

## RELATIONSHIP BETWEEN CORPORATE SUSTAINABILITY AND RETURN ON INVESTED CAPITAL OF PAKISTANI FIRMS

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### ABSTRACT

*The purpose of this research is to examine the impact of corporate sustainability on the return on invested capital performance for the non-financial sector in Pakistan. The data has been taken from the KSE-100 Index of 74 Non-Financial Firms for the period of 2015-2020 by taking the data from the sustainability reports, annual reports and website disclosures of the respective companies. The index for sustainability is based on the five sub-indices namely, economic, environmental, social, governance and health & safety indicators with the composite overall sustainability index. The panel regression model technique has been applied using the fixed effect to analyze the individual indicators as well as composite effect of sustainability index for the evaluation of company's performance. The results for the study indicates positive effect of economic, environmental, social, governance sustainability indicators and a composite sustainability index on the return on invested capital. This research depicts clear relevance of the sustainable practices on the corporate strategy and its financials. The findings of this study will be useful for respective companies' management to better understand the importance of sustainability practices in corporate strategy for the better performance of the company.*

**Keywords:** Corporate sustainability, return on invested capital, non-financial firms, fixed effect, health & safety sustainability, environmental sustainability

### INTRODUCTION

Corporate Sustainability is an evolving concept in the world, which aims to achieve the sustainable goals for the betterment of the country and for the world. For this reason, United Nations Development Program (UNDP) has been involving all the global communities to adopt the 17 sustainable goals agenda of 2030 which can be done with the proper steps initiated by the government among the businesses, communities, non-governmental organizations (Shad et al., 2020). The corporate sustainability is mainly associated with the corporate social responsibility (CSR) which is the social activities done by the companies for the benefit of the stakeholders and value of the firm. However, corporate sustainability is a broader term, which covers the attributes of the global problems. The companies can become aware of the benefits when they know the solutions for these problems which can be done by engaging themselves in the sustainability initiatives (Meuer et al., 2020). Moreover, ensuring the sustainable practices and efforts by the businesses help them in increasing their earnings and higher value of the firm for the shareholders and stakeholders, which is the major goal of the organizations to be achieved. Ensuring the satisfaction of the stakeholders can maximize the profits of the organization when the sustainable society activities are practiced by the firms rather than practice those activities which effects negatively to the society and put the world to the dangerous paths. Hence, it become important to follow the sustainable practices that do not affect the environment of the country.

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Sustainability reporting and its practices in the emerging economies are not much active since there are not much rules applied in emerging countries. We can take an example of Pakistan, sustainability reporting is a voluntary action in Pakistan and there are no such rules and set regulations from the regulatory bodies for this purpose (Mirza, 2017). The sustainable practices creates the efficiency in the market that can help the organizations in achieving the better profitable results and interest of the investors. There is lack of awareness among the people for the sustainability reporting and practices in Pakistan as the firms taking actions on the sustainable goals but many of them do not provide the disclosures for those activities. Hence, the reporting level of the sustainability by the firms become a limitation for the investors in order to analyze the firm's sustainability levels. However, there are certain laws that indirectly emphasize on the need of the sustainability reporting and its practices by the firms. Therefore, the company providing the transparent corporate sustainability measures through their sustainability reporting can be helpful in evaluating the maturity level of the sustainability performance (Gnanaweera & Kunori, 2018).

Hence, the disclosures can provide information to the stakeholders that how firm is responsible for their activities that might affect the global environment (Kim et al., 2021). If the businesses do not show concern for the environmental issues especially for the countries that are in the developing stage. Then, the continuous emission of greenhouse gases creates the global warming faster than from the previous years, which can deteriorates the ecological system. Thus, the positive economic impact can be created by reducing the negative impact on environment that adversely affect the environment and the society (Ortiz-de-Mandojana et al., 2016). The sustainable practices lead towards the development of the country in order to reduce the emissions of wastes and other pollutants which can help in minimizing the use of natural resources and ultimately preserve resources for the future generations (Hongming et al., 2020). Not only the environmental issue, other sustainable practices such as economic, social, governance and health & safety also creates benefit to the economy and the stakeholders of the firm if these practices are adopted by the organizations.

