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Sustainability Development Goals Initiatives of Multinational Firms: Empirical Evidence from Emerging Economy

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Abstract

MNCs are regarded as one of the essential actors within the private sector that have a greater capability and outreach to address these wicked global challenges identified by the UN in 2015. Surprisingly, despite their important role in achieving SDGs, there is a lack of knowledge on the nature and extent of MNCs' engagement in sustainable development programs (van der Waal and Thijssens, 2020). This study aims to address this issue by examining the characteristics (organizational size, and location) that influence firms' engagement in SDGs initiatives that target to increase positive externalities. The results suggest that size and location exert a positive impact on the firm's involvement in activities that increase positive externalities. These results have important theoretical and policy implications.

Introduction

In 2015, the member countries of the United Nations unanimously accepted a set of 17 Sustainability Development Goals (SDG) to succeed Millennium Development Goals (MDGs) that were set out for the initial fifteen years of this millennium, 2000 to 2015 (United Nations, 2000). These goals include interrelated and actionable targets that address a wide range of economic, environmental, and social development goals that represent the 5 Ps: people, planet, prosperity, peace, and partnership (United Nations, 2015a). These triple bottom line (economic, environmental, and social development) goals are set to be achieved by 2030. The 17 SDGs consist of 169 targets. These goals include: "poverty reduction (SDG-1), zero hunger (SDG-2), good health and well-being (SDG-3), provision of education (SDG-4), gender equality (SDG-5), clean water and sanitation (SDG-6), affordable & clean energy (SDG-7), decent work & economic growth (SDG-8), industry, innovation & infrastructure (SDG-9), reduced inequalities (SDG-10), sustainable cities (SDG-11), responsible consumption & production (SDG-12), climate action (SDG-13), life below water (SDG-14), life on land (SDG-15), peace, justice & institutions (SDG-16), and partnership for goals (SDG-17)" (United Nation, 2015b, p.3). This is regarded as one of the most comprehensive and effective frameworks to deal with urgent global grand challenges (Tihanyi, 2020).

Amidst the dynamic landscape of stakeholder cooperation, it becomes increasingly evident how multinational corporations' endeavors play a pivotal role in advancing the Sustainable Development Goals (SDGs) in developed as well as developing countries. As

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an illustration, while acknowledging the role of multinational businesses, at the time Secretary-General Ban Ki-Moon suggested that: “Governments must take the lead in living up to their pledges. At the same time, I am counting on the private sector to drive success” (UN News Center, 2015). The urgency of sustainability matters led SDGs to resonate very strongly in the international policy development debate and attracted considerable scholarly attention in the international business discipline (e.g., Yamasaki and Yamada, 2022; Saiu and Blecic, 2022; Macellari et al., 2021; Barbier and Burgess, 2021).

SDG research predominantly concentrates on macro-level elements, investigating the impact of government interventions and foreign direct investment on sustainable development in both the domestic and foreign realms (Segaro and Haag, 2022; Kolk and van Tulder, 2010; Dunning & Fortanier, 2007). Segaro and Haag (2022) find that government interventions in local development and to increase exports in a frontier market (Ethiopia) have positive effects that lead firms to engage in SDGs at a higher level. Using the context of COVID-19, Stephenson et al. (2021) suggest that digital transformation can help governments achieve SDGs in a vulnerable environment through five actions: providing resources for technical assistance to increase private-public sector collaboration, endorsing sustainable investment framework, adopting inward FDI encouraging policies, facilitate technology investment to build economic resilience, and develop industry-based coalitions to operationalize government efforts. Suehrer (2021) suggests that the government should intervene through legislation to channel FDI into SDGs projects.

Khattak (2020) suggests that financial market development which in turn increases corporate access to domestic finance enhances firms’ engagement with SDGs. At the same time, firms’ access to international finance also exerts a positive influence on their engagement with SDGs. In line with this finding, several other studies such as López-Pérez et al., (2017), Sarkodie and Strezov (2019), and Giannetti and Ongena (2009) also showed similar results and concluded that government interventions enhance firms’ financial capability to engage in SDGs.

