies quoted on the Karachi Stock Exchange (KSE) to measure the influence of capital structure on financial performance. Major sectors indicate a significant negative influence of current and non-current debt on financial performance (Kanwal, Shahzad, Rehman, & Zakaria, 2017). The motive of the analysis was to examine how corporate governance and capital structure affect an organization's performance. They used pooled regression method on the annual record of automobile & fertilizer sectors. Results indicated a negative effect was found on capital structure and performance in both sectors (Ahmed, Talreja, & Kashif, 2018).

Ownership structure and Firm Financial Performance

The relation between organizational financial performance and ownership structure is a subject matter of most researchers in the literature on finance. As the financial performance of a company depends on the decisions of shareholders, therefore different categories of stockholders were previously studied in the literature.

Scholars begin to study the influence of ownership structure on financial performance turning backward in 1968 (Kamerschen, 1968; Monsen, Chiu, & Cooley, 1968). Participations by other researchers in this relation include (Jensen & Meckling, 1976; Williamson, 1988; Hart, 1995), which leads to the theory of separation between stockholders and management. Empirically it was found that there was a positive effect of firm performance on institutional ownership (Leech & Leahy, 1991; Xu & Wang, 1999). It was investigated whether firms having foreign ownership perform better than those having a domestic shareholding in Turkish organizations listed on Istanbul Stock Exchange (ISE) in Turkey (Aydin, Sayim, & Yalaman, 2007).

Managerial and family ownership relates significantly to corporate performance while using regression analysis. Results show that firm performance decreases when managerial ownership increases (Amran & Ahmad, 2013). The effect of corporate performance and ownership structure was examined in the property and real estate sector in Indonesia by using a sample of 240 observations during 2010-15. Results show that both institutional and managerial ownership has a negative relationship with financial performance (Saleh, Zahirdin, & Octaviani, 2017).

The study investigated the effect of foreign ownership on a company's financial performance in India and found that foreign ownership has a significant positive relationship with firm performance (Shrivastav & Kalsie, 2017). Institutional shareholders decrease the agency costs due to the close monitoring and supervision of the performance. Results discover a positive correlation between company financial performance with institutional ownership. The research presumed that companies having high institutional ownership can perform better than others in the industry (Yahaya & Lawal, 2018). Institutional ownership has a significant relationship with financial performance while inside

ownership (managerial) shows insignificant relation when panel data regression was used on Indonesian companies (Rasyid & Linda, 2019).

In Pakistan Ownership Structure & Firm Performance

The study investigated the impact of ownership structure on financing decisions by utilizing managerial and institutional stockholders. Results show that managerial ownership has a significant negative while institutional ownership shows a positive impact on capital structure (Hassan & Butt, 2009).

Managerial and concentrated ownership were used to represent stockholders' ownership and examined a significant negative relation between managerial ownership and performance while financial performance indicated insignificant relation with concentrated shareholding (Wahla, Shah, & Hussain, 2012). Analyses were made to examine the influence of ownership structure on organizational performance. Results indicated that institutional and managerial ownership has a significant and negative relationship on Tobin's Q, while insignificant relation was found on return on Assets (Ali, Shah, & Jan 2015).

The study examined that company shareholding is a dominant aspect that affects financial performance in Pakistan. After analysis it was explored, that firm performance was negatively linked to both inside ownership and ownership concentration while Institutional shareholding was positively related to performance (Ullah, Ali, & Mehmood, 2017). The effect of institutional stockholders on organizational performance was investigated by using data from non-financial companies in Pakistan from 2007-2011. It resulted that financial performance shows a significantly negative relationship with debt and institutional ownership (Ahmad, Baek, Kim, & Shah, 2019).

Research Hypothesis

- H₁: There will be a significant positive relationship between capital structure and financial performance of the firms listed on the KSE 100 Index of the Pakistan Stock Exchange.
- H₂: There will be a significant positive relationship between ownership structure and financial performance of the firms listed on the KSE 100 Index of the Pakistan Stock Exchange.

Research Methodology

The population of the study is 553 companies listed on the Pakistan stock exchange but this study will take the data of KSE-100 index-listed companies as a sample for 10 years from 2009 to 2018. In this study, we used 90 companies out of 100 listed firms, because 10 companies do not show all financial statements relevant to the study period. Therefore, we selected 90 companies (900 observations) as a sample for the empirical results regarding the impact of capital structure and ownership structure on financial performance. To achieve the purpose of this research, data is collected from the annual reports of firms individually from companies' websites and the remaining is taken from the website of the Pakistan Stock Exchange.

Independent variable

In this research, the independent variables are the capital structure and ownership structure of the companies listed on the Pakistan Stock Exchange (PSX), which are defined as follows:

Capital structure defines the method an organization practices to finance its properties/projects, by choosing a mixture of debt, equity, or hybrid securities (Saad, 2010). This research studies the capital structure measures as debt-to-equity ratio and debt to total assets to analyze the effect on financial performance.

- The debt-to-equity ratio (DTE) is represented by dividing total debts by shareholder's capital.
- Debt to total assets (DTTA) shows the total debts divided by total assets.

The ownership structure is defined as the structure that shows investments made by inside investors like directors, managers, and other employees as well as investments by outside investors including debt and equity holders (Jensen & Meckling, 1976). Due to scope and data collection limitations, this research focused on managerial, foreign, and institutional ownership as independent variables.

- Managerial Ownership (MO) is defined as quantity of shares owned by managers, directors, CEOs, etc.
- Foreign Ownership (FO) means the quantity of shares owned by a foreign government, individuals, or multinational organizations.
- Institutional ownership (IO) is expressed as quantity of shares owned by institutions such as banks, leasing companies, associated firms, etc.

Dependent variable

This study used firm financial performance as a dependent variable. There are two approaches in research that measures firm financial performance, namely accounting and market-based measures (Al-Matari, Kaid, & Bt Fadzil, 2014). Therefore, this study used ROA and ROE as accounting-based measurements and Tobin's Q formula as market-based measurements.

- Return on assets: Also called return on capital employed, measures how a company's assets are producing returns for the corporation. It is elaborated by dividing net profit and the company's total assets during the same financial year.
- Return on equity: measured as the company's earnings available to common shareholders divided by shareholder's equity.
- Tobin's Q was formulated by James Tobin at Yale University. It is measured by dividing a firm's total market value by the total asset.

Empirical Models

Model 1: $ROA_{it} = \beta_0 + \beta_1 DTE_{it} + \beta_2 DTTA_{it} + \beta_3 MO_{it} + \beta_4 IO_{it} + \beta_5 FO_{it} + \varepsilon_t$

Model 2: $ROE_{it} = \beta_0 + \beta_1 DTE_{it} + \beta_2 DTTA_{it} + \beta_3 MO_{it} + \beta_4 IO_{it} + \beta_5 FO_{it} + \varepsilon_t$

Model 3: Tobin's. $Q_{it} = \beta_0 + \beta_1 DTE_{it} + \beta_2 DTTA_{it} + \beta_3 MO_{it} + \beta_4 IO_{it} + \beta_5 FO_{it} + \varepsilon_t$

Return on assets (ROA), Return on equity (ROE), and Tobin's Q formula are utilized as a representative of financial performance, Managerial ownership (MO), institutional ownership (MO), and foreign ownership (FO) for ownership structure while debt to equity ratio (DTE) and debt to total assets (DTTA) for capital structure.

Results and discussion

Descriptive statistics

Descriptive statistics are used to examine the level of capital structure and ownership structure that is used by the listed firms and find the financial performance of companies.

Table 1: Descriptive analysis

Measures	Independent Variables					Dependent Variables		
	DTE	DTTA	FO	IO	MO	ROA	ROE	TQ
Observations	900	900	716	900	890	900	900	900
Mean	4.6583	0.6354	12.6235	55.0286	10.8164	6.7572	25.2307	103.555
Median	1.6250	0.6100	4.9650	61.0050	0.5800	4.5650	17.8100	462.250
Max.	184.00	8.6700	84.700	100.000	89.640	46.950	701.400	2361.65
Min.	0.0060	0.0060	0.00004	0.00070	0.00006	-43.500	-270.00	0.22000
Std; Dev	11.3430	0.5101	18.5520	28.7102	18.7829	9.1415	235.489	2019.04

Descriptive statistics results are shown in Table 1. This table presented that the average value of ROA is 6.75% which means that as a whole firm generates a 6.75% return by employing the firm's assets. The mean value of ROE is 25.23% which shows the good performance of organizations and shows that on average firms on the KSE-100 index are giving a good income to their shareholders. TQ ranges between 23616.5 and 0.2200 and it shows a higher deviation from the mean which is 2019.04. Higher Tobin's Q results in better operating performance, high growth potential, and higher market value. The maximum

value of ROE is 701.400 and the minimum value is -270.00 which represents a large variation of ROE among the firms.

