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# Does Country Level Sustainability Reporting Affect Sustainable Development of a Country? Evidence from Developed and Developing Countries

Allah Ditta
Department of Commerce, Bahauddin Zakariya University, Multan, Pakistan
Email: admalana88@gmail.com

Zeeshan Mahmood (Corresponding author)
Department of Commerce, Bahauddin Zakariya University, Multan, Pakistan
Email: zeeshanmahmood@bzu.edu.pk

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## Abstract

The role of accounting and reporting in sustainable development has been gaining prominence over the last few decades. There is advocacy by the sustainability network associations (especially Global Reporting Initiative) that corporate sustainability reporting enables the sustainable development of a country. This study aims to find an empirical connection between corporate sustainability reporting of the country and the sustainable development of the country. A 6-year data set, ranging from 2014 to 2019 relevant to sustainability reporting and sustainable development, was used to test the hypothesis by controlling the effect of countries' governance index and countries' global competitive index. E-views-9 software was used for data analysis. Panel regression techniques were applied to find out a relationship between sustainability reporting and sustainable development. Empirical results revealed that there is a positive and significant relationship between sustainability reporting of the country and sustainable development of the country. Results also showed that the impact of country-level sustainability reporting on sustainable development is stronger in developed countries as compared to developing countries. This paper contributes both theoretically and empirically and informs policymakers, regulators, and companies for promoting sustainability reporting to achieve sustainable development.

**Keywords**: sustainability reporting, sustainable development, global competitive index, governance index.

## 1. Introduction

This paper arises from an interest in understanding the role of sustainability reporting in sustainable development of a country. Traditional accounting system, due to its sole focus on profits ignores the concepts like sustainable development. The concept of sustainable development revolves around the economic, social, and ecological aspects (Brundtland,

1987; Bebbington & Larrinaga, 2014) and was mainly developed over increasing concerns about environmental deterioration, global inequalities, and economic as well as socio-political instability (Stojanović et al., 2016). Among other changes, the practical application of sustainable development needs an accounting system that focuses on all three aspects of the development. In this regard, sustainability reporting can be considered as a framework for the accomplishment of sustainable development (Bebbington & Unerman, 2018). According to Storey, Killian, and O'Regan (2017), sustainability reporting could contribute towards sustainable development by measuring and reporting the sustainability practices toward a wide range of stakeholders. Global Reporting Initiative (GRI) also claims that sustainability reporting enables the sustainable development of the country. Despite this strong claim, this relationship has not become the focus of empirical research and warrants further in-depth investigation (Bebbington & Unerman, 2018; Trucco, Demartini, & Beretta, 2021).

Existing studies have examined the outcomes of sustainability accounting and reporting in different aspects. For example, the most salient outcomes as mentioned by some researchers include the impact of sustainability reporting on strategic decision making (Adams & Frost, 2008), corporate economic performance (Alshehhi et.al, 2018; Hongming et al., 2020; Yang, Orzes, Jia, & Chen, 2021; Albitar, Hussainey, Kolade, & Gerged, 2020a), firm value (Joseph et. al,2018; Muslichah, 2020), stock returns (Lins et al., 2017), sustainable future of an organization (Christian, 2018) and firm reputation (Ahmetshina et.al, 2018). However, the majority of the study on the effects of sustainability reporting has been done at the organizational level, ignoring the effects at the country level (Lääts et al., 2017). Very recently, few studies focused on the country-level determinants and outcomes of sustainability reporting (Uyar et, 2021; Muslichah, 2020; Tuan et al., 2019) but these studies ignored the relationship with sustainable development. Theoretically better sustainability reporting performance has a positive impact on the sustainable development of a country (Bartelmus, 2007; Bebbington & Larrinaga, 2014; Mistry et al., 2014; Ngwakwe, 2012; Unerman & Chapman, 2014), while empirically such relationship is yet to be investigated. Furthermore, the majority of research related to sustainability reporting was conducted in developed countries and neglected developing countries (Buallay, 2019; Fifka, 2013) despite the differences in the institutional environment between the two countries group (Uyar et al., 2021). The current study tried to fill these gaps by incorporating sustainability reporting of the country and its impact on sustainable development in both developing and developed countries.