While their contributions are invaluable, previous research from a CSR perspective has predominantly centered on assessing the impact of CSR involvement on corporate outcomes, particularly performance, rather than on its effects on society (e.g., Gillan et al., 2021; Saeed et al., 2022; Bhattacharya & Sharma, 2019). By exclusively focusing on the effects of socially responsible practices on business outcomes the studies are unable to connect with SDGs which are designed from a social value creation perspective. In this regard, the most commonly studied corporate outcomes include firm performance, creditworthiness, competitive advantage, and firm value (e.g., Saeed et al., 2022; Gillan et al., 2021; Bhattacharya & Sharma, 2019). By having a corporate focus, the question of how corporate engagement in SDGs influences society remains largely unanswered.

The purpose of the research is to pinpoint this issue by investigating the extent and nature of MNCs’ engagement in SDGs. Specifically, this study fills the gap: how do MNCs’ size and location influence a firm’s extent of engagement in SDG initiatives that increase positive externalities? This study intends to make two important contributions to existing literature. Firstly, this study conceptualizes all SDGs as a set of activities that aim to increase positive externalities. Building on the notion of externalities, this study aims to advance an explanation of how multinational firms, particularly from emerging economies, can engage in SDGs set by the United Nations. The proposed comprehensive framework would enable firms to map their activities with a wide set of SDGs and help them assess their effect on society. In doing so, the study mitigates the critique that the United Nations' SDGs are excessively broad, making it challenging for firms to develop distinctive initiatives in response. (Montiel et al., 2021; van Zanten and van Tulder, 2018). In addition, drawing on the insights of institutional theory and social network theory, this study analyzes the organizational antecedents of SDGs that aim to increase positive externalities. In so doing, the role of firm size, and location is examined in pursuing SDGs —that target to increase positive externalities. In this way, the finding of the study contributes to a large scholarly work that examines the determinants of MNCs' engagement in sustainable development practices (Pizzi et al., 2021; Van der Waal and Thijssens, 2020; Fleming et al., 2017; Rosati and Faria, 2019; Lourenco and Branco, 2013).

Literature review

Institutional Theory

The intuitional theory is presented by Scott (1995). The institutional theory states that "organizations are driven to incorporate the practices and procedures defined by prevailing rationalized concepts of organizational work and institutionalized in society. Organizations that do so increase their legitimacy and their survival prospects, independent of the immediate efficacy of the acquired practices and procedures". In simple words, institutional forces in institutional settings of a country such as regulatory and socio-cultural factors influence the firm legitimacy and survival (Saeed et al., 2016; Meyer & Rowen, 1977). This theory proposed three institutional forces (i.e., regulative, normative, and cognitive) that exert pressure on the firm to engage in legitimatized and sustainable practices of the organization (Amoako et al., 2021). However, regulative forces are the rules, laws, and regulations that are implemented by federal and industrial regulatory bodies (Saeed et al., 2016). The normative institutional force is to "introduce a prescriptive, evaluative, and obligatory dimension into social life" (Vijita et al., 2019). This pressure consists of social norms, values, assumptions, and value systems of human behavior within the industry that need to be followed by the organization to operate within the industry and gain legitimacy through adopting sustainable practices (Michailova & Ang, 2008). Normative pressure sets a set of systems and standards in the industry that need to be accepted and followed by the organization to adopt socially responsible behavior and represent conformity to it (Campbell, 2006). Whereas, the culture cognatic force is the "shared conceptions that constitute the nature of social reality and the frames through which meaning is made" (Scott, 2008; Marquis et al., 2007). In the same way, other organizations' structures and legitimized practices are also driven by these forces to meet social expectations which leads to institutional isomorphism.