The strong sustainability practices and its disclosures by the firms can improvise the economic growth which is a positive sign to gain the good financial and non-financial performance in the market (Ashrafi et al., 2020). However, many researchers believes that the company should not work only for the maximization of the profit of its shareholder and it should not be the primary goal of the company being in complex and competitive environment. They need to focus on the positive impact of the company by approaching the new various fields and the business strategies especially to achieve the economic performance by protecting the environment and reduce the negative impact of social activities (Dobrowolski et al., 2022). Thus, initiatives can be done when companies are willing to engage in sustainable practices and disclosures to make their stakeholders well informed about the concern of the companies towards the sustainable environment and social activities in order to make their firm more competitive in the market. The main aim of the research is to examine whether the corporate sustainability creates the return on invested capital of the firm and focuses on the impact of the sustainability and its indicators such as economic, environmental, social, governance and the health & safety sustainable practices on the fundamental analysis of the firm which demonstrates the profit of the firm.

## **REVIEW OF LITERATURE**

Corporate Sustainability is the emerging concept which is suitable to enhance the profile of the company and increases the bond between the firm and its stakeholders (Tsalis et al., 2020). The company can be flourished if they have good reputation in the market, which ultimately increases their economic value and increases the financial performance. Therefore, many theories have been used to illustrate the impact of corporate sustainability on the firm's value. Stakeholder theory is among the widely used theory which emphasis on the increment of the shareholder's value by increasing the firms' value by efficiently using the resources of the firm. This further can be linked with the resource-based perspective theory which implies how useful the resources of the company are because of the scare nature and this helps in gaining the trust of the stakeholders towards the company (Jung et al., 2018). Since, the resources are limited therefore it is required to use them properly which can be done with the sustainable practices of the companies to enhance the firm's profitability and to satisfy the stakeholders that firm is working efficiently.

Agency theory is another theory which is basically the difference of opinion between the agent and the principal of the company (Calvo & Calvo, 2018). This relates with the corporate sustainability

practices of the firms among their top management and managers of the company to have same goals in leading the company towards the sustainable environment in order to become efficient in the market. Therefore, the companies can achieve better financial performance when there are no issues between the management and stakeholders of the company. However, The effective corporate governance increases the sustainable measures in the company and enhances the strategic leadership management between the principal and the stakeholder of the company (Bae et al., 2018).

Financial performance of the companies can be analyzed with the help of the sustainability disclosures by the companies to attract the investors. Thus, sustainability disclosures nowadays become the most important aspect for the company because they affects the performance of the company. This helps to measure the financial situation of the company by calculating its economic profit. Economic profits are associated with the methodology of economic value added calculation to determine the company's value (Dobrowolski et al., 2022; Jankalová & Kurotová, 2020). This can be explained with the various theoretical approaches such as risk-avoid theory that involves the stakeholder theory, institutional theory and the opportunity-seeking theory involves the natural-based theory and knowledge based theory (Chatzitheodorou et al., 2021). It helps in gaining the confidence of the stakeholders on the company's operational workings, which improvised with the help of corporate sustainability because this fulfills the environmental and social works that are needed to be focused by the firms (Lo & Liao, 2021).

Corporates can achieve the economic performance efficiently by managing their sustainability activities to have the proper operations and to satisfy the stakeholders. For this purpose, the sustainable development can be efficiently increased by the companies if there are proper activities for the sustainability, which are beneficial for both society and the environment. This will help to have an upward trend for the international competitiveness with sustainable development in the market which can be enhanced that provides the link with the competitive advantage theory (Shad et al., 2020; Wagner, 2010). The increased awareness to achieve the sustainability has motivated the companies to follow the widespread sustainable guidelines for better performance in the market. The Global Reporting Initiative (GRI) framework is the most widespread in this regard which provide guidelines to the companies to disclose the economic, environmental, social and governance sustainable measures (GRIs, 2006). These measures can help the companies to achieve better reputation in the market and improve their firm value to have the better economic performance.

