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Investment on environmental social and governance activities and its impact on achieving sustainable development goals: evidence from Chinese manufacturing firms

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ABSTRACT
Achieving sustainable development goals (SDGs) is a global requirement that attracts new researchers and regulators. So, the current research investigates the impact of investment on the environment, social, and governance (ESG) activities on the achievement of SDGs of the Chinese manufacturing companies. The current article also examines the mediating impact of organizational effectiveness among the nexus of investment in ESG activities and the achievement of SDGs of the Chinese manufacturing companies. The current research has taken the questionnaires to gather the data and used the smart-PLS to analyze the data. The results exposed that investment in the environment and social activities have a positive impact on the achievement of SDGs. The findings also revealed that the organizational effectiveness significantly mediates among the nexus of investment in the environment and social activities and the achievement of SDGs of the Chinese manufacturing companies. This study provides help to the relevant authorities to achieve the SDGs using the investment in ESG activities.

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1. Introduction

The significant increase in the growth of economies has put the environment and natural resources in it on the way to destruction. Moreover, although many of the business enterprises are taking part in social or philanthropic activities, it is not

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enough to change the situation. Many authors and researchers have been attentive towards the influences of human capital and investment structure for environmental protection and social progress on the preservation of resources and sustainable development (Hussain et al., 2021; Rasoolimanesh et al., 2020; Schroeder et al., 2019). With the spreading of social and environmental awareness, the individual firms themselves and the government have designed the policies that the firms not only work for only financial profits but develop a commitment to social and environmental outcomes. In 2015, for the sake of sustainable development by 2030, an agenda was adopted by UN General Assembly. This agenda consisted of 17 SDGs and 169 objectives (Al-Refaie et al., 2020; Herrero et al., 2021). The 2030 Agenda for sustainable development is based on the Millennium Development Goals (MDGs), and provides a new dimension to global sustainable development with the 17 sustainable development goals (SDGs) committed to addressing global development problems and providing an enabling conditions that plays a key role in global development (Dantas et al., 2021; Mahmood et al., 2021). There are three groups of these 17 goals characterized as social, environmental, and economic sustainability founded on Ps, known as 'planet, people, peace, prosperity, and partnership,' These 17 SDGs are for assisting an appropriate context or developing situation that put the countries on the way to sustainable development characterized by resource abundance, effective use of the resource, collective wellbeing, and a clean & healthy work environment indicating planet, people, and prosperity (Caiado et al., 2018; Criado-Gomis et al., 2020).

The 17 SDGs, which are proposed in the UN general assembly 2015, as the way to sustainable development, cover the three areas within the country such as society, environment, and economic or financial development. These areas are affected by social issues, environmental problems, and governance issues, and through the investment on the part of business organizations, these all issues can be removed, and social, environmental, and economic performance can be accelerated (Allen et al., 2018; Streimikiene & Ahmed, 2021a). There are several environmental issues like pollution, global warming, overpopulation, waste disposal, ocean acidification, and loss of biodiversity. These issues may occur due to the unlimited use of energy resources, technologies that cause pollution in the form of chemicals, wastes, and harmful gases, increased use of transportation vehicles, use of chemical or acid-based resources, and outdated processes. By making Investments in ecological friendly resources, technologies, and environmentally friendly processes, environmental pollution can be reduced, and many environmental and related SDGs, along with other dependent goals, can be achieved (Hone et al., 2018; Miceikiene et al., 2021). There are many social issues like social stratification, economic issues related to employment and income, public health, age discrimination, social inequality, education, and the unequal role of females. Increase in the investment in different social projects, these issues are overcome, and SDGs like economic well-bringing, improved health, reduction in poverty and hunger, increased education, justice, and increase in the living standard are likely to be achieved (Eichler & Schwarz, 2019; Streimikiene & Ahmed, 2021a). Likewise, governance is the regulation, control, and management of business organizations. There may be issues in governance, but all these issues are possible to be removed but to exchange them into opportunities; thus, it creates assistance in getting the

SDGs (Belas & Cepel, 2020; Scherer et al., 2018). It is argued by Miralles-Quirós et al. (2020) that it is necessary to expand this line of literature so that researchers and investors, both can be connected on the same page with present social, environmental and governance challenges. Moreover, these issues must be developed gradually towards sustainable investment, hence aligned with the UN efforts to attain sustainable development goals (Joliet & Titova, 2018; Thuy et al., 2021).