Hypotheses Development

Organizational size

It is well documented in the prior studies (Saeed and Riaz, 2021 Ardito et al., 2021; Bhattacharya & Sharma, 2019) that the size of the firm is an important antecedent of the firm's corporate social responsibility-related strategies. Variability in the Idiosyncrasies of the small and large firms allows them for different approaches toward the establishment of the structure of sustainable targets (Wickert et al., 2016). Considering the lens of institutional theory, MNCs are required to track prevailing norms, values, and culture of the local environment to ensure their survival (Riaz et al., 2022). The survival of the firm is assured only if it achieves a certain level of local social legitimacy (Scott, 2001). The large stream of prior literature stated that the bigger firms are facing high visibility and are prone to more stakeholders' security, thus, they need to be involved in a higher level of contribution to SDGs to gain a positive image in the organizational field (Arvidsson, 2010). Particularly, sustainable development actions that aim to increase positive externalities play a key role in obtaining societal legitimacy by larger organizations because it reflects their operational structure is linked with the existing expectations, norms, and values of the general stakeholders (Gavana et al., 2017). The increasing pressure from the general society to make sustainable development-related activities more visible and transparent has made sustainable policies that aim to increase positive externalities a priority to respond adequately to the demands of stakeholders (Schreck and Raithel, 2018; Montiel et al., 2021).

The resource-based view shifts the emphasis of the literature towards using available internal funds and capital when it discusses how to get benefits of sustainable competitive advantage (e.g., Reddy and Hamann, 2018; Rosati and Faria, 2019). The firm performance relating to sustainable development goals is chiefly defined by the availability of inimitable, rare, and valuable resources. The prior literature shows that investment in sustainable goals helps firms to build expert skills that provide exceptional financial benefits to MNCs (Saiu & Blecic, 2022; Saks, 2022; Stephenson et al., 2021) which in turn also enhances firms' social as well as financial reputation (Gupta & Gupta, 2020). As larger firms have more human, technical, and financial resources they are in a better position to work on UNSDGs (United Nations Sustainable Development Goals) which increases their positive visibility and profitability.

Contrary to large firms, small and medium-sized firms are not capable of achieving the handsome benefits of investing in sustainable development tk2argets as they are characterized by low media visibility and stakeholders' scrutiny (Schreck and Raithel, 2018; Riaz et al., 2022), In addition, small firms have to incur more resources for adopting sustainable development agendas. SDGs demand surplus resources such as human and financial, investment of time, and technical competency to select and implement sustainable targets, and normally small firms face a scarcity of these resources (Pizzi et al., 2021).

Along the same line, due to lesser cost and high availability of human, technical, and financial resources, a great stream of literature stated that larger firms are positioned to afford sustainable development-related disclosure (Udayasankar, 2008; Brown et al., 2009) which leads to favorable outcomes. Furthermore, larger firms are highly skilled and well equipped to communicate their achievements and commitments to sustainable development activities by reporting their social responsibility reports, however, small firms cannot bestow costly resources to market their CSR activities to the interested groups (Wickert et al., 2016; Baumann-Pauly et al., 2013). Based on these arguments, this study states that as the size of the firm increases it also increases the competence of the firm to invest in SDGs and vice versa. Thus, this study hypothesizes that:

Hypothesis 1: There is a positive relationship between organizational size and MNC's investment in SDG initiatives that aim to increase positive externalities.

Headquarter location

MNC headquarters located in developed countries benefit from various rewards such as one-to-one meetings with other MNCs and stakeholders, attracting skilled labor and specialized suppliers, and, knowledge spillovers (Zamir and Saeed, 2020; Boubakri et al., 2016; Saeed et al., 2022). At the same time, due to this geographical proximity, MNCs are also highly observable to regulatory bodies, NGOs, media, and general society. This clear visibility puts MNCs with headquarters in advanced countries under more societal expectations to conform to societal hopes (Riaz et al., 2021).