Capital structure is measured by two variables which are debt to equity (DTE) and debt to total assets (DTTA) through 900 observations. The mean value of the DTE ratio is 4.65 times against the shareholder's equity while the average value of DTTA is 63.5% which means that organizations on the KSE-100 index finance their 63% of assets by using long-term debt. Among the two variables of capital structure, DTE shows a higher deviation of 11.34.

Foreign ownership (FO), institutional ownership (IO), and managerial ownership (MO) are used to measure the ownership structure. IO accounts for a significant proportion of 55.02% of the ownership structure of listed firms on the KSE-100 Index, whereas FO and MO are only about 12.62 % and 10.81% respectively. A prominent point is that FO shows results very near to MO because FO takes place an important role in the ownership structure of the listed firms on the Pakistan Stock Exchange. The maximum of IO is higher than other ownerships i.e., 100% compared with approximately 85% of FO and 90% of MO.

Correlation Analysis

Correlation analysis was used to determine the associations among all variables that are used in the regression model; either there is a strong or weak and positive or negative relationship. The results are shown below in table 2.

Table 2: Correlations

	Independent Variables					Dependent Variables		
	DTE	DTTA	FO	IO	MO	ROA	ROE	T.Q
DTE	1.000							
DTTA	0.333	1.000						
FO	-0.051	-0.190	1.000					
IO	-0.011	0.174	-0.394	1.000				
MO	-0.071	-0.068	-0.107	-0.541	1.000			
ROA	-0.210	-0.369	0.097	-0.028	0.021	1.000		
ROE	-0.017	0.009	-0.002	0.028	-0.020	0.058	1.000	
T.Q	-0.156	-0.346	0.173	-0.082	-0.025	0.410	0.026	1.000

Table 2 showed that there is a negative relationship between ROA, ROE and T.Q with DTE and DTTA i.e., (-0.210), (-0.017), (-0.156), (-0.369), and (-0.346) respectively, while positive and weak relation between ROE and DTTA i.e., (0.009). As more variables show a negative effect, therefore capital structure and financial performance have a negative relationship.

Correlations between financial performance and ownership structure measures presented contradictory results. ROA has a positive relationship with FO and MO which is (0.097) and (0.021), while a negative relationship with IO which is (-0.0285). ROE was positively related to IO (0.028) and negatively related to FO and MO. T.Q have a negative relation with IO and MO i.e., (-0.082) and (-0.025) while the positive relation with FO which is (0.173).

Test of Non-Stationarity

Before using the ordinary least square regression model, the non-stationarity test should be performed on all variables under study to evaluate whether the panel data is stationary or not. Table 3 shows the results of the unit root test of all dependent and independent variables below:

Table 3: Results of Unit root Test (Levin, Lin & Chu t)

Variables	Method	Statistics	Prob.
ROA		-10.0562	0.0000
ROE		-19.2732	0.0000
Tobin's Q		-8.32518	0.0000
DTE	Null: Unit root (assumes common unit root process)	-21.3517	0.0000

DTTA	-11.7287	0.0000
FO	-13.8083	0.0000
IO	-8.83102	0.0000
MO	-12.9221	0.0000

According to table 3, the P-value of all test relating to variables are below the acceptable level at 5%, therefore stationarity exists in data, so these variables can be used in further analysis.

Hausman Test

In order to decide which panel effects (between fixed and random) provide better results, researchers carried out the Hausman test for the panel regression models. Therefore, the results of the test for the three dependent variables are as follows.

Table 4: Results of the Hausman Test (Dependent Variables)

Return on Assets (ROA)			
Test summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section	11.642852	5	0.0400
Return on Equity (ROE)			
Test summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section	1.524993	5	0.9102
Tobin's Q			
Test summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section	9.209561	5	0.1010

When the regression model runs on random effect and applied the Hausman test, Table 4 shows that the 'p' value for ROA is less than the acceptable level at 5% i.e., (0.0400) it directs to the use of the fixed effect regression model for the ROA as a dependent variable. While 'the p-value for ROE and Tobin's Q is greater than the acceptable level i.e., 0.9102 and 0.1010 respectively that directs to the use random effect regression model for the ROE and Tobin's Q.

To measure the impact of capital structure and ownership structure on financial performance, this study used the ordinary least square regression method for the analysis of panel data by using E-views 10 software.

Table 5: Results of ROA

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5.957664	2.745647	2.169858	0.0304
DTE	-0.032154	0.010261	-3.133527	0.0018
DTTA	-6.009316	2.564129	-2.343609	0.0194
FO	0.117537	0.040423	2.907699	0.0038
IO	0.060188	0.022407	2.686109	0.0074
MO	-0.047798	0.031741	-1.505860	0.1326

The results of the fixed-effect regression model for the dependent variable ROA are shown in table 5. Results show that there is a negative relationship between capital structure and firm financial performance on the basis of ROA. The coefficient value of both DTE and DTTA is -0.032154 and -6.009316 respectively; this means that there is a negative relationship between a capital structure with ROA. The significant change in DTE is 0.0018 and DTTA is 0.0194 which is less than the acceptable value of 0.05 so both show significant relation with firm financial performance. In this case, our alternate hypothesis is rejected.

Ownership structure and firm financial performance show a significant positive relationship when measured on the basis of FO and IO with ROA. The coefficient value of FO is 0.117537 and IO is 0.060188, this means that the value shows positive relation and the P-value of FO is 0.0038 while IO is 0.0074 which is less than the acceptable value of 0.05, therefore having a significant effect on ROA. It shows strong evidence to accept the alternate hypothesis. The outcome of the regression model shows that firm financial performance is insignificant and negatively related to ownership structure when measured on the basis of MO. The coefficient value of managerial ownership is -0.047798 which means there is a negative relationship between the two. The significant change in managerial ownership is 0.1326 which is greater than the acceptable value of 0.05, it is not significant and therefore we reject our alternate hypothesis.

Table 6: Results of ROE

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	9.453714	9.065316	1.042844	0.2974
DTE	-0.434151	0.445131	-0.975333	0.3297
DTTA	11.92141	18.60033	0.640924	0.5218
FO	0.107380	0.216462	0.496066	.0.6200
IO	0.236547	0.071170	3.323680	0.0009
MO	-0.096595	0.301778	-0.320087	0.7490

According to table 6, there is a negative relationship between DTE and ROE while positive relation between DTTA and ROE. The coefficient value of DTE and DTTA are -0.434151 and 11.92141 respectively. The P-value of DTE is 0.3297 and DTTA is 0.5218, both are greater than the acceptable value of 0.05, therefore, showing a highly insignificant relationship with ROE.

Ownership structure and firm financial performance show a significant positive relationship when measured based on FO and IO with ROE. The coefficient value of FO is 0.107380 and IO is 0.236547 which means both variables show positive relation with financial performance. The P-value of FO is 0.6200 which shows insignificant relation while institutional ownership is 0.0009 which is less than the acceptable value of 0.05, therefore, having a significant effect on ROE. It shows strong evidence to accept the alternate hypothesis. The outcome of the regression model shows that firm financial performance is insignificant and negatively related to ownership structure when measured on the basis of MO and ROE. The coefficient value of managerial ownership is -0.096595 which means there is a negative relationship between the two. The significant change in managerial ownership is 0.7490 which is greater than the acceptable value of 0.05, it is not highly insignificant and therefore we reject our alternate hypothesis.

Table 7: Results of T.Q

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1331.427	299.2311	4.449494	0.0000
DTE	-5.982914	1.876372	-3.188555	0.0015
DTTA	-623.3876	200.7693	-3.104495	0.0020
FO	0.265387	4.126027	0.064320	0.9487
IO	-0.361994	3.121615	-0.115964	0.9077
MO	-2.672819	4.987972	-0.535853	0.5922

The results in table 7 showed that there is a negative relationship between capital structure and firm financial performance on the basis of T.Q. The coefficient value of both DTE and DTTA is -5.982914 and -623.23876 respectively; this means that there is a negative relationship with financial performance. The significant change in DTE is 0.0015 and DTTA is 0.0020 which is less than the acceptable value of

0.05 so both are highly significant. Therefore, there is a significant negative relation between capital structure and a firm's financial performance. In this case, our alternate hypothesis is rejected.