In addition to the theoretical connections between sustainability reporting and sustainable development as described above, this paper uses the arguments of the stakeholder theory and institutional theory. According to the stakeholder theory, entities in a country must develop a valuable relationship with all of its stakeholders, rather than just shareholders, and strive to address their concerns and meet their informational needs through sustainability practices (Chen & Roberts, 2010). Sustainability reporting is considered as a bridge between society and stakeholders in terms of a company's ecological responsibilities (Mahmood et al., 2019). According to stakeholder theory, firms should engage with their

stakeholders to ensure economic, social, and environmental performance (Abdullah, Zailani, Iranmanesh, & Jayaraman, 2016; Latif, Mahmood, San, Said, & Bakhsh, 2020). The institutional theory suggests that organizations must meet the expectations of the institutional environment in which they operate (Campbell, 2007; Greiling et al., 2015). The institutional environment in developed and developing countries varies due to different economic, socio-cultural, legal, and political contexts (Uyar et al., 2021; Jacoby, Liu, Wang, Wu, & Zhang, 2019). The differences in the institutional environment may have implications for the link between sustainability reporting and sustainable development in developed and developing countries that need to be investigated. Therefore, this paper aims to find an empirical association between country-level sustainability reporting and sustainable development in both developed and developed countries. This paper contributes to the sustainability reporting literature and has practical implications for policymakers, regulatory bodies, corporations, and other stakeholders.

The rest of the paper is structured as follows. Section 2 reviews the existing literature that results in the development of hypotheses. Section 3 describes the research methodology followed by results in section 4. Section 5 provides discussion, conclusion, and policy recommendations.

## 2. Literature Review and Hypotheses Development

In recent years, sustainable development-related research has gained much attention in numerous disciplines including management and business (Bebbington & Unerman, 2018). The UN Sustainable Development Goals (SDGs) are the most current development in the SD agenda (United Nations Development Programme, 2015). The SDGs are a set of 17 goals linked to economic, social, and environmental outcomes that seek to eradicate poverty, hunger, safeguard the environment, and ensure that all people may live in peace and prosperity (Le Blanc, 2015). SDGs were developed through consultation and participation of different segments of society. Although the development and accomplishment of SDGs were initially the responsibility of governments, the collective effort of businesses, governments, and society as a whole is needed (Scheyvens et al., 2016). SDGs are now becoming part of the strategic process for various organizations. Focusing on sustainability strategies help firms to manage their environmental and social impacts even while improving operational efficiency and natural resource management (Ernst & Young, 2014).

Sustainability reporting is one of the recent accounting innovations that aims to contribute towards achieving sustainable development goals (Sardianou, Stauropoulou, Evangelinos, & Nikolaou, 2021; Alshehhi et al., 2018; Bebbington & Unerman, 2018). According to GRI (Global Reporting Initiative), sustainability reporting (SR) is a non-financial form of reporting which is published by organizations or companies to show their economic, social and environmental performance. Accounting professionals can influence the accomplishment of SDGs and transform them into sustainable development of a country (Makarenko et al., 2017). Various studies have pointed out the impact or outcomes of sustainability reporting. For example, Weber, Koellner, Habegger, Steffensen, and Ohnemus (2008) found that there is a positive effect of SR on financial performance and

the sustainable development performance of the firm. Moreover, Kouloukoui et al., (2019) found a significant and positive association between ecological disclosure and firm economic performance. Similarly, Alshehhi, Nobanee, and Khare (2018) analyzed the literature and found a positive relationship between sustainability reporting and firm financial performance. Likewise, De Villiers and Marques (2016) examined that sustainability reporting disclosure has a positive relation with high share prices.