Contributions to achieving Sustainable development goals that offer positive externalities have been stated as the foremost societal expectation in developed countries (Terlaak et al., 2018). Nonetheless, hypothetically, both MNCs and local firms face stakeholders' pressure in developed countries, in reality, MNCs are prone to be more vulnerable to such societal demands as they are largely visible to the general society (De Jong et al., 2018). Proximity to strong stakeholders like investors, shareholders, NGOs, and regulatory bodies that are largely located in developed countries allows close visibility of firms' sustainable activities (Husted et al., 2019). In the same line, stakeholders' alliance is stronger in developed countries. Moreover, the normative pressure by social activists, civil society, and investors on MNCs to chase SDGs is widely spread in developed countries (Saeed et al., 2022). The chase of a socially responsible initiative that offers positive externalities makes MNCs more liable to the forces generated by a large variety of stakeholders in developed countries. This claim is based on the following arguments.

On the top, developed countries, contrary to developing and underdeveloped countries keep a great variety of opportunities. Humans migrate from less developed countries to developed ones to fulfill their targets (Benson and O'Reilly, 2009). Developed countries also provide more opportunities for MNCs to create their goodwill and reputation to increase their legitimacy and profitability. Prior studies (e.g., Aggarwal, V. S., & Jha, A. (2019; Dudutari et al., 2022; Jiang et al., 2020) documented that developed countries provide and wide avenue and greater platform for MNCs to create their positive image.

Secondly, the supply of financial resources in developing and underdeveloped countries is irregular (Diao et al., 2019) which makes developed countries more suitable and appealing for educated and skills persons (Fiaschi et al., 2017) —the highly knowledgeable stakeholders (Saeed et al., 2022). These immigrants make developed countries the hub of well-informed and financially sound business stakeholders that can effectively gauge firms' strategies and can modify via activism and buying decisions (Leisinger, 2006; Adu-Gyamfi et al., 2021). Keeping in consideration, the supremacy of these powerful stakeholders, this study states that general community pressure to follow SDGs with Positive externalities is prone to be higher in developed countries. In addition, the visibility of the MNCs with headquarters in a developed country is high among civil society and their continuous scrutiny makes them more vulnerable in their socially responsible actions. Based on the above discussion, this study hypothesized that:

Hypothesis 2: The firm's headquarters' location in developed countries has a positive effect on MNC's investment in SDGs initiatives that aim to increase positive externalities.

Data and Variable Construction

This study collected the data of 140 Chinese multinational firms from 2015-2022. China is selected based on its importance in the global economy as Belke et al. (2019) argue that after the occurrence of the global financial crisis of 2008, emerging countries, explicitly, China has recovered relatively quickly and now accounts for more than 30% of the global GDP. It is forecasted that in 2050 China will be the 1st largest economy globally.

China also faces significant sustainable development challenges that need to be addressed to achieve global sustainability goals. One of the critical sustainable development challenges facing the is poverty. Another significant challenge faced by China is environmental degradation. China is responsible for a significant portion of global greenhouse gas emissions, and it faces challenges such as deforestation, air pollution, and water scarcity. Inadequate access to basic services such as healthcare, education, and clean water is also a significant challenge in China. While progress has been made in some areas, such as improving access to education, significant gaps remain. Achieving the SDGs in China can have a significant impact on global sustainable development efforts. China represents a significant proportion of the world's population and economy, and its progress towards the SDGs can serve as an example for other countries and regions. In conclusion, understanding the relevance of the SDGs in China is essential for achieving global sustainability goals. By focusing on the SDGs, China can address shared challenges such as poverty, inequality, environmental degradation, and inadequate access to basic services.

The data relating to the contribution of the firms in various SDGs is collected from annual reports, CSR reports, and websites of the firms. For this purpose, we use content analysis to trace the firm's investment in the SDGs. Following van Zanten and van Tulder (2018) we categorized SDGs into one group namely positive externalities (doing good). In positive externalities, we added the SDGs that relate to firms' responsible contribution towards wealth, knowledge, and health such as doing CSR, food for all, and medicines and healthcare services for all. Specifically, nine goals are added in positive externalities that are 1) No Poverty 2) Zero Hunger 3) Good Health and Well Being 4) Quality Education 5) Gender Equality 6) Decent Work and Economic Growth 7) Industry Innovation and Infrastructure 8) Reduced Inequalities and 9) Peace Justice and Strong Institution. Importantly, data on all SDGs is collected from annual reports through content analysis. The data on SDGs is collected from the Thomson Reuters database (Asset 4). In addition, we will also manually collect the missing data regarding the SDGs of the firms from their annual CSR and sustainability reports. The data on other financial variables is collected from the OSIRIS database as well as from the annual statements of the firms.