The current study examines the impacts of investment strategies like investment on environmental issues, social issues, and governance issues on organizational effectiveness and the SDGs achievement in the economy of China with pieces of evidence from the manufacturing sector. One of the largest countries by area and population. It is a newly industrialized country with a developing upper-middle-income economy. According to the nominal gross domestic product GDP, china is the 2nd largest country across the world, while as per purchasing power parity, it is the 1st largest country (Li et al., 2019; Vveinhardt & Sroka, 2020). The estimated nominal GDP is \$16.642 trillion in 2021, which shows an 8.5% GDP growth rate. The country is the world's largest manufacturer, also known as 'the world's factory'. In recent decades, on account of its low technically skilled workforce, labor costs, and solid infrastructure, it has become a well-known industrial site (Liu et al., 2021; Sharma, 2020; Zhao & Tang, 2018). However, China's manufacturing profile and competitiveness are changing, with more developed regions increasing the value chain and labor-intensive industry-shifting inland. Rather than using China as a low-cost alternative for manufacturing export items, businesses are choosing to produce in China to serve the emerging Chinese market with an increasing rate (Al Mamun et al., 2021; Lawrence, 2020; Xiang et al., 2021). Though the share of the manufacturing sector to the country's GDP has been decreasing in the current years, it has been a significant sector, recording a 42.6% increase in GDP in 2014. The sector provides employment opportunities ta o 30% labor force in China and has guaranteed the country to possess the position as the world leader in terms of gross industrial output. The focus has progressively shifted to advanced manufacturing on China's more developed eastern coast, while lower-cost, the more labor-intensive industry has moved further interior Although in China, the manufacturing sector provides employment and becomes a source of earning with the creation of wealth, still, it has been causing many environmental issues, and many of the manufacturing enterprises are also causing social issues. Thus, the country's sustainable development is under threat. Well, China started to adopt SDGs declared by UN General Assembly. Still, it is needed to pay attention here (He & Wang, 2020; Piligrimienė et al., 2021; Zhao et al., 2021).

The current study pays attention to the need for sustainable development and the adoption of SDGs. The basic objective of the study is to explore the influences of investment strategies like investment on environmental issues, social issues, and governance issues on the SDGs achievement. It also has the objective to address the business effectiveness as a mediator between the investment in environmental issues, social issues, and governance issues and the SDGs achievement. Though many of the study factors have been taken from past studies, they still have a great addition to the literature. 1) In the existing literature, the role of investment in environmental issues, social issues, and governance issues on the achievement of SDGs have been addressed, but separate articles deal with the influences of any one of these factors with their influences on SDGs and even at different timing. As the current study examines the role of the investment in environmental issues, social issues, and governance issues on the SDGs achievement simultaneously, it brings a difference in the existing literature. 2) Before this, only the direct relation of investment on environmental issues, social issues, and governance issues with organizational effectiveness and of the organizational effectiveness with the SDGs achievement have been analyzed. The authors' desire to explore the organizational effectiveness as a mediator between the investment on environmental issues, social issues, and governance issues and the SDGs achievement is a significant addition to the literature. 3) The Investment in environmental issues, social issues, and governance issues is basically a solution to all these issues which are a hurdle in the way to SDGs achievement, and mostly they are addressed like the same, but our study makes a distinction by associating investment strategy with these issues for analyzing the SDGs achievement. 4) The analysis of the SDGs achievement on account of investment in environmental issues, social issues, and governance issues with reference to China is also a great addition to the literature.

This paper is composed of different parts: the part next to the introduction presents the hypothesis regarding the relationship between investment in environmental issues, social issues, and governance issues, organizational effectiveness, and SDGs achievement on the basis of past literature. The third part talks about the procedures applied for data collection and analysis of the reliability of data and proposed nexus among the variables. Afterward, the results of the study are presented and supported by the previous studies with appropriate discussions. In the last, study implications, conclusions, and implications are given.