Ownership structure and firm financial performance show an insignificant negative relationship when measured on the basis of IO and MO with T.Q. The coefficient value of IO is -0.361994 and MO is -2.672819, which means both variables of ownership structure have a negative relation with T.Q. The P-value of IO is 0.9077 while MO is 0.5922 which is much greater than the acceptable value, therefore having an insignificant effect on financial performance. These results show strong evidence to reject the alternate hypothesis. The outcome of the regression model shows that firm financial performance is insignificant and positively related to ownership structure when measured on the basis of FO and T.Q. The coefficient value of FO is 0.265387 which means there is a positive relation between the two. The significant change in FO is 0.9487 which is much greater than the acceptable value of 0.05, it is highly insignificant and therefore we reject our alternate hypothesis.

Using the panel data regression model along with correlation analysis, we found that there is a significant negative relationship between capital structure and firm financial performance which is consistent with earlier studies in Pakistan (Kanwal, Shahzad, Rehman, & Zakaria, 2017; Ahmed, Talreja, & Kashif, 2018). Researchers determined that Ownership structure and firm financial performance presented a significant positive relationship when measured on the basis of foreign FO and IO with ROA and ROE while insignificant with T.Q. The results relating to IO are in accordance with the study of (Ullah, Ali, & Mehmood, 2017) while showing opposite results to the research of (Ahmad, Baek, Kim, & Shah, 2019) in Pakistan. The impact of FO on financial performance is traced first time on the listed firms in Pakistan and shows a significant positive relationship with the financial performance which supports the hypothesis of this study as well is consistent with the results (Shrivastav & Kalsie, 2017). Finally, we observed that MO shows negative and insignificant relation with financial performance (ROA) which is consistent with the results of (Wahla, Shah, & Hussain, 2012).

Conclusion and Recommendations

The authors have examined the relationship between capital structure and ownership structure on companies' financial performance on a sample of 90 listed firms on the KSE-100 index on PSX for the period 2009-2018.

This study suggests that companies in listed on the KSE-100 index in Pakistan should avoid a high ratio of debt in capital structure and the level of debt should not exceed the optimal limit because financial performance decreases when debt increases and high debt may lead organizations towards insolvency. The companies can use this study to choose an optimum capital structure in order to maximize shareholders' wealth and the company's performance.

The corporate level of management should especially focus on foreign ownership and take decisions accordingly because it enhances the financial performance as well as the goodwill of the company. Institutional ownership also helps organizations to achieve their goals and financial growth in the long term. Organizations should take steps to decrease the level of managerial shareholding due to a negative impact on financial performance.

Additionally, the outcomes of this study will be supportive to all stockholders as well as stakeholders (creditors, investors, government, employees, suppliers, companies, and managers, etc.) that how performance is affected by the owners and selection of financing mode, so that they make decisions about their future investments. This research provides instrumental information and important insights regarding ownership structure, capital structure, and financial performance to researchers for future work.

References

- Ahmad, M., Baek, N., Kim, D., & Shah, B. (2019). *The Impact of Institutional Ownership on Firms' Performance Evidence From Pakistan* (Vol. 22). THE JOURNAL OF ASIAN STUDIES.
- Ahmed, F., Talreja, S., & Kashif, M. (2018). Effects of Corporate Governance and Capital Structure on Firms' Performance: Evidence from Major Sectors of Pakistan. *Indonesian Capital Market Review*, 10, 90-104.
- Akhtar, A., Bakhsh, A., Ali, M., & Kousar, S. (2019). Impact of Capital Structure on the Performance of Textile sector in Pakistan: Examining the Moderating Effect of Liquidity. *Journal of Accounting and Finance in Emerging Economies*, 5(1).
- Ali, A., Shah, A., & Jan, F. A. (2015). Leverage, Ownership Structure and Firm Performance: Evidence from Karachi Stock Exchange. *Journal of Management Information system*, 1-19.
- Al-Matari, E. M., Kaid, A. A.-S., & Bt Fadzil, F. H. (2014). The Measurements of Firm Performance's Dimensions. *Asian Journal of Finance & Accounting*, 6.
- Amjed, S. (2011). Impact of Financial Structure on Firm's Performance: A Study of Pakistan's Chemical Sector. *Society of Interdisciplinary Business Research*.
- Amran, N. A., & Ahmad, A. (2013). *Effect of Ownership Structure on Malaysian Companies Performance* (Vol. 4). Asian Journal of Accounting and Governance.
- Aydin, N., Sayim, M., & Yalaman, A. (2007). *Foreign Ownership and Firm Performance: Evidence from Turkey*. International Research Journal of Finance and Economics.
- Badar, R., & Saeed, A. (2013). Impact Of Capital Structure On Performance Empirical Evidence From Sugar Sector Of Pakistan. *European Journal of Business and Management*, 5(5).
- Basit, A., & Hassan, Z. (2017). Impact of Capital Structure on Firms Performance: A Study on Karachi Stock Exchange (KSE) Listed Firms in Pakistan. *International Journal of Management, Accounting, and Economics*, 4(2).
- Berger, A. N., & Patti, E. (2006). *Capital structure and firm performance: A new approach to testing agency theory and an application to the banking industry*. (Vol. 30). Journal of Banking & Finance.
- Berle, A., & Means, G. (1932). The Modern Corporation and Private Property.
- Brander, J., & Lewis, T. R. (1986). *Oligopoly and Financial Structure: The Limited Liability Effect* (Vol. 76). American Economic Review, 1986, vol. 76, issue 5, 956-70.
- Chen, J., Blenman, L. P., & Chen, D.-H. (2008). *Does Institutional Ownership Create Values? the New Zealand Case*. Business, Economics Quarterly Journal of Finance and Accounting.
- Chowdhury, A., & Chowdhury, S. (2010). Impact of capital structure on firm's value: Evidence from Bangladesh. *Business and Economic Horizons*, 3(3), 111-122.
- Ezeoha, A. E., & Okafor, F. (2010). Local corporate ownership and capital structure decisions in Nigeria: A developing country perspective. *Corporate Governance International Journal of Business in Society*, 10(3), 249-260.
- Gambo, E.-M. J., Ahmad, A.-R., & Ahmad, M. M. (2016). Capital Structure and Firm Performance in the Nigerian Cement Industry. *Archives of Business Research*, 4(6), 30-44.
- Gedajlov, E. R., & Shapir, D. M. (1998). Management and Ownership Effects: Evidence From Five Countries. *Strategic Management Journal*, 19, 533-553.
- Harris, M., & Raviv, A. (1991). The Theory of Capital Structure. *The Journal of Finance*, 46(1), 297-355.
- Hart, O. (1995). Corporate Governance: Some Theory and Implications. *The Economic Journal*, 105(430), 678-689.
- Hassan, A., & Butt, S. (2009). *Impact of Ownership Structure and Corporate Governance on Capital Structure of Pakistani Listed Companies* (Vol. 4). International Journal of Business and Management.
- Imran, M. K., & Kouser, R. (2019) Corporate Governance and Capital Structure Dynamics: Evidence from Pakistan. *Pakistan Journal of Social Sciences (PJSS)*, Vol. 39, No. 2 (2019), pp. 653-663