Variables and Measurement

Dependent Variable

The dependent variable of the study is firms' investment (contribution) in sustainable development goals by the United Nations. This information is retrieved from the annual reports (CSR reports, and websites of the firms) of each firm using the content analysis. To check the hypotheses of our study we split this variable. Specifically, SDGs targets that aim to increase positive externalities. Based on prior studies (e.g., Saeed et al., 2022; Overland et al., 2021) this study will construct an index based on firms' investment towards respective SDG goals to capture the variable. This study will measure dependent variables as follows:

SDGs Investment that aim to increase positive externalities:

The definition of SDGs targets that aim to increase positive externalities means the firms' contribution towards wealth, knowledge, and health such as doing CSR, food for all, and medicines and healthcare services for all. Therefore, this study will characterize nine goals with positive externalities that are 1) No Poverty 2) Zero Hunger 3) Good Health and Well Being 4) Quality Education 5) Gender Equality 6) Decent Work and Economic Growth (Employee Friendly practices) 7) Industry Innovation and Infrastructure 8) Reduced Inequalities and 9) Peace Justice and Strong Institutions. After that, we coded the firm's contribution to the above-mentioned goals into two categories (1 for "contribution to a specific goal" and 0 for "no contribution to that specific goal). We assigned equal weights to all nine criteria following Saeed et al. (2022) and calculated discretion using the formula:

SDGs Investment to increase positive externalities = (0.11 No Poverty) + (0.11* Zero Hunger) + (0.11* Good Health and Well Being) + (0.11* Quality Education) + (0.11* Gender Equality) + (0.11* Employee Friendly practices) + (0.11* Industry Innovation) + (0.11* Reduced Inequalities) + (0.11* Peace Justice and Strong Institutions).*

The higher the value of the index mean higher contribution SDGs targets that aim to increase positive externalities and vice versa.

Independent Variables

The independent variables of the study are measured as follows:

Organizational Size

The size of the firm is measured as the natural logarithm of the total assets following prior studies (Aggarwal & Jha, 2019; Campopiano et al., 2019).

Headquarter location

The headquarters is a dummy variable which is equal to 1 if the firm's headquarters is situated in a large city, 0 otherwise.

Control Variables

This study also controls the effect of several variables that have been documented in previous literature (Fourati & Dammak, 2021; López-Pérez et al., 2017). This study will control firms' investment opportunities, leverage, and profitability as it is argued that profitable firms with high growth opportunities have more resources to invest in social initiatives. However, firms with high leverage have financial constraints as well as high risk, therefore, they are reluctant to invest in SDGs. Investment opportunities are measured by the market-to-book value of equity ratio, financial leverage is measured by debt-to-equity ratio, and profitability is measured by return on assets. Firm age is measured as the logarithm of the number of years since the firm was established. Older firms might be more concerned about their name and image and, therefore, be more sensitive towards investing in SDGs. This study will also control for GDP of the four countries to control the economic heterogeneity among them. The data on the GDP is collected from the website of the World Bank. In addition, this study will also control industry, year, and country effects by introducing the dummy variable of each category.