2. Literature review

Generally, economic growth establishes a country's position in the global market; however, sustainable development ensures that this position is maintained among countries in the world. Sustainable development does not indicate the potential of economic growth leads to abundant availability of resources with high-quality, healthy living creatures, including humans, and social prosperity in a country (Chien et al., 2022; Grover et al., 2019; Nurwani et al., 2020). The 17 SDGs suggested by UN General Assembly members not only improve but also sustain economic development, as well as a healthy, prosperous public. These 17 goals are divided into three categories: social, environmental, and economic development. But, there may be found several environmental, social, and governance issues which could affect the environmental protection, social welfare, and financial development within the country. The investment to remove the social problems, environmental issues, and governance issues improve the social, environmental, and corporate performance of the business enterprises and is helpful to gain all the 17 prescribed SDGs (Chams & García-Blandón, 2019; Ehsanullah et al., 2021; Ojogiwa, 2021). This study examines the role of investment strategies like investment on environmental issues, social issues, governance issues, and organizational effectiveness in achieving the SDGs. The impacts of investment strategies like investment on environmental issues, social issues, and governance issues on organizational effectiveness and the SDGs achievement have been discussed in the literature. The current article examines the relationship among the aforementioned variables with the help of the authors' arguments.

The investment in environmental issues provides a guarantee for the success of 17 SDGs proposed by the UN in the 2030 agenda for sustainable development (Huang et al., 2021; Menton et al., 2020). The environmental issues include issues like pollution, global warming, overpopulation, waste disposal, ocean acidification, and loss of biodiversity that can affect human health, the health of all other living creatures on land and below the water surface, and the quality of naturally developed resources. The environmental issues, if not controlled properly, may affect the country's development (Pintuma & Anuyawong, 2021; Rojek-Adamek, 2021; Tan et al., 2022; Tiba & Frikha, 2019). But the investment in removing the environmental issues improves the health of living creatures and the quality of the naturally found resources, which in themselves are the SDGs, and provides a way to achieve other related goals, which all are designed for the country's sustainable development. A study conducted by Mehmood (2021), investigated the investment in clean energy, reduction of CO2, and SDGs achievement. The relevant data were collected from G11 countries for the period of 1990–2019. This study examines the impacts of investment on clean energy, change in CO2 emissions, and SDGs, including good health, high wellbeing, and life on land. Heterogeneity causality results indicate that investment in clean energy (an environmental aspect) has a positive association with the reduction of CO2 emissions and selected SDGs achievement. A study was conducted by Mawonde and Togo (2019), for the integration of analysis between investment on environmental issues and the SDGs achievement. The study examines that the environmental problems do not allow to achieve the SDGs as most of the goals are directly or indirectly connected to environmental protection. The investment in finding a solution to the environmental issues clears the way to gain SDGs as sound health, and reliable resources prepare the country for progress. On account of the above discussion, we put the hypothesis:

H1: Investment in environmental issues has a positive influence on SGDs achievement.

A specific set of goals proposed in the 2030 agenda for sustainable development are related to the social progress of the country. Individual business firms can participate in the social progress of the country by designing their investment strategies in such a way as to make Investments on social issues. In this way, they can clear the path toward the achievement of SDGs (Oanh et al., 2021; Rosati & Faria, 2019). In literary research Psacharopoulos and Patrinos (2018) investigate the investment on social issues like education and the SDGs. This is based on the reviews of literature about the investment patterns and education trends with 1120 estimates in 139 states during 1950-2014. According to this research, the increased investment in the provision of education to the maximum possible public enhances the trend of education within the country irrespective of age, status, and gender. This facilitates equality, awareness, and human capital creation within the country. These all are objectives of SDGs. Similarly, the study of Hirons (2020) addresses the adverse impacts of social and environmental issues on SDGs achievement with reference to small-scale mining and presents how to mitigate these impacts through an effective investment strategy. Small-scale mining, basically an informal economic sector, causes many social and environmental issues like poverty, lack of education, low-wellbeing, deforestation, mercury pollution, land degradation, and river siltation. When the individuals and enterprises operating in this economic sector invest some money to remove these social and environmental issues, SDG 1, SDG 2, SDG 3, SDG 4, SDG 7, and SDG 15 are possible to achieve. Based on the above arguments, we place the hypothesis as below:

H2: Investment in social issues has a positive influence on SGDs achievement.