In this regard, the legitimacy theory provides the relation between the firm and the society to achieve better measures in compliance for the value creation when companies disclosed their economic, environmental, and social issues (Nobanee & Ellili, 2016). This theory indicates that the firms have to make the social contract with the society for its growth and hence the operations of the firm meets the social ends, which are desired by the society. Additionally, Economic sustainability can be achieved with the proper economic strategies made by the companies in order to have the long-term competitiveness. This can be determined with the help of the value creation function of gaining the effectiveness and efficiency of the product and services to improve the value created by the firm (Wijethilake, 2017). Karaman et al. (2018) mentioned in their research that the companies incorporates sustainability issues into their firms' strategies can achieve the higher growth in the market. Moreover, the companies need to provide the economic sustainability for the higher growth with the help of the strategies applied through the social and environmental sustainability.

The Corporate sustainability can impacts the economic profits of the company which might affects the wealth of shareholders therefore, efficient allocation of economic capital to generate the economic value of the company. To determine this, Figge and Hahn (2012) have assessed the economic value creation by analyzing environmental and economic sustainability performance of the company in achieving the impacts of the sustainability on the financial performance of the company. Accurate sustainability disclosures lead to help the companies and their managers in decision making for the internal and external factors of the firms (Amahalu, 2018). To achieve the long-term sustainability, the environmental resources can be analyzed as the eco-efficiency which is basically how the company utilizes its environmental sustainability resources to generate the economic output for better financial and economic performance (Kocmanová et al., 2016).

In order to achieve the effective corporate performance, it is evident that the firms to have strong corporate governance measures which should be sustainable enough for the operations of the firm. This is because the corporate governance is a mechanism which build relationship between the parties that can be firms' shareholder, managers and investors in order to ensures the proper structure

of using the resources to remain competitive in the market (Al-ahdal et al., 2020). Weston and Nnadi (2021) established a link between the CSR activities of the firm to the corporate financial performance with the help of the ESG principle in decision-making process while making investment decisions. The firms use the positive strategies for sustainable activities can predict high future growth. However, the firms engaged in the negative corporate sustainability or do not perform sustainable activities may affect the value of the firm in the market (Lin et al., 2021).

**RESEARCH METHODOLOGY**

The research is conducted to analyze whether sustainability indicators have a relation and impact on the return on invested capital. Therefore, the secondary data has been collected 74 Non-Financial Companies of KSE-100 Index for the evaluation of our models with the time of 6 years i.e. 2015-2020. For this purpose, the qualitative data has been collected from the annual reports, sustainability reports and websites disclosures for the sustainability indicators of economic, environmental, social, governance and health & safety sustainability of a firm. In the research the independent variables are dummy variables, therefore the data is collected as ‘1’ if the particular indicator information has been disclosed by the company and ‘0’ if there is no disclosure of the indicator by the company. The quantitative data has been taken from the company’s annual reports for the calculation of the ROIC. To evaluate this heterogeneous data, panel regression analysis is more suitable as it combines the elements of time-series and cross-sectional data analysis which helps in the process of data with less collinearity (Hongming et al., 2020; Yasser, 2011). Hence, the results for panel data processed through STATA-16 software for the panel regression analysis to test the relationship of the variables.

$$ROIC_{i,t} = \alpha + \beta_1 ECI_{i,t} + \beta_2 ENI_{i,t} + \beta_3 SOI_{i,t} + \beta_4 GOI_{i,t} + \beta_5 HSI_{i,t} + \beta_6 SIZE_{i,t} + \beta_7 LEV_{i,t} + \epsilon_{i,t} \quad (Model 1)$$

$$ROIC_{i,t} = \alpha + \beta_1 SRI_{i,t} + \beta_2 SIZE_{i,t} + \beta_3 LEV_{i,t} + \epsilon_{i,t} \quad (Model 2)$$

Here, ‘i’ refers to the company and ‘t’ refers to the time. The dependent variable ROIC is the Return on Invested Capital where independent variables includes; ECI is the Economic Sustainability Indicator, ENI is the Environmental Sustainability Indicator, SOI is the Social Sustainability Indicator, GOI is the Governance Sustainability Indicator, HIS is the Health and Safety Sustainability Indicator, SRI is the Overall Sustainability Indicator. SIZE is the size of the firm and LEV is the firm leverage.