- Jensen, M. C., & Meckling, W. H. (1976). Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure. *Journal of Financial Economics*, 3(4), 305-360.
- Jiang, P. (2004). The Relationship Between Ownership Structure and Firm Performance: an Empirical Analysis over Heilongjiang Listed Companies. *Nature and Science*, 2(4), 87-90.
- Kamerschen, D. R. (1968). The Influence of Ownership and Control on Profit Rates. *The American Economic Review*, 58, 432-447.
- Kanga, J.-K., & Shivdasani, A. (1995). Firm performance, corporate governance, and top executive turnover in Japan. 38, 29-58.
- Kanwal, M., Shahzad, S. J., Rehman, M., & Zakaria, M. (2017). Impact of Capital Structure on Performance of Non-Financial Listed Companies in Pakistan. *Pakistan Business Review*, 19(2).
- Khan, A. G. (2012). The relationship of capital structure decisions with firm performance: A study of the engineering sector of Pakistan. *International Journal of Accounting and Financial Reporting*, 2(1).
- King, M., & Santor, E. (2008). *Family values: Ownership structure, performance and capital structure of Canadian firms* (Vol. 32). Journal of Banking & Finance.
- Kouser, R., Bano, T., Azeem, M., & Hassan, M., (2012) Inter-Relationship between Profitability, Growth and Size: A Case of Non-Financial Companies from Pakistan. *Pakistan Journal of Commerce and Social Sciences*, Vol. 6 (2), 405-419
- Lebas, M. J. (1995). Performance measurement and performance management. *International Journal of Production Economics*, 41, 23-35.
- Leech, D., & Leahy, J. (1991). Ownership Structure, Control Type Classifications and the Performance of Large British Companies. *Economic Journal*, 101(409), 1418-1437.
- Lemmon, M. L., & Lins, K. V. (2003). Ownership Structure, Corporate Governance, and Firm Value: Evidence from the East Asian Financial Crisis. *The Journal of Finance*, 58(4), 1445-1468.
- Majumdar, S. K., & Chhibber, P. K. (1999). *Capital Structure and Performance: Evidence from a Transition Economy on an Aspect of Corporate Governance*. (Vol. 98). Kluwer Academic Publishers.
- Modigliani, F., & Miller, M. H. (1958). The Cost of Capital, Corporation Finance, and the Theory of Investment. 48, 261-297.
- Monsen, R. J., Chiu, J. S., & Cooley, D. E. (1968). The Effect of Separation of Ownership and Control on the Performance of the Large Firm. *The Quarterly Journal of Economics*, 82(3), 435-451.
- Muhammad, H., Shah, B., & ul Islam, Z. (2014). The Impact of Capital Structure on Firm Performance: Evidence from Pakistan. *Journal of Industrial Distribution & Business*, 5(2), 13-20.
- Oino, I., & Ukaegbu, B. (2015). The impact of profitability on capital structure and speed of adjustment: An empirical examination of selected firms in Nigerian Stock Exchange. *Research in International Business and Finance*, 35(C), 111-121.
- Pandey, I. M. (2004). Capital Structure, Profitability, and Market Structure: Evidence from Malaysia. <https://www.researchgate.net/publication/265273461>.
- Raheman, A., Zulfiqar, B., & Mustafa, N. (2007). Capital structure and profitability: Case of Islamabad Stock Exchange. *International Review of Business Research Papers Vol. 3 No.5*, 3(5), 347-361.
- Rajan, R. G., & Zingales, L. (1995). What Do We Know about Capital Structure? Some Evidence from International Data. *The Journal of Finance*, 5, 1421-1460.
- Rasyid, R., & Linda, M. R. (2019). *Ownership Structure, Capital Structure, and Firm Performance: A Case in Indonesia* (Vol. 97). Advances in Economics, Business and Management Research.
- Saleh, M., Zahirdin, G., & Octaviani, E. (2017). *Ownership structure and corporate performance: evidence from property and real estate public companies in Indonesia* (Vols. 14 (2-1)). Investment Management and Financial Innovations.
- Salima, I., & Yadav, R. (2012). Capital Structure and Firm Performance: Evidence from Malaysian Listed Companies. *Procedia - Social and Behavioral Sciences*, 65, 156 – 166.
- Shan, Y. G., & McIver, R. (2011). Corporate governance mechanisms and financial performance in China: panel data evidence on listed non-financial companies. *Asia Pacific Business Review*,

17:3, 301-324, 17(3), 301-324.

- Sharma, B., & Gadenne, D. (2002). An inter-industry comparison of quality management practices and performance. *Managing Service Quality: An International Journal*, 12(6), 394-404.
- Shrivastav, S. M., & Kalsie, A. (2017). *The Relationship between Foreign ownership and firm performance in India: An empirical analysis* (Vol. 2). ACADEMIA.
- Thomsen, S., & Pedersen, T. (2000). Ownership Structure and Economic Performance in the Largest European companies. *Strategic Management Journal*, 689-705.
- Ullah, W., Ali, S., & Mehmood, S. (2017). *Impact of Excess Control, Ownership Structure, and Corporate Governance on Firm Performance of Diversified Group Firms in Pakistan* (Vol. 9). Business & Economic Review, 2017, vol. 9, issue 2, 49-72.
- Wahla, K.-U.-R., Zulfiqar Ali Shah, S., & Hussain, Z. (2012). Impact of Ownership Structure on Firm Performance Evidence from Non-Financial Listed Companies at Karachi Stock Exchange. *International Research Journal of Finance and Economics*(84).
- Williamson, O. E. (1988). Corporate Finance and Corporate Governance. *The Journal of Finance*, 43(3), 567-591.
- Yahaya, K. A., & Lawal, R. (2018). Effect of Ownership Structure on Financial Performance of Deposit Money Banks in Nigeria. *The Journal of Accounting and Management*, 8(2).
- Yasser, Q. R., & Mamun, A. A. (2015). Effects of ownership concentration on firm performance: Pakistani evidence. *Journal of Asia Business Studies*, 9(2), 162 - 176.



Value Relevance of Financial Information in Malaysian Listed Firms: Real Earnings Management's Perspective

Aboubakar Mirza, Lecturer, SKANS School of Accountancy, Multan Campus, Pakistan

***Javaria Abbas**, Assistant Professor, Institute of Management Sciences (IMS), Bahauddin Zakariya University, Multan, Pakistan

*Corresponding author's email: javeriaabbass@bzu.edu.pk

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ABSTRACT

Purpose: This study investigates the value relevance of financial information i.e., earnings (EPS), the book value of equity (BVE), and cash flow from operations (CFO). The study further investigates the influence of real EPS management (REM) on the value relevance of financial information because firms are now switching toward real earnings management rather than accrual-based earnings management (ABEM).

Methodology: A sample of 250 public listed companies was used to test the hypotheses over the period 2014-2018. Using Driscoll-Kraay regression.

Findings: This study finds that earnings, the book value of equity, and cash flow from operations are value relevant, and real earnings management moderates the value relevance of EPS, book value of equity, and cash flow from operations.

Implications: This study has specific policy implications for regulators to push auditors to detect real earnings management to improve the value relevance of financial information.



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Introduction

The scandals in the widely held corporations around the world, such as Enron, WorldCom, and Toshiba are related to bad accounting practices. There are also many Malaysian accounting scandals in public listed firms, e.g., Transmile Group Berhad, MEMS Technology Berhad, and Felda Group Berhad are also related to the manipulation of financial information (Mirza, Abbas, & Nawaz, 2020). These firms deceived investors through false financial statements and shattered investors' confidence (Darussamin, Ali, Ghani, & Gunardi, 2018; Mirza et al., 2020). These cases highlighted the importance of the quality of financial information and its implications for investors (Mirza et al., 2020; Mirza, Malek, & Hamid, 2018; Pfanter & Fujikawa, 2015).

EPS is the main financial information of the financial statement, suggested by the International Accounting Standards Board (IASB) to support investors in making economic decisions and is superior to any other financial information (IASB, 2018). Contrary to this, EPS is losing its value relevance; this has raised concerns about the lower quality of EPS supplied by the listed firms, as highlighted by prior international and Malaysian empirical studies and the reduced value relevance of EPS is reduced due to the growing reliance of investors on BVE and CFO for making investment decisions (Barth, Li, & McClure, 2018; Callao, Cimini, & Jarne, 2016; Kwon, 2018a, 2018b, 2019; Lev, 2018; Mirza et al., 2020; Mirza, Malek, & Abdul-Hamid, 2019a). The above studies have highlighted that value relevance of EPS is reduced because investors consider it less reliable due to earnings management (EM) practices and focus on BVE and CFO internationally and including in Malaysia.

The issue of the decreasing value relevance of EPS and more reliance on BVE for the investment decision-making was initially observed by Collins, Maydew, and Weiss (1997), who claimed, value relevance of EPS has been declined and increase in BVE is observed due to the fact that EPS can be manipulated through accounting policies. Later research by other authors such as, Callao et al. (2016), Mostafa (2017) and Whelan and McNamara (2004) also observed similar findings, that EM practices reduces value relevance of EPS (Barth et al., 2018; Bhatia & Mulenga, 2019; Mirza et al., 2020).

Previous research has explored the impact of ABEM on the value relevance of financial information (Callao et al., 2016; Christensen, Hoyt, & Paterson, 1999; Marquardt & Wiedman, 2004; Mostafa, 2017; Whelan & McNamara, 2004) and ignored the more fatal EM factor for firms in long-run i.e., REM. Moreover, the REM is very difficult for the auditor to detect (Achleitner, Gunther, Kaserer, & Siciliano, 2014). Consequently, firms have shifted their focus from ABEM to REM. Therefore, it shows a significant theoretical gap. Following these arguments, the current study proposes that EPS, BVE and CFO are value relevant factors and REM influences the value relevance of EPS, BVE and CFO.