Econometric Framework

To test the Hypotheses of this study, the data is analyzed using the GMM (Generalized Method of Moments) methodology. GMM is chosen as the estimation technique due to its ability to address various econometric concerns that may arise in the analysis. One econometric concern that GMM helps overcome is heteroskedasticity. In this study, heteroskedasticity may arise due to the diverse nature of sample firms. Different firms may exhibit different levels of variability in their data, leading to heteroskedasticity. GMM estimation takes into account this heteroskedasticity by using efficient weighting schemes, providing more accurate and reliable parameter estimates. Another econometric concern addressed by GMM is the autoregressive process. In some cases, the data may exhibit autocorrelation, meaning that the errors in the model are correlated over time. Autocorrelation violates the assumption of independent errors, which can lead to biased and inefficient estimates. GMM allows for the inclusion of lagged dependent variables or other moment conditions to account for autocorrelation, ensuring consistent estimation. Additionally, potential endogeneity due to omitted variables is another concern addressed by GMM. In this study, there may be unobserved variables such as organizational culture or leadership styles that could affect the relationships being analyzed. Omitted variables can introduce bias into the estimated coefficients, leading to unreliable results. GMM estimation helps address this endogeneity issue by using instrumental variables or additional moment conditions to control for the potential impact of omitted variables, providing more reliable and unbiased estimates. To further account for unobserved heterogeneity, industry-fixed effects, and year-fixed effects are included in the analysis. Unobserved heterogeneity refers to factors that are specific to individual entities or groups but are not directly observable. By including these fixed effects, using GMM the study aims to control for unobserved heterogeneity that could potentially affect the relationships (Arellano & Bond, 1991). This study used the following equation to test our hypotheses:

SDGs Investment to increase positive externalities = $\alpha_0 + \beta_1$ *Size* + β_2 *location* + *control variables*+ ε **…………………………………(1)**

Data Analysis and Findings

Table 1 shows the descriptive statistics of the sample firms. It can be observed from the results that the mean value of SDG's Investment to increase positive externalities is 0.644 and the mean value of the firm's size is 2.86 whereas, the mean value of the location is 6.137. On average, 48 percent firms of in our sample have a CSR committee.

Table 1: Descriptive Statistics

Variable	**Obs**	**Mean**	**Std. Dev.**	**Min**	Max
SDGs Investment to increase positive externalities	1120	.64	.267	.11	.99
Firm Size	1120	2.86	.91	-.32	4.555
Location	1120	6.13	1.91	2.14	9.231
CSR committee	1120	.48	.50	0	1
Growth Opportunities	1120	2.49	3.02	-16.99	22.85
Profitability	1120	2.69	17.46	-212.92	347.62
Leverage	1120	2.10	7.07	-114.13	145.61
Age	1120	3.13	.84	.69	4.605

Table 2 reports the correlation table of our variables. As expected there exists a positive and significant correlation between total assets and SDGs Investment to increase positive externalities. SDGs investment to increase positive externalities is also positively associated with the location of the firm. The relatively low correlation between our variables proves that multicollinearity is not the issue of our model.

Table 2: Pairwise correlations

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1) SDGs Investment to increase positive externalities								
(2) Firm Size	0.12***							
(3) Location	0.17***	-0.04						
(4) CSR committee	-0.03	0.09*	0.19*					
(5) Growth Opportunities	0.05*	0.02	-0.08*	-0.06**				
(6) Profitability	0.04	-0.01	0.03	-0.00	-0.00			
(7) Leverage	-0.04	0.01	-0.00	-0.01	-0.02	0.00		
(8) age	0.31*	-0.04	-0.04	-0.07**	-0.00	0.01*	-0.00	

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

Table 3 contains the regression results. In model 1 we present the results of our control variables with SDGs investment to increase positive externalities. In model 2 we introduce a firm's size as the independent variable in the model. The findings show that the size of the firm positively affects SDG investment to increase positive externalities. Thus, it provides support to our first hypothesis. In hypothesize 2, we proposed that the location of the firm is positively linked with SDG investment to increase positive externalities. The findings present in Model 3 also provide support for our second hypothesis. Model 4 is the full model that contains control variables along with both independent variables i.e., the firm's size and location. The full model also supports all our hypothesized effects. The results of the control variables show that older firms and the firms with more investment opportunities are positively linked with SDG investment to increase positive externalities because these firms have more experience and other resources to invest in SDGs. The results of the study corroborate with prior studies such as Saeed et al. (2022), Hao et al. (2018), Heras-Saizarbitoria et al. (2022), and Jiang et al. (2020).