**Variable and Its Measurements**

Following are the variables and its measurements:

**Table No. 1 Variable and its Measurement**

Variables	Proxies	Measurement	References
<b>Dependent Variable</b>			
Return on invested capital	ROIC	ROIC= Net Operating Profit before interest divided by invested capital	(Bodhanwala & Bodhanwala, 2018; Damodaran, 2007)
<b>Independent Variables</b>			
Economic Sustainability Indicator	ECI	If the particular sub-indicator is disclosed by the company then it is mentioned as “1” otherwise “0”.	(Hongming et al., 2020)
Environmental Sustainability Indicator	ENI	If the particular sub-indicator is disclosed by the company then it is mentioned as “1” otherwise “0”.	(Hongming et al., 2020)
Social Sustainability Indicator	SCI	If the particular sub-indicator is disclosed by the company then it is mentioned as “1” otherwise “0”.	(Hongming et al., 2020)
Governance Sustainability Indicator	GOI	If the particular sub-indicator is disclosed by the company then it is mentioned as “1” otherwise “0”.	(Hongming et al., 2020)
Health & Safety Sustainability Indicator	HIS	If the particular sub-indicator is disclosed by the company then it is mentioned as “1” otherwise “0”.	(Hongming et al., 2020)

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Overall Reporting Index	Sustainability	SRI	If 3 or more individual indicators of sustainability are disclosed as “1” then it is reported as “1” otherwise “0”.	(Hongming et al., 2020)
<b>Control Variables</b>				
Firm Size		SIZE	FS= Log (Total Assets)	(Hongming et al., 2020; Shad et al., 2020)
Firm Leverage		LEV	FL= Total Debts/ Total Equity	(Hongming et al., 2020; Shad et al., 2020)

**RESULTS AND DISCUSSION**

**Descriptive Statistics**

The table 2 provides the descriptive statistics of the variables used in this research. The total number of observations for this research is 444 observations of each variable. The ROIC average value is 0.134 showing the average return on the invested capital through debt and equity of the company with the standard deviation of 0.124 showing 12.4% variation in the data. The range of the data lies with the -0.22 to 0.49. The economic sustainability mean value is 0.847 with standard deviation of 0.361 showing that almost 84.7% of the economic sustainability is being reported by the firms with the deviation of the 36.1% in the data. The environmental sustainability average value is the 0.550 with standard deviation of 0.498 showing that 55% of the environmental sustainability is reported by the companies, which is the lowest among all other sustainability indicators.

The social sustainability mean value is 0.615 with the standard deviation of 0.487 showing that the 61.5% of the data is being reported by the firms therefore, the 48.7% data provides the information of social sustainability of the firms. The governance sustainability mean value is 0.917 with the standard deviation of 0.277 showing 91.7% of the companies disclose their governance indicators with a low deviation of 27.7%. This is the highest mean value and lowest deviation among all the independent variables of this research. The health and safety sustainability mean value is 0.680 with the standard deviation of the 0.467 showing that the 68% of the indicators have been disclosed by the companies where the data shows deviation of 46.7%.