The specific objectives of the study are given below:

1. To determine whether EPS, BE, and CFO are value relevant in the Malaysian capital market.
2. To determine whether real earnings management influences the value relevance of EPS, BVE, and CFO.

Literature Review

Value Relevance

Francis and Schipper (1999, p. 325) defined value relevance as a relationship among firm value or stock returns and financial information. Hellstrom (2006, p. 328) classified the value relevance research into two main aspects, first signaling perspective and secondly a measurement perspective. The signaling perspective means to evaluate, how markets react after announcing the financial information. The measurement perspective determines association among firm value and financial information. The domination of EPS and BVE as financial information is based on the theoretical foundation of valuation framework of Ohlson's (1995). A formal model is presented below

$$P_t = BVE_t + \sum_{i=1}^{\infty} \frac{NI_t - ke * BVE_{t-1}}{(1+ke)^t}$$

Where,

1. P: Share price,
2. BVE: Book value of equity,
3. NI: Net income or earnings available to ordinary shareholders,

4. K_e : Cost of equity capital.
5. Residual income is thus equal to a firm's net income minus the required rate of returns of BVE.

Many studies in the prior literature have added other variables especially CFO along with EPS and BVE to explain variation in share price and found CFO as significantly value relevant variable (Badu & Appiah, 2018; Boonlert-U-Thai & Sen, 2019; Mirza et al., 2020). Whereas prior research findings are not consistent, therefore, this study considers EPS, BVE and CFO as independent variables to test value relevance in Malaysian context.

Value Relevance of EPS, BVE and CFO

The studies conducted initially on value relevance of financial information focused on EPS and conducted in US. These studies found EPS a relevant variable (Beaver, Clarke, & Wright, 1979; Collins & Kothari, 1989). Subsequent research related to value relevance focused on comparative analysis of alternative measures of financial information such as BVE along with the EPS in the developed countries (Barth, Beaver, & Landsman, 1998; Collins et al., 1997; Ohlson, 1995) and found the considerable role of the BVE as well. In the meantime, studies also started to investigate the role of CFO in developed countries because CFO is not subject to change in accounting policies (Lee, 1974). Based on above discussion, prior empirical literature endorse that EPS, BVE and CFO provide value relevant financial information but EPS is still a superior measure as compared to other financial information (Black & White, 2003; Miranda-Lopez & Nichols, 2012). On the other hand, some researchers believes that in developed countries, EPS does not provide decision useful information (Amir & Lev, 1996; Arora & Bhimani, 2016).

The research conducted in the developing countries also found EPS as a superior measure in comparison with BVE and CFO (Mostafa & Mostafa, 2016; Shamki & Rahman, 2011) but some researchers rejected this notion based on empirical evidence that EPS is irrelevant due to EM practices (Mirza et al., 2020; Pervan & Bartulovic, 2014). Whereas, BVE was claimed as more significant variable in comparison with EPS and CFO (Kargin, 2013; Mirza et al., 2020; Sharma, Kumar, & Singh, 2012; Tanaka, 2015). While other researchers found BVE irrelevant to take economic decision (Omokhudu & Ibadin, 2015). Some researchers claimed that there is low risk of managerial entrenchment through CFO that made it more relevant in comparison with EPS and BVE (Barth et al., 2018; Mirza et al., 2020; Vichitsarawong, 2011). While other claimed that CFO is not decision useful factor. (Mostafa & Mostafa, 2016; Sharma et al., 2012). Malaysian research on value relevance of financial information also provided mixed results regarding the decision usefulness of financial information (Gan, Chong, & Ahmad, 2016; Kadri, Abdul Aziz, & Ibrahim, 2009; Kwong, 2010).

EPS, BVE and CFO provide information that supports to take economic decision as per conceptual framework for financial reporting (IASB, 2018). It further explains that EPS is a superior variable to take economic decision. Prior research found conflicting findings concerning the relative significance of EPS, BVE and CFO. So, it is arguable that there is no universal financial information to determine firm value, significance of each variable depends on firm-level managerial manipulation (Barton, Hansen, & Pownall, 2010; Mirza et al., 2020). These arguments lead to the notion that earning, BVE, and CFO are value relevant but relative value relevance of each variable may vary. Thus, the following hypothesis can be developed:

Hypothesis 1: Relative value relevance of EPS, BVE and CFO is different in Malaysian capital market.

REM and Value Relevance of Financial Information

Past literature has highlighted the influence of ABEM on EPS and BVE, such as Whelan and McNamara (2004) investigated the impact of ABEM on the value relevance of EPS and BVE of the

firms listed on the Australian capital market. Results reveal a decline in the value relevance of earning due to EM practices, whereas it also does not increase the value relevance of BVE. Moreover, the authors claimed that investors prefer other information for making economic decisions in the presence of EM practices rather than BVE. Marquardt and Wiedman (2004) presented evidence that in the firms which are involved in the earnings manipulation, BVE played a major role in decision making and earning was less value relevant, and in addition, cash flow portion of earning is not influenced by the EM practices.

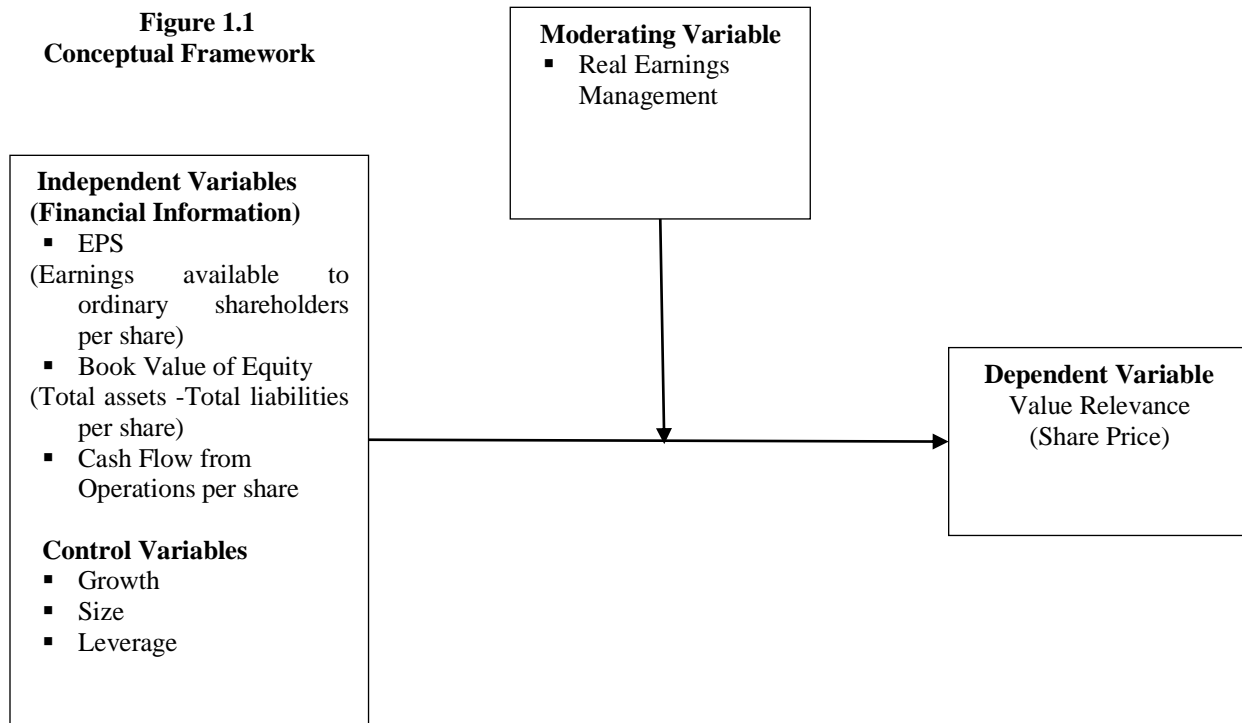
Callao et al. (2016) explored the effect of EM on the value relevance of EPS and BVE of the European firms. Findings reveal that EPS loses its relevance in the firms, where there are high EM practices. In that case, value relevance of BVE rises for those firms. Adisetiawan and Surono (2016) investigated the influence of ABEM on the relevance of financial information in Indonesia stock exchange. Findings show that ABEM does not reduce the value relevance of EPS and BVE. Mostafa (2017) scrutinized the association between ABEM and value relevance of earning of the firms listed on the Egyptian capital market. The findings recommended that firms involved in EM practices lose value relevance compared to the firms not involved in EM.