The findings of Papoutsi and Sodhi (2020) pointed that corporate sustainability practices affect company sustainability performance. Besides, Joseph et. al, (2018) pointed out that SR practices have a positive impact on the value of the stock. Moreover, sustainability reporting has a positive relationship with stock return (Lins et al., 2017). Similarly, Christian (2018) pointed out environmental and social reporting of the firm has a positive effect on the sustainable future of the organization. Furthermore, reporting under the Global Reporting Initiative (GRI) framework showed a positive relationship with the firm reputation (Ahmetshina et al., 2018).

The study of Sudirman, Upe, Herman, and Susilawaty (2021) pointed out that corporate social responsibility (CSR) programs that are linked with the SDGs can assist the government in accelerating SDGs accomplishment. Similarly, Alotaibi (2021) found that firms' CSR disclosure has a positive effect on the quality of reporting and value of the firm. According to Storey, Killian, and O'Regan (2017) accounting and reporting could contribute towards sustainable development (SD) by measuring and reporting the sustainability practices towards a wide range of stakeholders. Furthermore, Calabrese et al., (2021) suggested framework opens up options for practice and research, allowing enterprises to evaluate their level of commitment to reporting and monitoring their contributions to the SDGs.

Several types of studies have been conducted to determine the impact of sustainability reporting on various aspects e.g., the impact of sustainability reporting on corporate reputation (Ahmetshina et al., 2018), corporate financial performance (Alshehhi et.al, 2018; Hongming et al., 2020; Yang, Orzes, Jia, & Chen, 2021; Albitar, Hussainey, Kolade, & Gerged, 2020a), firm value (Joseph et. al,2018; Muslichah, 2020), stock returns (Lins et al., 2017), sustainable future of an organization (Christian, 2018) and strategic decision making (Adams & Frost, 2008). However, the majority of research on the outcomes of sustainability reporting has been done at the organizational level, and the country-level SR is missing from existing literature (Lääts, Gross, & Haldma, 2017). Also, existing research has not explored the theoretical link that exists between sustainability reporting and sustainable development at the country level. From the perspective of stakeholder theory, sustainability reporting can be seen as a bridge between society and stakeholders (Mahmood et al., 2019) that ensures sustainability performance (Latif, Mahmood, San, Said, & Bakhsh, 2020). Companies perform and disclose various economic, social, and environmental practices for different stakeholders which may contribute toward sustainable development. Based on existing literature and theoretical foundation this paper proposed the following hypothesis:

> $H_1$: There is a significant positive relationship between country-level sustainability reporting and the sustainable development of a country.

According to Buallay (2019) and Fifka (2013), the majority of studies on sustainability reporting have been undertaken in developed countries while neglecting underdeveloped countries. The association between societal accountability and business performance is expected to be influenced by market development and the institutional system of the country (Buallay et al., 2020). Institutional theory, suggests that organizations must fulfill the expectations of the institutional environment in which they operate (Campbell, 2007; Greiling et al., 2015). Sustainability practices appear to be more strongly associated with formal stakeholders' involvement or government actions (Brammer et al., 2012) which may affect the sustainable development of the country. The institutional environment in different countries varies due to change in the framework of legal, infrastructural, and governance (Uyar et al., 2021). Furthermore, in developed economies, corporate social responsibility (CSR) is more strongly tied to the participation of institutional stakeholders or government intervention (Brammer et al., 2012). In contrast to developed countries, there is a dearth of understanding regarding the need for sustainability reporting due to the absence of regulations, training, and government support (Mahmood et al., 2019). Therefore, the sustainable development of developing countries may be affected due lack of sustainability reporting. Similarly, sustainable development performance is affected due to countries with varying economic and institutional origins, exhibiting diverse development trajectories, priorities, measurements, and progress in implementing the SDGs (Cheng et al., 2021). The study of Wang, Dou, and Jia (2016) pointed out that the development of the institutional structure, a well-functioning market system for allocating resources to societal responsibilities by enterprises in developed nations produces better results than their counterparts in emerging countries. Similarly, Buallay et al., (2020) found in developed countries, environmental reporting enhances market-based performance and bank accounting. However, the mainstream research did not consider country-level reporting and the country's sustainable development performance in developed and developing countries. Therefore, this paper hypothesized the following:

> $H_2$: The impact of country-level sustainability reporting on sustainable development is stronger in developed countries as compared to developing countries.

## 3. Research Methodology

### *3.1 Measures*

This paper assessed the empirical association between country-level sustainability reporting and the sustainable development of a country. For this purpose, some important control variables were also included for instance governance indicators index and the global competitive index.

### *3.2 Variables and Description*

**Table 1: Variables and Measurement**

| Variables | Measures and Data Source |
|---|---|
| **Sustainability Reporting (SR)** Independent Variable | Sustainability reporting is measured through the number of sustainability reports published by the GRI database approximately for all countries and KPMG reports for sustainability reporting trends. 1. https://database.globalreporting.org/ 2. https://home.kpmg/xx/en/home.html |
| **Sustainable Development (SD)** Dependent Variable | Sustainable development is considered as a sustainable development goals index published by Sustainable Development Solution Networks for almost all countries. https://www.sdgindex.org/ |
| **Governance Indicators (GI)** Control variable | The governance indicators index is measured through the mean value of six indicators related to governance, published by the world bank. This index measures the efficiency of governance in the country. http://info.worldbank.org/governance/wgi/ |
| **Global Competitive Index (GCI)** Control variable | Index of global competitiveness is taken as a control variable. The World Economic Forum published a global competitive index every year based on the macroeconomic performance of the countries. https://www.weforum.org/ |

*3.3 Data Collection and Population*

This paper used secondary data from the year 2014 to 2019. The sustainability reporting of a country is measured through the number of sustainability reports published by the GRI database (Uyar et al., 2021) approximately for all countries. The sustainable development of the country was considered as a dependent variable. Moreover, the governance indicators' index is considered as control variable due to the rising issue of environmental degradation, disillusionment with global development efforts to reduce poverty and inequality, as well as macroeconomic and socio-political uncertainty, the focus has changed away from the economic growth model and towards a new model of sustainable development (Stojanović et al., 2016). Therefore, we consider governance indicators as a

control variable. The governance indicators index is measured through the mean value of six indicators related to the governance published by the world bank (Uyar et al., 2021). Similarly, we also consider the global competitive index (GCI) as a control variable because GCI includes different macroeconomics factors such as financial market development, health, institutional infrastructure, labor and goods market efficiency, education and training, market size, innovation, and business sophistication (World Economic Forum, 2020). Moreover, we consider dummy variables for developed and developing countries 1 and 0 respectively to make a comparison between these two categories. The population consists of all those countries of the world about whom the sustainability reporting scores, SDGs index, GCI score, and governance indicators scores are published by the respective institutions and databases.

*3.4 Sample*

Our sample consists of the countries for whom the indicators are available for the sample period i.e, 2014-2019. Therefore, the panel of 42 countries including developing and developed country-year observations used for data analysis.