**Table No. 2 Descriptive Statistics**

Variable	Obs	Mean	Std. Dev.	Min	Max
ROIC	444	0.134	0.124	-0.22	0.49
ECI	444	0.847	0.361	0	1
ENI	444	0.550	0.498	0	1
SOI	444	0.615	0.487	0	1
GOI	444	0.917	0.277	0	1
HSII	444	0.680	0.467	0	1
SRI	444	0.770	0.421	0	1
SIZE	444	10.519	0.554	8.922	11.935
LEV	444	0.690	2.117	-22.052	22.761

The overall sustainability index mean value is 0.770 with standard deviation of 0.421 showing that combining the effect of all sub-indicators, the overall sustainability index providing the disclosure of 77% from all the selected companies with the deviation o 42.1%. The minimum and maximum value of the sustainability indicators and overall sustainability is 0 and 1 because these are dummy variables and data is collected in 0 and 1. The mean value for firm size is 10.519 with the standard deviation of 0.554. The minimum and maximum range is 8.922 and 11.935 this means the data for firm size lies between these two values. The mean value for firm leverage is 0.690 with the standard deviation of 2.117 that ranges between the minimum and maximum values of -22.052 and 22.761.

**Correlation Matrix**

Table 3 provides the information regarding the Pearson correlation outcomes of the variables applied in the research. The results of matrix indicates that the ROIC is significant and positive for the indicators i.e. economic, environmental, social and health & safety as well as for the overall sustainability index but it is negatively insignificant with the governance sustainability indicator showing decreasing the ROIC of the firms. This means the firms need to adopt more policies in order to gain significant impact

from the governance sustainability of the firms. Since, the indicators are positively significant creating the value addition in the dependent variables therefore; the companies need to enhance their sustainability levels in order to achieve the enhanced financial performance for the year.

The value-creation of the companies which provides the information related to the sustainability management theories showing that the risk of the firm can be reduced if the companies increases their sustainability levels which can be analyzed when they are reported by the company to the stakeholders (Shad et al., 2020). The control variables (firm size and firm leverage) are showing the opposite results to each other. The SIZE is positively insignificant with the ROIC. On the other hand, the LEV is negatively insignificant with the ROIC. The overall results of correlational matrix are below ‘0.90’ indicates that the multi-collinearity problem does not exists in our models and not an issue for the results (Tabachnick et al., 2007).

**Table No. 3 Correlation Matrix**

Variables	ROIC	ECI	ENI	SOI	GOI	HSI	SRI	SIZE	LEV
ROIC	1.000								
ECI	0.101**	1.000							
ENI	0.160**	0.248**	1.000						
SOI	0.142**	0.206**	0.529**	1.000					
GOI	-0.056	0.186**	0.169**	0.109**	1.000				
HSI	0.161**	0.307**	0.338**	0.432**	0.096**	1.000			
SRI	0.211**	0.269**	0.369**	0.428**	0.263**	0.676**	1.000		
SIZE	0.065	0.203**	0.284**	0.219**	0.158**	0.366**	0.362**	1.000	
LEV	-0.011	-0.022	0.040	0.037	-0.016	0.068	0.058	-0.008	1.000

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

**Regression Analysis**

The panel regression analysis of the models depicts the relation and impact of independent variables on the dependent variable. Before interpreting the results of the panel regression, it is important to mention that which effect has been used in checking the appropriation of the results. Thereby, the Hausman specification test has been performed to analyze whether fixed effects (FE) or random effects (RE) is appropriate for the model used in the panel regression. The results of the Hausman test indicates that the fixed effect models are more appropriate than random effects for all models as it can be seen from the table 4 that the Hausman test results are significant.

**Table No. 4 Regression Results of Return on Invested Capital (ROIC) Models**

Variables	Symbols	Model 1	Model 2
Economic Sustainability Indicator	ECI	0.0610556** (0.024)	
Environmental Sustainability Indicator	ENI	0.0293579* (0.051)	
Social Sustainability Indicator	SOI	-0.0256158 (0.190)	
Governance Sustainability Indicator	GOI	0.0853568*** (0.001)	
Health & Safety Sustainability Indicator	HIS	-0.1033246*** (0.000)	
Overall Sustainability Indicator	SRI		0.0796172* (0.069)
Firm Size	SIZE	-0.1125943***	-0.1384489***

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		(0.000)	(0.000)
Firm Leverage	LEV	-0.000225	-0.0002227
		(0.199)	(0.234)
_cons		1.258116***	1.528808***
		(0.000)	(0.000)
Observations		444	444
Hausman Test		33.33***	10.70**
		(0.0000)	(0.0135)
R-square		73.28	69.47