Governance refers to the system through which a business organization is managed, controlled, and operates. Governance includes the mechanisms by which the organization, and its people, are held to be accountable (Moslehpour et al., 2022; Pizzi et al., 2021). Governance has elements like administration, risk management, ethics, and compliance. Corporate governance may have to face some issues like fairness, transparency, stakeholders' engagement, and accountability when the business organizations take care of corporate governance and spend money to remove the governance issues the health, welfare, peace, and other economic rights of the stakeholders which determine the success in achieving SDGs declared in 2030 agenda by UN (Othman et al., 2020; Pedersen, 2018). The study of Raub and Martin-Rios (2019) emphasizes that governance investing in employees through training, digital facilities, rewards, and compensation improves the performance of various types of business management and improves the business effective service benefits to the stakeholders, whose wellbeing, health, and progress are concerns of the 2030 Agenda for Sustainable Development. As a result, investments in governance concerns are positively related to the achievement of SGDs. The authors like Martínez-Ferrero and García-Meca (2020) debate on investment issues in internal corporate governance and deal with it as a mechanism for achieving SDGs. For analysis, a sample of business enterprises from European countries for 2016–2017 was taken. The study posits that the investment in the board members and the implementation of their decisions regarding the governance of the organization helps achieve SGDs. For instance, investment in human resource management develops stakeholders' engagement within the business operations who perform the business operations efficiently and help gain the social and environmental goals of the firms, and ultimately assist the achievement of SDGs. Hence, it can be hypothesized:

H3: Investment in governance issues has a positive influence on SGDs achievement.

The research administered by Sinha et al. (2020) examines the investment on investment issues, technological policies, environmental quality, and organizational effectiveness as an approach to achieving sustainable development goals. Through the IPAT framework and by using a quantile approach, the concerned factors were analyzed in Asia Pacific countries from 1990–2017. For analysis, the Rolling Window Heterogeneous Panel Causality test was applied. The results stated that the investment in ecological friendly technologies, which use the minimum quantity of energy and leave the least amount of toxic wastes, reduces the emission of hazardous gases and health-damaging chemicals. Thus, the quality of the work environment and business resources improved, leading to organizational effectiveness and the achievement of SDG 4, SDG 8, SDG 7, SDG 9, SDG 10, and SDG 13. The study conducted by Elder and Olsen (2019) investigates environmental priorities while making investment policies, organizational effectiveness, and SDGs. The study implies that the organizations which when forming investment policies, give priority to the reduction of negative environmental impacts of the economic activities they carry, have effectiveness in the management of sectors, resource allocation, innovation, production of quality goods, and marketing according to business requirements. When individual businesses show high organizational effectiveness, they have high profits and can contribute to the achievement of SDGs. So, organizational effectiveness develops a link between the investment in environmental issues and SDGs. Based on the literature review given above, we may say:

H4: Organizational effectiveness is a mediator between the investment in environmental issues and SGDs achievement.

Organizational effectiveness, which is indicated by effective management, high workforce performance, high-quality productivity, increase in the efficiency and variety of technology, accountability, and effective resource organization, has many positive outcomes which help the organization to contribute to the achievement of SDGs (Sinkovics et al., 2021). The investment on the social issues like economic issues of employees, public health, age discrimination, social inequality, gender difference, and education convert these issues into opportunities for organizational effectiveness, and goals for sustainable development in agenda 2030 become easy to achieve. A study was presented by Muhmad and Muhamad (2021) to examine investment in social issues, Sustainable business practices and financial performance, and SDG adoption. The content of the study was taken from the past literature consisting of 56 articles indexed in the Web of Science (WoS) and Scopus. According to 96% of the public, there is positive relation of organizational effectiveness to investment on social issues within the organization and SDGs achievement. An article was written by Barua (2020) about financing the SDG with the analysis of social issues and mitigation techniques. The study implies that the SDGs achievement requires large resources. From an organizational point of view, the investment in removing the social issues like the lack of education and training of the employees, maintaining the employees' working skills instead of looking for other employees through new hiring, improving their performance, the organizational service qualities, and raise funds through increased profitability. The organizational effectiveness, as a result of investment in social issues, raise funds for the SDGs. Based on the literature review, it can be hypothesized:

H5: Organizational effectiveness is a mediator between the investment in social issues and SGDs achievement.