*3.5 Hypothetical and Econometric Research Model*

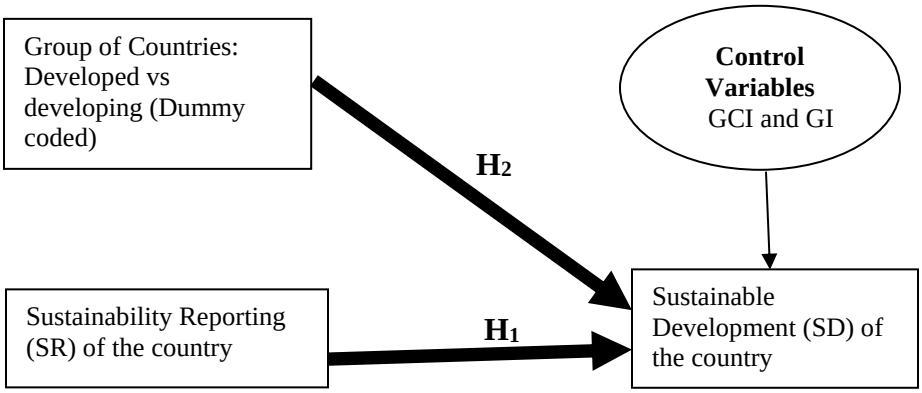


**Figure 1: Hypothetical Model**

$$SD_{it} = \alpha + \beta_1 SusRep_{it} + \beta_2 GI_{it} + \beta_3 GCI_{it} + \varepsilon$$

$$SD_{it} = \alpha + \beta_1 SR * developing\_dummy_{it} + \beta_2 GI_{it} + \beta_3 GCI_{it} + \varepsilon$$

$$SD_{it} = \alpha + \beta_1 SR * developed\_dummy_{it} + \beta_2 GI_{it} + \beta_3 GCI_{it} + \varepsilon$$

SDit represents sustainable development which is the dependent variable. SD is defined as a sustainable development goals index published by Sustainable Development Solution Networks. GIit represents the governance indicator index of a country and we used it as an average of six indicators published by the world bank. SR means sustainability reporting

of the country which is an independent variable. It is measured through the number of sustainability reports published by the GRI database and KPMG reports. 〖GCI〗 _it denotes global competitiveness index. Every year, the World Economic Forum publishes a global competitive index based on nations' macroeconomic performance. GI and GCI are control variables in the model.

*3.6 Analytical Procedure*

For each regression model, the outcomes of a pooled regression (POLs), fixed effect (FE), and a random effect (RE) were examined. The statistical outcomes of the FE regression were presented using the Hausman test. Tables 2 and 3 show the descriptive statistics and correlations matrix of the proposed variables.

## 4. Results

*4.1 Descriptive Statistics*

Descriptive statistics are used to observe the general behavior of the data set. The average and standard deviation of the variables are presented in the table. The minimum and maximum values of the variables are also shown. Moreover, Skewness and Kurtosis of the data set are also presented in the following table 2 to observe the normality of the data set.

Table 2 shows that the average of SD, GI, GCI, and SR was 69.92, 0.63, 5.73, and 133.91 respectively. Similarly, the maximum value of SD, GI, GCI, and SR was 85.60, 1.86, 9.21, and 876 respectively. While, the minimum value of SD, GI, GCI, and SR was 41.9,-1.03, 3.45, and 2 respectively. Moreover, the standard deviation of SD, GI, GCI, and SR was 9.34, 0.89, 1.39, and 151.33 respectively.

**Table 2: Descriptive Statistics**

| Variables | SD | GI | GCI | SR |
|---|---|---|---|---|
| **Mean** | 69.92722 | 0.639187 | 5.732632 | 133.9187 |
| **Median** | 70.00000 | 0.720000 | 5.410000 | 96.00000 |
| **Maximum** | 85.60000 | 1.860000 | 9.210000 | 876.0000 |
| **Minimum** | 41.90000 | -1.030000 | 3.450000 | 2.000000 |
| **Stand. Dev.** | 9.340856 | 0.895814 | 1.396337 | 151.3348 |
| **Skewness** | -0.447026 | -0.208550 | 0.600295 | 2.500015 |
| **Kurtosis** | 2.614389 | 1.610407 | 2.370651 | 11.05547 |

*4.2 Correlation and Multicollinearity*

A correlation analysis was done before a regression analysis to rule out the possibility of multicollinearity among independent variables. Multicollinearity is considered definite when the correlation coefficient is more than 0.9 (Dohoo et al., 1997). Some researchers suggested that for regression analysis, the correlation between independent variables should be 0.70 or lesser, otherwise, these variables are not eligible for regression in the same equation if the correlation between them is 0.70 or higher. However, there are no set standards for determining the relevance of multicollinearity in a specific regression

analysis application (Chen & Rothschild, 2010). The following table 3 shows the correlation coefficients for each pair of variables of interest to show the pairwise linear correlations.