*Note: Return on Invested Capital is the dependent variable. Hausman test analyze the measure for using the fixed effect model and the  $R^2$  to check the accuracy of the model. P-value are in the parentheses. \*\*\*  $p < .01$ , \*\*  $p < .05$ , \*  $p < .1$ .*

The R-square of fixed effect of model 1 shows that 73.28% of the variable is explained through the model with the help of independent and constant variables. The panel regression results of the model 1 is displayed in table 4, which depicts the effect of individual sustainability indicators on the return on invested capital (ROIC). The results depicts that the economic sustainability indicator ( $\beta = 0.0610556$ ,  $sig < 0.05$ ), the environmental sustainability indicator ( $\beta = 0.0293579$ ,  $sig < 0.1$ ) and the governance sustainability indicator ( $\beta = 0.0853568$ ,  $sig < 0.1$ ) have positively significant effect on the ROIC. With the sustainability individual indicators analysis, we can get the idea that the sustainability performance have a positively significant impact on the performance of the invested capital as the return on the invested capital is tend to be increased if the companies reports and follows the sustainability of the firm to provide the sustainable environment to their investors. The more the sustainable a company is the more it can have return on their invested capital and the investors are tends to invests in the companies.

The health & safety sustainability indicator ( $\beta = -0.1033246$ ,  $sig < 0.01$ ) has negative and significant effect on the ROIC. Thus, we can say that the health & safety sustainability has a significant relationship with the ROIC but have an negative impact as well which means if high health & safety sustainability reporting is done by the organization then there is a chance of lower return on invested capital. On the contrary, the social sustainability indicator ( $\beta = -0.0256158$ ,  $sig > 0.1$ ) has a negative and insignificant relation with the ROIC showing that social sustainability performance do not play significant role in the performance of the ROIC. This can be analyzed with the research of Shad et al. (2020), showing that weak effect of the social sustainability indicator on the firm profitability.

The control variable of firm size ( $\beta = -0.1125943$ ,  $sig < 0.01$ ) has negative and significant effect on the ROIC showing that the firm size is an important variable in depicting the results of the sustainability indicator with ROIC as dependent variable. On the contrary, the firm leverage ( $\beta = -0.000225$ ,  $sig > 0.1$ ) has negative and insignificant effect on the ROIC showing that the leverage is not an important factor in the model because the significance of the model has been depicted with the help of other variables. The results for the control variables are in context with the research of Hongming et al. (2020) showing significance with the firm size and insignificance with the firm leverage. Thus, on the basis of all the results of individual sustainability indicators, we can conclude that the sustainability performance have an impact on the ROIC which means the return on invested capital can be enhanced with the sustainability measures of the company and their reporting level so that the investors are willing to invest more and more return can be generated with the help of sustainable practices of the firm.

The R-square shows that 69.47% model has been explained through the independent and constant variable in the model 2. The overall sustainability index with dependent variable ROIC is reported in table 4 under the model 2. The results of overall sustainability index ( $\beta = 0.0796172$ ,  $sig < 0.1$ ) has a positive and significant effect on the ROIC. Thus, the corporate sustainability can increase the return on the invested capital of the company, which can be increased by attracting the investors to invest into the company. The significant relationship determines the corporate sustainability of the firm in ROIC enhancement.

Moving towards the control variables of the model 2, the firm size ( $\beta = -0.1384489$ ,  $sig < 0.01$ ) has the negative but significant effect on the ROIC. This means the firm size is an important factor in determining the relationship of the independent and dependent variable but have a negative association with them. On the other hand, the firm leverage ( $\beta = -0.0002227$ ,  $sig > 0.1$ ) has negative and insignificant effect on ROIC. This is because the significance of other variables in the model determine the significance of the model and hence, the leverage as a control variable become insignificant.

Moreover, the results for the control variables are in context with the research of Hongming et al. (2020) showing significance with the firm size and insignificance with the firm leverage.