Hansson et al. (2019), in a literary work, throw light on the association among investment on governance issues, organizational effectiveness, and the achievement of SDGs. The research was administered to governance reports of 153 Public Interest Entities in Italy. The study reveals that enterprises in different economic sectors must operate effectively in order to accomplish the SDGs, and the performance of a business organization is based on the internal governance of the corporation. Many challenges can arise in corporate governance, such as a lack of fairness, transparency, inadequate leadership, stakeholder engagement, and accountability. Investing in

Table 1. Measurement of investment of environmental issues.

Variables	Items	Statements	Source
Investment in Environmental Issues	IEI1	"My organization is interested in investments that consider the environment."	(de Zwaan et al., 2015)
	IEI2	"I think superannuation funds should consider environmental factors when they choose their investments."	
	IEI3	"I think considering the environment when investing makes good financial sense."	
	IEI4	"I want my superannuation to be invested in a way that does not harm the environment."	
	IEI5	"If a superannuation fund considered environmental issues, I think more highly of them."	
	IEI6	"I understand how my superannuation fund can consider the environment."	
	IEI7	"I believe changing the way I invest in my superannuation can help improve the environment."	
	IEI8	"I feel good when I take the environment into Consideration."	
	IEI9	"I am concerned about global warming."	
	IEI10	"I think considering environmental issues will negatively impact financial performance."	
	IEI11	"I am less concerned about environmental issues given the current state of the economy."	

governance issues enhances organizational effectiveness and aids in the achievement of SDGs. The study of Meuleman (2021) examines the role of investment on governance issues and organizational effectiveness in the adoption of SDGs, a set of goals presented by the UN in 2015. The study analyzes the organization's responsiveness and accountability to the public as elements of corporate governance. When the organization makes an investment in employing different resources, technologies, and skilled workers having quality or efficiency which is suitable to respond to the public expectation, high organizational effectiveness can be achieved. The country where the business organizations are operating effectively is more active in getting SDGs. The above arguments from past studies give the following hypothesis:

> **H6:** Organizational effectiveness is a mediator between the investment on governance issues and SGDs achievement.

3. Research methodology

The article investigates the impact of investment on ESG activities on the achievement of SDGs and also examines the mediating impact of organizational effectiveness among the nexus of investment on ESG activities and the achievement of SDGs of the Chinese manufacturing companies. The current research has taken the questionnaires from the past studies such as de Zwaan et al. (2015), Ng (2018) and Zamora-Polo et al. (2019) to gather the data. The current study has invested in the environmental issue (IEI) as the predictor with eleven items. Table 1 shows the measurement of IEI.

Table 2. Measurement of investment of social issues.

Variables	Items	Statements	Source
Investment in Social Issues	ISI1	"I am interested in investments that consider Society."	(de Zwaan et al., 2015)
	ISI2	"I think superannuation funds should consider social factors when they choose their investments."	
	ISI3	"I think considering society when investing makes good financial sense."	
	ISI4	"I want my superannuation to be invested in a way that does not harm society."	
	ISI5	"If a superannuation fund considered social issues, I think more highly of them."	
	ISI6	"I understand how my superannuation fund can consider social issues."	
	ISI7	"I believe changing the way I invest in my superannuation can help improve society."	
	ISI8	"I feel good when I take the society into Consideration."	
	ISI9	"I think considering social issues will negatively impact financial performance."	
	ISI10	"I am less concerned about social issues given the current state of the economy."	

Table 3. Measurement of investment in governance issues.

Variables	Items	Statements	Source
Investment in Governance Issues	IGI1	"I am interested in investments that consider a company's corporate governance."	(de Zwaan et al., 2015)
	IGI2	"I think superannuation funds should consider governance factors when they choose their investments."	
	IGI3	"I think considering corporate governance when investing makes good financial sense."	
	IGI4	"I want my superannuation to be invested in a way that encourages good corporate governance."	
	IGI5	"If a superannuation fund considers corporate governance issues, I think more highly of them."	
	IGI6	"I understand how my superannuation fund can consider corporate governance issues.	
	IGI7	"I believe changing the way I invest in my superannuation can help improve corporate governance."	
	IGI8	"I think considering corporate governance issues will negatively impact financial performance."	
	IGI9	"I am less concerned about corporate governance issues given the current state of the economy."	