One of the most important firms' specific factors in the context of Malaysia is the EM practices. The focus of major prior research was on ABEM practices but recently companies have changed their strategy to manipulate financial information from ABEM to REM practices (Achleitner et al., 2014). Some studies in the literature explore the influence of REM on the value relevance of EPS but ignored the important financial information i.e., BVE and CFO. For example, Heshmat, Nahandi, and Khanghad (2015) investigated the impact of accrual and REM on the value relevance of EPS in firms on Tehran Stock Exchange. The results found that REM and ABEM have a negative influence on the value relevance of EPS. Oraby (2017) examined the impact of ABEM on financial information relevance in Saudi stock exchange. Results indicate that ABEM does not influence value relevance of EPS, but REM influences the value relevance of EPS negatively.

Signalling theory is useful to evaluate value relevance of accounting information. According to Scott William (2006), a firm can enhance its share price by sending signals through its annual report. If the information published contains positive information e.g., higher EPS, it is expected that share price will increase, whereas negative information e.g., loss-making firms will be considered a negative signal and share price will be reduced (Prihatni et al., 2016; Rashid et al., 2017). Therefore, if investors consider financial information manipulated through REM, its value relevance will be reduced. Based on these arguments this study has introduced REM as a moderator. Therefore, following hypothesis can be developed.

Hypothesis 2: REM influences EPS, BVE and cash flow from operations.

Figure 1.1
Conceptual Framework



Methodology

Measurement of Variables

This study has used Ohlson's (1995) model to operationalize the dependent variable, consistent with the previous studies (Bhatia & Mulenga, 2019; Kwon, 2018a; Mirza et al., 2019b, 2019c). This study also controlled variables, i.e., firm size, leverage and growth that is in line with previous studies (Mirza et al., 2019b, 2019c). The measurement of REM is established on REM metrics. There are three measurements available, abnormal CFO, abnormal discretionary expenses, and abnormal production costs to measure REM (Achleitner et al., 2014; Cohen & Zarowin, 2010; Roychowdhury, 2006). Finally, following Cohen et al. (2008), overall matrix of REM is developed by using all three real actions at the same time. Independent variables measurement is given below. H1 and H2 are estimated through final regression model that is presented below:

$$SPPS_{it} = \beta_0 + \beta_1 EPS_{it} + \beta_2 BVE_{it} + \beta_3 CFO_{it} + \beta_4 REM_{it} + \beta_5 SIZE_{it} + \beta_6 LEVERG_{it} + \beta_7 GROW_{it} + \beta_8 REM_{it} * EPS_{it} + \beta_9 REM_{it} * BVE_{it} + \beta_{10} REM_{it} * CFO_{it} + \epsilon_{it}$$

Where,

$SPPS_{it}$: Share price per share after four months following the year t and firm i,

EPS_{it} : EPS per share for a firm at year t and firm i,

BVE_{it} : Book value of equity per share for a firm at year t and firm i,

CFO_{it} : Cash flow from operations per share for a firm at year t and firm i,

$GROW_{it}$: Market to book ratio at year t and firm i,

$SIZE_{it}$: Natural log of total assets at year t and firm i,

$LEVERG_{it}$: Ratio of debt to total assets at year t and firm i,

REM_{it} : Real EPS management, it is a continuous variable based on REM matrix,

$REM_{it} * EPS_{it}$: Interaction between REM and EPS at year t and firm i,

$REM_{it} * BVE_{it}$: Interaction between REM and BVE at year t and firm i,

$REM_{it} * CFO_{it}$: Interaction between REM and CFO at year t and firm i,

ϵ_{it} : error term,

Sample Selection and Unit Analysis

The population of the study comprises all non-financial listed firms in Malaysia's main capital market covering the period 2014-2018. This study has considered the firms that have availability of data for all variables for 5 years. Table 1.1 below explains the process of sample selection.

Table 1.1 Derivation of Population

	Number of Firms
Firms listed on Main Market Malaysia as of 31 December 2018	801
Firms with financial year change in the period 2014-2018	(86)
Financial Institution	(32)
Real estate investment trust	(15)
Firms listed in Malaysian capital market after the year 2014	(34)
Firms with missing data on share price	(27)
Firms with missing annual report	(14)
Firms with negative book values of equity	(17)
Firms with missing data on real EPS management	(97)
Total	479

The final sample is based on 250 firms based on the random sampling from the population. Data is obtained from Thomson Reuters Financial DataStream Advance.

Results and Discussion

To perform ordinary least square regression (OLS), data should be based on normally distributed populations (Gujarati, 2003). Therefore, before regression analysis, it is mandatory to conduct descriptive statistical analysis for all variables. According to Greene (2012) kurtosis and skewness figures should be in the limit of +3 and -3. Actual results show that other than LEVERG, SIZE and REM, the data related to remaining variables is not normal. Gujarati (2003) stated that researchers can rely on the central limit theorem, the sampling distribution will be normal if sample size is larger than 30.

Table 1.2 Descriptive Statistics of Variables

Variable	Mean	Min.	Max.	Median	St.D	Skewness	Kurtosis
SPPS	2.221	0.117	82.087	0.927	5.261	8.781	100.016
EPS	0.205	-3.876	14.564	0.145	0.493	16.044	535
BVE	1.644	0.1	17.778	1.100	1.831	3.306	17.976
CFO	0.236	-2.102	3.884	0.156	0.46	3.915	29.767
GROW	1.517	0.107	157.477	0.897	4.432	21.831	644.009
SIZE	13.22	10.04	18.792	13.022	1.565	0.889	3.834
LEVERG	18.441	0.000	76.097	15.987	15.608	0.763	2.869
REM	20.288	9.107	89.177	45.487	25.603	0.778	1.942

Correlation Analysis

A Pearson correlation analysis was computed for variables included in the study. Table 1.3 below demonstrates that, dependent variable, SPPS, has a significant correlation with the independent variables based on the correlation coefficients at the 1% significance level.

Table 1.3 Correlation Matrix

	SPPS	EPS	BVE	CFO	GROW	SIZE	LEVERG	REM
SPPS	1							
EPS	0.6298*	1						
BEVPS	0.5230*	0.4077	1					
CFO	0.8205*	0.5650*	0.5352*	1				

GROW	0.4425*	0.2631*	0.0321	0.3183*	1			
SIZE	0.3600*	0.2659*	0.5313*	0.3592*	0.164*	1		
LEVERG	-0.0053*	-0.1293*	-0.0693	-0.0841	0.0059*	0.3912*	1	
REM	-0.0211*	0.0424	0.0400	0.0346	-0.098*	0.0678*	-0.0367	1

Significance level (.01*,.05, .10***)**

Findings highlight that EPS and CFO has a correlation coefficient ($r=0.5650$), that is the highest as compared to other relationship among independent variables; it suggests the highest multicollinearity among these two variables. Hair, Bill, Barry, and Anderson (2006) stated that if the value of the multicollinearity is less than 0.8, then it can be ignored in OLS regression.

Heteroscedasticity

Heteroscedasticity (hetro) occurs when error terms result in unequal variances. Hetro is the main concern in multivariate regression analysis (Hair, Black, Babin, & Anderson, 2010), because its presence may result in the biased estimated standard errors that can result in invalid statistical inferences (Brooks, 2014). The existence of hetro is detected through the statistical test by Breusch and Pagan (1979). According to Brooks (2014), the null hypothesis of the Breusch-Pagan test is homoscedasticity, and the alternative hypothesis is the presence of hetro. Table 1.4 below reports the value of Chi^2 statistic is 2185.59 and corresponding $p\text{-value} < .01$. It shows existence of hetro in the residuals in regression model.

Table 1.4 Breusch-Pagan/Cook-Weisberg Test for Heteroscedasticity

	Values
Chi ²	2185.59
Probability > Chi ²	0.0000

Cross-Sectional Dependence

The extant literature provides that panel-data models are expected to show considerable cross-sectional dependence (CSD) in the errors term, that might be an outcome of unobservable factors (Certo & Semadeni, 2006; Hoechle, 2007) that eventually are incorporated in the error term (Baltagi, 2005; Pesaran, 2004). To test the presence of CSD, De Hoyos and Sarafidis (2006) suggested Pesaran (2004) CD test, when N is greater than T, i.e., the case of the current study ($250 > 5$). The null hypotheses of the CD test state that there is no CSD in the residuals, while the alternative hypothesis presumes that there is a CSD in the residuals. The results of Pesaran (2004) CD tests are given in Table 1.5 below.