Taken together, the results support our presented notions. They show evidence that bigger firms and firms whose headquarters are located in large cities invest more in the SDGs that aim to increase positive externalities. Overall, the results corroborate with institutional theory.

Table 3. Impact of firm's size and location on SDGs Investment to increase positive externalities

VARIABLES	Model 1	Model 2	Model 3	Model 4
Size		0.0831**		0.0576*
		(2.3821)		(1.77)
Location			0.0573***	0.0541**
			(3.2821)	(2.7821)
CSR committee	0.040	-0.0172	0.0280	-0.0053
	(0.0601)	(-0.2812)	(0.4201)	(-0.0700)
Growth opportunity	0.050***	0.0732***	0.0347***	0.0567***
	(8.070)	(5.3321)	(3.8810)	(4.1672)
Profitability	0.000	-0.0000	0.0022**	0.0023**
	(0.3500)	(-0.3521)	(2.9018)	(2.1201)
Leverage	-0.003*	-0.0017	-0.0011	0.0003
	(2.0126)	(-0.7821)	(-0.5612)	(0.1710)
Age	2.322***	2.125***	2.043***	2.246***
	(3.0231)	(3.562)	(3.343)	(3.8753)
Industry Effect	Yes	Yes	Yes	Yes
Year Effect	Yes	Yes	Yes	Yes

Constant	-0.085 (0.3102)	-0.1399 (-0.4112)	-0.3209 (-1.2001)	-0.5320* (1.8112)
Observations	1120	1120	1120	1120
AR (2)	0.21	0.594	0.354	0.674
Hansen	0.432	0.529	0.405	0.331

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.

Conclusions and Discussion

Attracted by the significance of the 2030 Agenda that sets out a plan of action for achieving global sustainable development, burgeoning literature examines the contribution of each concerned societal actor. Multinational firms are regarded as one of the essential actors within the private sector that have a greater capability and outreach (across the continents) to address these wicked global challenges identified by the UN in 2015. Surprisingly, despite their important role in achieving SDGs, there is a lack of knowledge on the nature and extent of MNCs' engagement in sustainable development programs (van der Waal and Thijssens, 2020). This problem is recently highlighted in an SDG Challenge report of Pricewaterhouse Coopers as "while there is a general acknowledgment of the importance of the goals, there is still not enough understanding of what [companies'] concrete action should be or is taking place" (PWC, 2019, p.6). Therefore, there is a greater need to understand the role of multinational organizations as a sustainable development agent in tackling global challenges based on the SDGs framework.

The lack of empirical research on MNCs' engagement in a wide range of SDGs creates an opportunity to systematically examine MNCs' scope of engagement in SDGs. The readily unavailable information and empirical evidence make it difficult for MNCs to engage in SDGs across different institutions. This problem is also highlighted in prior studies such as Bebbington and Unerman (2018) and van der Waal and Thijssens (2020) which suggested that lack of empirical evidence augments the general misunderstanding of MNCs' commitment to the SDGs. The present study aims to fill this research gap by bringing the initial empirical evidence on MNCs', particularly from emerging economies, engagement with SDGs. The results of the study revealed that large MNCs are more prone to invest their resources in the SDGs that aim to increase positive externalities. Furthermore, results also reflect the attention of MNCs having headquarters closer to the big cities owing to the greater level of scrutiny by various stakeholders.

EMNCs can contribute to achieving the Sustainable Development Goals (SDGs) in less developed markets by applying strategies learned from developed markets. They can invest in local infrastructure, engage in Corporate Social Responsibility (CSR) programs, create jobs and offer skills development, implement sustainable supply chain management, transfer technology, form local partnerships, expand market access, practice environmental stewardship, ensure transparency and ethical standards, involve local communities, build local capacity, develop inclusive business models, commit to long-term impact, and adapt successful models from developed markets. These actions leverage the MNCs' experience in addressing economic and social challenges in their home countries to support the SDGs in less developed markets.

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