Table 3 shows that SR has a significant and positive correlation with SD (r =0.137) at a 5% significant level. Similarly, SR shows a positive association with GI (r =0.104). Furthermore, SR has a significant and positive relation with GCI (r =.261) at a 1% significant level. Likewise, SD has a significant positive association between GI (r =0.76) and GCI (r =0.59) at a 1% significant level. Similarly, GCI and GI have significant and positive relation (r =0.479) at a 1% level of significance. According to the correlations table, the relationship between independent and control variables is less than 0.70 which shows the non-existence of multicollinearity.

**Table 3: Correlation Matrix**

| Variables | SR | SD | GI |
|---|---|---|---|
| **SD** | .137* | 1 | . |
| **GI** | .104 | .760** | 1 |
| **GCI** | .261** | .591** | .479** |

*4.3 Regression Analysis and Hypotheses Results*

We identified Pooled regression analysis (POLS) as the most relevant technique for analyzing the relationship of independent variables with the dependent variable by using the Lagrange Multiplier (LM) test criteria which suggest whether POLS is appropriate or not. Based on the criteria, we found POLS was not appropriate. Therefore, we applied the random effect (RE) model. After that, we applied the Hausman test to check whether the RE model or fixed effect (FE) model is appropriate. We used a fixed-effect model when the Hausman null hypothesis was rejected. We proposed the first hypothesis that the SR of the country has a significant and positive impact on the SD of the country. The following equation was proposed:

$$SD_{it} = \alpha + \beta_1 SusRep_{it} + \beta_2 GI_{it} + \beta_3 GCI_{it} + \varepsilon$$

We tested the relationship between SR and SD while controlling for the effect of the global competitive index (GCI) and governance index (GI). Since the LM test was significant (P=0.000), we used the fixed-effect model to examine the relationship between SR and SD because the value of the Hausman was significant at a 5% level of significance (P=0.0014). The results of the fixed effect model show that the effect of SR on SD was significant (B= 0.02 P=0.03) as shown in Table 4.

**Table 4: Regression Results of Fixed Effect Model**

| Variables | Coefficient | S.E (Standard Error) | T-Stat | P-Value |
|---|---|---|---|---|
| **C** | 68.51101 | 5.281496 | 12.97190 | 0.0000 |
| **GI** | -15.96269 | 7.780895 | -2.051524 | 0.0418 |
| **GCI** | 1.544564 | 0.310788 | 4.969832 | 0.0000 |
| **SR** | 0.020646 | 0.009703 | 2.127784 | 0.0348 |

**Effect Description (Cross-section FE)**

| $R^2$ | Adj $R^2$ | F-Stat | Prob-(F Statistic) | DW (Durbin-Watson) |
|---|---|---|---|---|
| 0.778617 | 0.719221 | 13.109 | 0.000000 | 2.518343 |

The above table showed that sustainability reporting of the country (B= .021; P= 0.034) has a significant and positive effect on the SD of the country. GI and GCI were used as control variables in the proposed model. According to the F-test stats, the model was highly significant at the 5% level of significance. Therefore, the first hypothesis was accepted. Results confirm the theoretical view of the earlier studies that reporting sustainability reporting has a positive impact on sustainable development (Bartelmus, 2007; Bebbington & Larrinaga, 2014; Mistry et al., 2014; Ngwakwe, 2012; Unerman & Chapman, 2014). Findings also validated the theoretical view of stakeholders' theory.