Table 1.5 Pesaran's CD Test for Cross-Sectional Dependence

	Values
Pesaran's test of CSD	31.06
The average absolute value of the off-diagonal elements	0.47
Probability	0.00

The value of Pesaran's test is 31.06, with the corresponding average absolute value of off-diagonal elements at 0.47. The result of the CD test strongly rejects the null hypothesis of no CSD based on the corresponding significance of $p\text{-value} < 0.01$. Therefore, there is sufficient evidence of the presence of CSD regression model.

Hoechle (2007) recommended assessing linear model of panel data by an approach given by Kraay's (1998) (Driscoll and Kraay's regression) for use with pooled OLS estimation and fixed effects (FE) regression. That regression technique offers robust standard errors in case of CSD, and when N is greater than T. This method offers only OLS and FE regression estimation; therefore, the subsequent

step is to carry out Hausman specification test (1978) (Baltagi, 2005; Greene, 2012). Results are demonstrated in Table 1.6 below, the value of Chi^2 statistics is 467.29, and p-value is less than 1%, the significant p-value shows that FE model is appropriate to conduct regression analysis.

Table 1.6 Hausman Specification Test for Random-Effects vs Fixed-Effects

	Values
Chi ²	467.29
Probability > Chi ²	0.0000

Therefore, this study adopted the Driscoll Kerry with FE regression approach to deal with issues of hetero and CSD as mentioned above. Driscoll and Kraay's regression has been employed in a study related to value relevance by Mirza, Malek, and Abdul-Hamid (2019b).

Multivariate Regression Analysis

Multivariate regression analysis for examining the influence of REM on the EPS, BVE and CFO. Table 1.7 below presents the findings of multivariate regression analysis to test non-directional hypotheses H1 and H2.

Table 1.7 Influence of REM on value relevance of EPS, BVE, and CFO

Dependent Variable SPPS				
Variable	Coefficient	Std. Err.	Z Statistics	P>Z
EPS	1.02	0.633	1.89	0.064***
BVE	0.52	0.113	4.87	0.000*
CFO	3.57	1.230	4.56	0.002*
GROW	0.34	0.082	3.87	0.000*
SIZE	0.18	0.077	1.83	0.060***
LEVERG	-0.007	0.009	-0.32	0.820
REM	-2.71	1.120	-4.12	0.000*
EPS*REM	-1.15	0.790	-4.73	0.030**
BVE*REM	1.85	0.870	3.78	0.010*
CFO*REM	-2.26	1.014	-3.11	0.007*
Constant	-0.59	0.129	-1.30	0.394
R ²	43.87%			
Observations	1250			
Significance level (0.01*,0.05**,0.10***)				

The R² is 43.87%. It shows that the variables included in the study have significant explanatory power. The results shown in Table 1.7 show that EPS, BVE, and CFO are value relevant variables at a significant level of 10%, 1% and 1% respectively and supported hypotheses 1. Results further show that value relevance of EPS has decreased in Malaysian capital market and value relevance of BVE and CFO has increased. The main reason behind this decline is the manipulation of EPS as suggested by the previous studies (Prihatni et al., 2016; Rashid et al., 2017). The interaction effect of REM*EPS is negative and significant at 5% level, supporting H2. This result suggests that the firms that are involved in REM, the investors perceived that they are entrenched through manipulation in EPS. Moreover, the REM practices are considered a bad signal according to signaling theory (Prihatni et al., 2016; Rashid et al., 2017) and investors consider EPS inappropriate for investment decision-making. Furthermore, this result is in line with the previous studies, which argued that if investors perceive that the firms are managing earnings it results in the reduced value relevance of EPS (Barth et al., 2018; Heshmat et al., 2015; Oraby, 2017).

The interaction among BVE*REM is positive and significant at 1% supporting H2. This result is opposite to the previous results because if companies are involved in real management activities, the

value relevance of EPS will be reduced but the value relevance of BVE will be improved. It further infers that the investors will focus more on the BVE in that case they suspect that the firms are involved in the REM. This result can also be explained through signaling theory because EM practices will be considered as a bad signal by the investors that will reduce value relevance of EPS, therefore, that bad signal will force investors to focus on the BVE for taking investment decisions (Callao et al., 2016; Marquardt & Wiedman, 2004).

The interaction among CFO*REM is significant and negative at 1% level supporting H2. Generally prior studies concluded that when EPS is subject to manipulation, investors focus on CFO as a prime measure for decision making (Barth et al., 2018; Mirza et al., 2020). The results found are not in line with this argument because firms have now switched their EM strategy from ABEM to REM (Achleitner et al., 2014), this practice is very dangerous for the long term cash flows of the firms. In this anticipation, investors don't consider it reliable as well.

Conclusion

Overall, the findings suggested that in general, the financial information helps investors in making investment decisions making, however, the role of EPS is losing value relevance in comparison with the BVE and CFO. Additionally, results further conclude that the firms that are using REM practices, consequently, value relevance of EPS and CFO is reduced and value relevance of BVE is increased for making investment decisions in the Malaysian capital market.

This study also has theoretical implications for the signaling theory. This study considers not only EPS but also BVE and CFO to investigate value relevance of firms that are involved in REM activities. The results suggest that REM negatively and significantly moderates the value relevance of EPS and CFO but positively moderated BVE. The new evidence confirms that investors considered REM as a bad signal that forced them to alter their preference for financial information for investment decisions making.

This study also offers valuable implications for policy making. Policymakers should take proper action to improve the quality of EPS in the firms that are involved in the REM to improve investors' perception of EPS. Moreover, the auditor should be given strict guidelines to track down the REM practices. This study uses Malaysia as its scope. However, the results of this study cannot be generalized to other developing countries and financial institutions because institutional and legal environment is altogether different among developing countries. This study also provides some exclusive directions for future research. This study used PLCs as its sample. Most firms globally are dominated by private firms; therefore, it may be a significant contribution to apply this conceptual framework to the private firms.

References

- Achleitner, A.-K., Gunther, N., Kaserer, C., & Siciliano, G. (2014). Real earnings management and accrual-based earnings management in family firms. *European Accounting Review*, 23(3), 431-461.
- Adisetiawan, R., & Surono, Y. (2016). Earnings Management and Accounting Information Value: Impact and Relevance. *Business, Management and Economics Research*, 2(10), 170-179.
- Amir, E., & Lev, B. (1996). Value-relevance of nonfinancial information: The wireless communications industry. *Journal of Accounting and Economics*, 22(1), 3-30.
- Arora, P., & Bhimani, M. (2016). Determinants of stock price in Singapore's manufacturing sector In M. H. Bilgin & H. Danis (Eds.), *Entrepreneurship, Business and Economics - Vol. 2. Eurasian Studies in Business and Economics* (Vol. 2, pp. 665-676). Cham: Springer.
- Badu, B., & Appiah, K. O. (2018). Value relevance of accounting information: An emerging country perspective. *Journal of Accounting & Organizational Change*, 14(4), 473-491.
- Baltagi, B. H. (2005). *Econometric analysis of panel data* (3 ed.). Chichester: John Wiley & Sons Ltd.