In addition, the current study has also used the investment on social issues (ISI) as the predictor with ten items taken from the research of de Zwaan et al. (2015). The measurement of ISI is given in Table 2.

Moreover, the current article has also used the investment on governance issues (IGI) as the predictor, with nine items taken from the research of de Zwaan et al. (2015). The measurement of IGI is given in Table 3.

In addition, the current article has also used organizational effectiveness (OE) as the mediating variable, with twenty items taken from the research of Ng (2018). The measurement of OE is given in Table 4.

Table 4. Measurement of organizational effectiveness.

Variables	Items	Statements	Source
Organizational Effectiveness	OE1	"Our mission helps us to monitor performance."	(Ng, 2018)
	OE2	"Our mission helps us to make a better decision."	
	OE3	"I understand how my job helps achieve our mission."	
	OE4	"Our mission statement helps me to understand how my organization sets priorities."	
	OE5	"Strategy is an important element in our mission."	
	OE6	"Our strategy is achievable."	
	OE7	"My day-to-day duties help us to achieve our mission."	
	OE8	"My co-workers' day-to-day duties help us to achieve our mission."	
	OE9	"Our mission is the driving force for this organization."	
	OE10	"Our organization's actions are consistent with our mission."	
	OE11	"Our organization's actions are consistent with our vision."	
	OE12	"Our organization's actions are consistent with our core values."	
	OE13	"We consistently meet the foundation for performance established in our mission statement."	
	OE14	"We consistently meet the criteria for performance established in our vision statement."	
	OE15	"We consistently meet the criteria for performance established in our values statement."	
	OE16	"We are effective at cost-saving."	
	OE17	"We maintain low expenses."	
	OE18	"We work well with other nonprofits."	
	OE19	"We have sufficient funds to provide service programs."	
	OE20	"We can appropriately allocate our financial resources across programs."	

Finally, the current article has also used the sustainable development goals (SDG) as the predictive variable with seventeen items taken from the research of Zamora-Polo et al. (2019). The measurement of SDG is given in Table 5.

The employees of manufacturing companies in China related to the ESG activities and striving to attain SDGs are the study's respondents. These respondents are selected based on purposive sampling. A total of 535 surveys were sent using mail and personal visits, but only 290 valid responses were received, representing about 54.21 percent response rate. In addition, the researchers had used the smart-PLS for analysis because it is the best statistical tool to work effectively even when the author used a large sample size and complex model (Chien et al., 2022; Hair Jr et al., 2021). The current study model is given in Figure 1.

4. Research findings

The current study has examined the convergent validity that shows the correlation of the items. The statistics mentioned in Table 6 exposed that Alpha and 'composite reliability (CR)' values are bigger than 0.70. In addition, 'average variance extracted (AVE)' and factor loading value are also higher than 0.50. These values exposed high correlation among items and valid convergent validity.

The current study has also examined the discriminant validity that shows the variables correlation, and the statistics mentioned in Tables 7 and 8 exposed that the

Table 5. Measurement of SDGs.

Variables	Items	Statements	Source
Sustainable Development Goals	SDG1	"My organization takes part in poverty reduction."	(Zamora-Polo et al., 2019)
	SDG2	"My organization plays a significant role in hunger reduction."	
	SDG3	"My organization is working for health care and wellness."	
	SDG4	"My company also provides quality education to their employees and employees' family."	
	SDG5	"My firm always works for gender equality."	
	SDG6	"I have access to clean water and sewerage."	
	SDG7	"My firm has the accessible and non-polluting energy."	
	SDG8	"My firm takes part in decent work and economic growth."	
	SDG9	"My firm has the innovation and effective infrastructure."	
	SDG10	"My firm always works for reducing inequalities."	
	SDG11	"My firm is creating sustainable cities and communities."	
	SDG12	"My firm has the ability of responsible consumption and production."	
	SDG13	"My organization always considers the weather care."	
	SDG14	"My firm always cares about underwater life."	
	SDG15	"My firm always cares for life in terrestrial ecosystems."	
	SDG16	"My firm takes part in peacebuilding, justice, and corruption-free institutions."	
	SDG17	"My organization strives to build alliances to achieve the above goals."	

values that indicated the nexus with variable itself are higher than the values that indicated the nexus with other variables. These values exposed low correlation among variables and valid discriminant validity.