Sustainable environment and practices is an important topic nowadays because resources are limited therefore the firms are required to attain more sustainable practices in order to efficiently utilizes the resources which enables them to have competitive advantage over other firms (Signori et al., 2021). This evaluates with the effectiveness of corporate sustainability that enhances the return on invested capital of the firms because stakeholders are not only interested in the return performance of the company but are also interested in the other sustainable performances of the firms which creates a progressive way to the society (Dobrowolski et al., 2022; Kocmanová et al., 2016). The impact of the sustainability indicators can be seen from the table 4 where the regression analysis provides the significant association with return on invested capital of the firms.

Hence, inclusion of the sustainable practices by the firms can enhance the strengths of the companies in order to provide them with the comprehensive view of the company rather than using the traditional and one-directional way of performing into the market. This is because day by day, the world is moving towards the sustainable businesses and more investments are made in those sustainable businesses because these are the future of the efficient markets. The traditional businesses without any sustainable practices might not be able to achieve the attraction of more investors, which is only based on the financial performance of the firms.

The firms that are financially strong are able to engage themselves in the sustainability practices and take initiatives in this regards. The sustainability performance initiatives have a universal and positive financial impacts on the companies which deduced from the ROIC performance of the firms (Mittal et al., 2008). The results generated in the research enables to evaluate that the individual sustainability indicators of economic, environmental, social, and governance as well as the overall sustainability index performance and reporting level have a significant and positive effect on the return on invested capital performance of the firms. The higher the sustainability disclosures means that there are higher performance of the firms which depicts through the results as the higher disclosures of the sustainability created high significance to our results (Dobrowolski et al., 2022).

## **CONCLUSION**

The research is conducted to analyze the return on invested capital performance of the company with its financial performance to better depict that the profitability and performance of the firms either can be enhanced through practicing the sustainability measures and disclose them in their sustainability or annual reports in order to make stakeholders inform about the activities of the firm. The main advantage of using the ROIC was to assess the performance of the companies using the modern indicators. Hence, the sustainable practices of the companies leads to achieve their perspective of value-creation into the market because companies do not perform for individual values but they perform to satisfy their stakeholders. This reduces the agency costs by having higher management values, which can be associated with the higher sustainable employee values by providing them the health & safety measures into the production lines as well as in the business performance.

The use of different sustainability indicators provided the diversification in our analysis to individually analyze the impact and effect of the sustainability activities of the companies to its financial performance of ROIC. The research have been conducted for the time period of 2015-2020 on the Non-Financial Sector of the KSE-100 Index which results in the significant relationship of the ROIC with the individual as well as with the composite sustainability index. This creates the impact that the disclosures of the sustainability and the firms' practicing the activities of sustainability enables the organizations to enhance their economic performance into the market and attract more investors. Thus, the stakeholder can be able to check the activities of the companies if these are reported in by the companies.

This research provides the guidance to the investors to analyze the status of the companies in a broader way rather than analyzing the efficiency status of the companies through their ratio analysis only. The management of the companies can depict the importance of evaluation of the ROIC in their calculation to better analyze the performance of the company performance where this become the chance for the management to attract more stakeholders towards the company by ensuring the effectiveness of corporate sustainability which lead towards the better financial performance. The limitation of this research involves the disclosures of the sustainable practices by the companies were



not disclosed. This is because the sustainability reporting is yet not mandatory in Pakistan. Moreover, the literature for this limited in context to ROIC and the studies conducted in Pakistan.

Despite the limitations, the findings of this research will be helpful for the investors to analyze the non-financial sector of KSE-100 index as well as to the respective companies' management and the government to analyze the significance of the sustainable practices within a firm and its impact on the country as a whole. The future research may include large sample instead of limited to KSE-100 Index in order to analyze the level of sustainable practices among the different sectors of the Pakistan Stock Exchange. Different non-financial variables such as human resource management, marketing and reputation of the firm can be used to assess the non-financial and the sustainability performances of the companies.

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