The second hypothesis was that the impact of country-level sustainability reporting on sustainable development is stronger in developed countries as compared to developing countries. For this purpose, we used a dummy variable as an interaction term with SR to find the impact of SR on SD in developed and developing countries. the following two proposed models were tested, and the results are stated in Table 5:

$$SD_{it} = \alpha + \beta_1 SR * developing\_dummy_{it} + \beta_2 GI_{it} + \beta_3 GCI_{it} + \varepsilon$$

$$SD_{it} = \alpha + \beta_1 SR * developed\_dummy_{it} + \beta_2 GI_{it} + \beta_3 GCI_{it} + \varepsilon$$

We applied POLS regression to test the hypothesis, the LM test results suggested that POLS is not appropriate. Therefore, we applied the random effect model for testing the hypothesis. However, the Hausman value suggested that the FE model is suitable to test the hypothesis. Therefore, the following table 5 shows the results of the FE model using GCI and GI as control variables for both developed and developing countries.

**Table 5: Regression Results of Fixed Effect Model**

| **Developing Countries** | | | **Developed Countries** | | |
|---|---|---|---|---|---|
| **Variables** | **Coefficient** | **P-Value** | **Variables** | **Coefficient** | **P-Value** |
| **C** | 70.06219 | 0.0000 | **C** | 71.13185 | 0.0000 |
| **GI** | -12.35225 | 0.1078 | **GI** | -17.86194 | 0.0225 |
| **GCI** | 1.814302 | 0.0000 | **GCI** | 1.528741 | 0.0000 |
| **SR*DEVLOPING_DUMMY** | -0.032765 | 0.1692 | **SR*DEVLOPED_DUMMY** | 0.030457 | 0.0038 |
| **Effect Description (Cross-section FE) Developing Countries** | | | **Effect Description (Cross-section FE) Developed Countries** | | |
| **$R^2$** | 0.775119 | | **$R^2$** | 0.781697 | |
| **Adj-$R^2$** | 0.714785 | | **Adj-$R^2$** | 0.722768 | |
| **F-Stat** | 13.26516 | | **F-Stat** | 13.26516 | |
| **P-(F-Stat)** | 0.00000 | | **P-(F-Stat)** | 0.00000 | |
| **DW Stat** | 2.51 | | **DW Stat** | 2.57 | |

Table 5 shows that SR of developed countries (SR*Developed_Dummy) has a significant and positive effect on sustainable development (B=0.03; P-value= 0.004) of developed countries. Whereas the effect of sustainability reporting on SD (B=0.03; P-value= 0.17) in developing nations (SR*Developing_Dummy) is insignificant. Findings confirm that the effect of SR on the SD in developed countries is stronger as compared to developing countries. F test shows that model was highly significant (P=0.00000) which shows the overall goodness of fitness of the model. Therefore, the second hypothesis was accepted. Results are consistent with previous findings that in developed economies, SR is more closely tied to formal institutions of stakeholders' engagement or state action (Brammer et al., 2012). Similarly, findings are in line with the previous study of Ali, Frynas, and Mahmood (2017) who pointed out that the interest of different stakeholders like shareholders, creditors, investors, media, regulators, environmentalists, and policymakers are deemed as very crucial in developed nations rather than developing nations. Likewise, findings are also convergent with the view of Cheng et al., (2021) who argued, because of institutional and economic factors, the trend of SR in developing nations is lower, making it tougher to increase sustainable development performance. Furthermore, results are also validated and confirm the institutional theory.