- Barth, M. E., Beaver, W. H., & Landsman, W. R. (1998). Relative valuation roles of equity book value and net income as a function of financial health. *Journal of Accounting and Economics*, 25(1), 1-34.
- Barth, M. E., Li, K., & McClure, C. (2018). Evolution in value relevance of accounting information. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2933197
- Barton, J., Hansen, T. B., & Pownall, G. (2010). Which performance measures do investors around the world value the most—And why? *The Accounting Review*, 85(3), 753-789.
- Beaver, W. H., Clarke, R., & Wright, W. F. (1979). The association between unsystematic security returns and the magnitude of earnings forecast errors. *Journal of Accounting Research*, 316-340.
- Bhatia, M., & Mulenga, M. J. (2019). Value relevance of accounting information: Comparative study of Indian public and private sector banks. *International Journal of Indian Culture and Business Management*, 18(1), 12-33.
- Black, E. L., & White, J. J. (2003). An international comparison of income statement and balance sheet information: Germany, Japan and the US. *European Accounting Review*, 12(1), 29-46.
- Boonlert-U-Thai, K., & Sen, P. K. (2019). Family ownership and earnings quality of Thai firms. *Asian Review of Accounting*, 27(1), 112-136.
- Breusch, T. S., & Pagan, A. R. (1979). A simple test for heteroscedasticity and random coefficient variation. *Econometrica: Journal of the Econometric Society*, 47(5), 1287-1294.
- Brooks, C. (2014). *Introductory econometrics for finance* (2 Ed.). Cambridge: Cambridge University Press.
- Callao, S., Cimini, R., & Jarne, J. I. (2016). Value relevance of accounting figures in presence of earnings management. Are enforcement and ownership diffusion really enough? *Journal of Business Economics and Management*, 17(6), 1286-1299.
- Certo, S. T., & Semadeni, M. (2006). Strategy research and panel data: Evidence and implications. *Journal of Management*, 32(3), 449-471.
- Christensen, T. E., Hoyt, R. E., & Paterson, J. S. (1999). Ex ante incentives for earnings management and the informativeness of earnings. *Journal of Business Finance & Accounting*, 26(7-8), 807-832.
- Cohen, D. A., & Zarowin, P. (2010). Accrual-based and real earnings management activities around seasoned equity offerings. *Journal of Accounting and Economics*, 50(1), 2-19.
- Collins, D. W., & Kothari, S. (1989). An analysis of intertemporal and cross-sectional determinants of earnings response coefficients. *Journal of accounting and economics*, 11(2-3), 143-181.
- Collins, D. W., Maydew, E. L., & Weiss, I. S. (1997). Changes in the value-relevance of earnings and book values over the past forty years. *Journal of Accounting and Economics*, 24(1), 39-67.
- Darussamin, A. M., Ali, M. M., Ghani, E. K., & Gunardi, A. (2018). The effect of corporate governance mechanisms on level of risk disclosure: Evidence from Malaysian government linked companies. *Journal of Management Information and Decision Sciences*, 21(1), 1-19.
- De Hoyos, R. E., & Sarafidis, V. (2006). Testing for cross-sectional dependence in panel-data models. *Stata Journal*, 6(4), 482-496.
- Francis, J., & Schipper, K. (1999). Have financial statements lost their relevance? *Journal of Accounting Research*, 37(2), 319-352.
- Gan, C.-Y., Chong, L.-L., & Ahmad, Z. (2016). Impacts of FRS139 adoption on value relevance of financial reporting in Malaysia. *Managerial Finance*, 42(7), 706-721.
- Greene, W. H. (2012). *Econometric analysis* (7 ed.). Harlow: Pearson
- Gujarati, D. (2003). *Basic Econometrics* (4th ed.). West Point: McGraw Hill.
- Hair, J. F., Bill, B., Barry, B., & Anderson, R. E. (2006). *Multivariate data analysis* (6 ed.). Upper Saddle River, NJ: Pearson.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis: A global perspective* (7 ed.). New Jersey: Pearson Prentice Hall.
- Hellstrom, K. (2006). The value relevance of financial accounting information in a transition economy: The case of the Czech Republic. *European Accounting Review*, 15(3), 325-349.

- Heshmat, N., Nahandi, Y. B., & Khanghad, V. (2015). The effect of real and artificial earnings management on the value relevance of earnings. *Indian Journal of Fundamental and Applied Life Sciences*, 5(1), 1727-1741.
- Hoechle, D. (2007). Robust standard errors for panel regressions with cross-sectional dependence. *Stata Journal*, 7(2), 1-31.
- IASB. (2018). *Conceptual framework for financial reporting*. London: International Accounting Standards Board.
- Kadri, M. H., Abdul Aziz, R., & Ibrahim, M. K. (2009). Value relevance of book value and earnings: Evidence from two different financial reporting regimes. *Journal of Financial Reporting and Accounting*, 7(1), 1-16.
- Kargin, S. (2013). The impact of IFRS on the value relevance of accounting information: Evidence from Turkish firms. *International Journal of Economics and Finance*, 5(4), 71-80.
- Kwon, G.-J. (2018a). Changes in the value relevance of accounting information before and after the adoption of K-IFRS: Evidence from Korea. *Afro-Asian Journal of Finance and Accounting*, 8(1), 65-84.
- Kwon, G.-J. (2018b). The value relevance of accounting information: Focusing on US and China. *Academy of Accounting and Financial Studies Journal*, 22(6), 1-11.
- Kwon, G.-J. (2019). The role of accounting information in valuing administrative issues of Korea Exchange. *International Journal of Economics and Business Research*, 17(1), 106-125.
- Kwong, L. C. (2010). The value relevance of financial reporting in Malaysia: Evidence from three different financial reporting periods. *International Journal of Business & Accountancy*, 1(1), 1-19.
- Lee, T. A. (1974). Enterprise income: survival or decline and fall? *Accounting and Business Research*, 4(15), 178-192.
- Lev, B. (2018). The deteriorating usefulness of financial report information and how to reverse it. *Accounting and Business Research*, 48(5), 465-493.
- Marquardt, C. A., & Wiedman, C. I. (2004). The effect of earnings management on the value relevance of accounting information. *Journal of Business Finance & Accounting*, 31(3-4), 297-332.
- Miranda-Lopez, J. E., & Nichols, L. M. (2012). The use of earnings and cash flows in investment decisions in the US and Mexico: Experimental evidence. *Journal of International Accounting, Auditing and Taxation*, 21(2), 198-208.
- Mirza, A., Abbas, J., & Nawaz, M. A. (2020). Which financial information leads to better market valuation and economic decision making in Malaysian main market listed firms? A value relevance perspective. *Pakistan Journal of Social Sciences (PJSS)*, 40(2), 995-1006.
- Mirza, A., Malek, M., & Abdul-Hamid, M. A. (2019a). Value relevance of earnings and book value of equity: Evidence from Malaysia. *Global Business Management Review*, 10(2), 19-40.
- Mirza, A., Malek, M., & Abdul-Hamid, M. A. (2019b). Value relevance of financial reporting: Evidence from Malaysia. *Cogent Economics & Finance*, 7(1), 1-19.
- Mirza, A., Malek, M., & Hamid, M. A. A. (2018). Value relevance of accounting information in Malaysian listed firms: Family and government ownership concentration's perspective. *Paradigms*, 12(2), 218-224.
- Mostafa, W. (2017). The impact of earnings management on the value relevance of earnings: Empirical evidence from Egypt. *Managerial Auditing Journal*, 32(1), 50-74.
- Mostafa, W., & Mostafa, W. (2016). The value relevance of earnings, cash flows and book values in Egypt. *Management Research Review*, 39(12), 1752-1778.
- Ohlson, J. A. (1995). Earnings, book values, and dividends in equity valuation. *Contemporary Accounting Research*, 11(2), 661-687.
- Omokhudu, O. O., & Ibadin, P. O. (2015). The value relevance of accounting information: evidence from Nigeria. *Accounting and Finance Research*, 4(3), 1-20.
- Oraby, S. A. (2017). The impact of earnings management strategies on accounting information relevance. *International Journal of Business and Social Science*, 8(4), 125-135.

- Pervan, I., & Bartulovic, M. (2014). Value relevance of accounting information: Evidence from South Eastern European countries. *Economic Research*, 27(1), 181-190.
- Pesaran, M. H. (2004). General diagnostic tests for cross section dependence in panels. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=572504
- Pfanner , E., & Fujikawa, M. (2015). Toshiba slashes earnings for past seven years. Retrieved from <https://www.wsj.com/articles/toshiba-slashes-earnings-for-past-7-years-1441589473>
- Roychowdhury, S. (2006). Earnings management through real activities manipulation. *Journal of Accounting and Economics*, 42(3), 335-370.
- Shamki, D., & Rahman, A. A. (2011). Net income, book value and cash flows: The value relevance in Jordanian economic sectors. *International Journal of Business and Social Research*, 1(1), 123-135.
- Sharma, A. K., Kumar, S., & Singh, R. (2012). Value relevance of financial reporting and its impact on stock prices: Evidence from India. *South Asian Journal of Management*, 19(2), 60-77.
- Tanaka, G. (2015). Value relevance of international financial reporting standards : Evidence from Peruvian companies. *Indian Journal of Accounting*, 47(1), 1-14.
- Vichitsarawong, T. (2011). The value relevance of earnings and cash Flows: Evidence from Thailand. *Journal of Accounting Profession*, 7(19), 39-53.
- Whelan, C., & McNamara, R. (2004). The impact of earnings management on the value-relevance of financial statement information. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=585704