The current study has also examined the discriminant validity using the Heterotrait Monotrait (HTMT) ratio. The statistics mentioned in Table 9 exposed that the values that the figures of HTMT ratio are lower than 0.90. These values exposed low correlation among variables and valid discriminant validity.

The path analysis results mentioned in Table 10, derived from Figures 2 and 3, exposed that investment in the environment and social activities positively impacts SDG achievement and accepts H1 and H2. The findings also revealed that the organizational effectiveness significantly mediates among the nexus of investment on the environment and social activities and achievement of SDGs of the Chinese manufacturing companies and accepts H5 and H6.

5. Discussions

The results showed that investment in environmental issues has a positive influence on SGDs achievement. These results agree with the recent study of Vanham et al. (2019), who are of the view that environmental issues like pollution, global warming, overpopulation, waste disposal, ocean acidification, and loss of biodiversity damage human health and resources quality and may restrict the country's development. But with the investment in removing the environmental issues, the utility of the resources, their potential, and quantity can be improved, which are required for achieving SDGs. Hence, the investment in ecological projects is helpful to work on SDGs

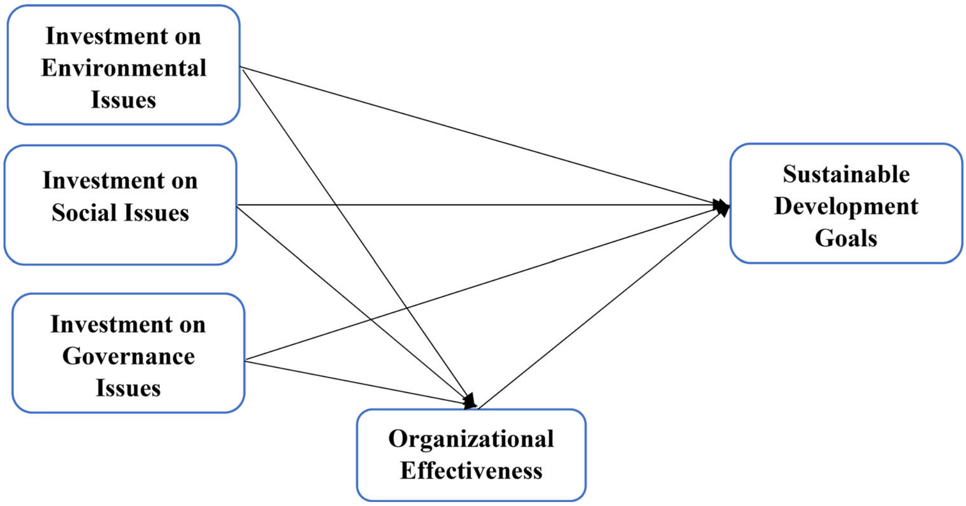

Figure 1. Theoretical framework.
Source: authors estimation.

achievement. These results are in line with the study of Khoshnava et al. (2019). They inferred those enterprises where a specific sum of profits is utilized on the programs whose objective is to remove the environmental issues which are peculiar to the nature of activities they are carrying in routine, become a minimum source of pollution into the environment and thereby, the natural resources, as well as skilled human resources, can be preserved for future use which is the basic objective of SDGs. These results are also in line with the past study of Solarte-Toro and Alzate (2021), who argue that the trend to make an investment to handle the environmental issues of different types of pollution, greenhouse gases, waste disposal, and flow of chemicals or acids into the connected water body, saves the environment and related factors. In this situation, SDGs connected to human health, human wellbeing, and resources can be attained.