## 5. Discussion, Conclusion and Policy Recommendation

This study was conducted to find out the impact of sustainability reporting of the country on the sustainable development of the country. As a result of the data analysis, the sustainability reporting of the country showed a positive and significant impact on the sustainable development of the country. Therefore, the result of the study confirms the theoretical view of the earlier studies that sustainability reporting has a positive impact on sustainable development (Bartelmus, 2007; Bebbington & Larrinaga, 2014; Mistry et al., 2014; Ngwakwe, 2012; Unerman & Chapman, 2014). However, results indicated that the relationship of sustainability reporting with sustainable development in developed countries is different from developing countries. Particularly, the relationship of sustainability reporting with sustainable development is more pronounced and significant for developed countries but weaker and insignificant for developing countries. This finding complies with the view of institutional theory that highlights the role of the political, societal economic system in firms' behaviors (Campbell, 2007; Greiling et al., 2015 ). This finding also complies with the view of Brammer et al., (2012) that sustainability reporting practices are more tightly linked to state intervention in advanced economies. The insignificant relationship of sustainability reporting with sustainable development in developing economies may be due to the lack of stakeholder's interest, government, and policymakers in firms' compliance with sustainability reporting practices. Hence, most companies in developing countries may not focus on sustainability practices as the companies in developed countries do. Further, the companies in developed countries may show greater concern for sustainability reporting practices to reveal valuable information for their creditors, investors, controllers, environmentalists, stockholders, and the mass media as a part of their legal and social responsibility. Results strengthened and confirmed the theoretical view of Ali, Frynas, and Mahmood (2017). Findings also validate the view of Cheng et al., (2021) that in developing countries, the trend of sustainability reporting is lower, and difficult to improve sustainable development performance due to poor institutional and economic conditions. Moreover, the companies which are issuing sustainability reports in developing countries may not follow the due process of stakeholder engagement and proper guidelines of the GRI. As a result, the sustainability reporting of the country may not contribute substantially toward the sustainable development of the country. It is in line with the literature that in developing countries, the primary challenges to SR have been found as poor government structures, a lack of awareness and interest in sustainability issues, a lack of legislation, a lack of enforcement skills, and a lack of political will (Mahmood et al., 2019; Mahmood, Kouser, e Hassan, & Iqbal, 2017). Thus, this study concludes that country-level sustainability reporting has a positive impact on sustainable development and this impact is stronger in developed countries whereas in developing countries it has no impact on sustainable development.

### *5.1 Contributions of the Study*

This paper contributes theoretically and empirically to understand the role of sustainability reporting in achieving the sustainable development of a country. This paper provides

empirical evidence that sustainability reporting contributes to the sustainable development of a country. It is in line with stakeholder theory because sustainability reporting just not emphasize only shareholders but also focuses on society, the environment, and a diverse range of stakeholders. This study also confirms the theoretical view of the institutional theory which suggests that organizations must meet the expectations of the institutional environment in which they operate (Campbell, 2007; Greiling et al., 2015). This paper provides empirical evidence that, in developed countries, the impact was significant and positive whereas, in developing countries, sustainability reporting has no impact on sustainable development. This study directly contributes to the research agenda for highlighting the role of accounting and reporting in sustainable development (see. e.g., Bebbington & Unerman, 2018; Trucco, Demartini, & Beretta, 2021).

*5.2 Practical Implications*

The positive link between sustainability reporting and sustainable development implies that policymakers, regulatory bodies, society, and other stakeholders must focus more on the development of sustainability reporting for achieving sustainable development. The study also highlights the role of the corporate sector in addressing the stakeholders' concerns through sustainability reporting and contributing towards sustainable development. Companies must perform and report on all three aspects of sustainable development. Therefore, it is recommended that corporate leaders must perform a crucial role to develop a culture of sustainability reporting.

*5.3 Research Limitations and Potential Guidelines for Future Studies*

The paper is based on the sustainability reports available on the GRI Database. The reports that have not been uploaded to this system fall outside of the scope of this investigation. Future research could include more data sources for more inclusive research. In addition, the interaction among several additional country-level variables (e.g., environmental performance of countries, Governance performance of the countries and social performance of the countries as well as ethical and cultural issues of the countries) with sustainable development of the country through mediating role of SR of the country may be investigated as a future research area.

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