The results indicated that the investment in social issues has a positive influence on SGDs achievement. These results agree with the recent study of Raub and Martin-Rios (2019) and Lisha & Abdullah (2021), which analyzes social issues like social stratification, economic issues related to employment and income, public health, age discrimination, social inequality, education, and equal role of females, are related to many of the goals stated by UN in 2030 agenda for sustainable development. Through investment in properly handling social issues, the SDGs are easy to be achieved. These results are supported by the previous study by Anwar and El-Bassiouny (2020), which states that sometimes the investment is made by enterprises in the education and training of the employees with attention to improving their skills, knowledge, and specialization without the distinction of males and females, to give progress to the business. Under such a tendency, the achievement of SDGs like a decrease in social inequality and gender discrimination, an increase in education, employment, and innovation is possible. The past study of Bull and Miklian (2019) also supports these results in the sense that the study emphasizes investment in social development projects for getting SDGs and thus, promoting sustainable development.

Table 6. Convergent validity.

Constructs	Items	Loadings	Alpha	CR	AVE
Investment on Environmental Issues	IEI1	0.923	0.950	0.961	0.720
	IEI10	0.942			
	IEI11	0.921			
	IEI2	0.930			
	IEI4	0.934			
	IEI5	0.939			
	IEI7	0.923			
	IEI9	0.930			
Investment on Governance Issues	IGI1	0.773	0.943	0.950	0.679
	IGI2	0.732			
	IGI3	0.784			
	IGI4	0.858			
	IGI5	0.825			
	IGI6	0.863			
	IGI7	0.864			
	IGI8	0.880			
	IGI9	0.828			
Investment on Social Issues	ISI1	0.825	0.935	0.946	0.663
	ISI10	0.578			
	ISI2	0.861			
	ISI3	0.849			
	ISI4	0.822			
	ISI5	0.870			
	ISI7	0.861			
	ISI8	0.851			
	ISI9	0.771			
Organizational Effectiveness	OE1	0.845	0.969	0.972	0.643
	OE10	0.791			
	OE11	0.765			
	OE12	0.829			
	OE14	0.800			
	OE15	0.831			
	OE16	0.813			
	OE17	0.803			
	OE18	0.712			
	OE19	0.786			
	OE2	0.824			
	OE20	0.767			
	OE3	0.797			
	OE4	0.848			
	OE5	0.839			
	OE6	0.826			
	OE7	0.832			
	OE8	0.805			
	OE9	0.711			
Sustainable Development Goals	SDG1	0.665	0.937	0.942	0.543
	SDG11	0.864			
	SDG12	0.785			
	SDG14	0.865			
	SDG15	0.862			
	SDG16	0.782			
	SDG17	0.862			
	SDG2	0.657			
	SDG3	0.624			
	SDG4	0.649			
	SDG5	0.614			
	SDG6	0.657			
	SDG7	0.635			
	SDG9	0.705			

Source: authors estimation.

Table 7. Fornell Larcker.

	IEI	IGI	ISI	OE	SDG
IEI	0.930				
IGI	0.337	0.824			
ISI	0.429	0.211	0.814		
OE	0.491	0.164	0.457	0.802	
SDG	0.546	0.187	0.473	0.642	0.737

Source: authors estimation.

The results showed that investment in governance issues has a negative and insignificant influence on SGDs achievement. These results match with the recent study of Naciti (2019), which implies that though the environmental and social progress are the key factors to SDGs, but the progress in these areas may be affected by corporate governance, which through effective administration and raising the financial strength of the individual units and the resultant increase in the economic activities may cause an impossibility to achieve SDGs. These results are supported by the previous study of Lashitew (2021), which highlights that the investment in the employees through training processions, providing them digital facilities, rewards, and compensation, improves the performance of different types of business management and improves the business effective serves mostly economic purposes of the organization. Hence, the investment in governance issues is negatively linked to SGDs achievement.

The study results indicated that organizational effectiveness is a mediator between the investment in environmental issues and SGDs achievement. These results are supported by the past article of Opoku (2019), which shows that when the business organizations have human resource effectiveness through the provision of a healthy work environment, health allowances, and provision of ecologically friendly products by doing the investment in green resources, ecologically friendly practices. And the achievement of SDGs is possible with human resource effectiveness. These results are also in line with the previous study of Schleicher et al. (2018), which shows that when the business organizations pay attention to the environmental aspects of their activities and make their investment accordingly, they secure the health of the stakeholders, which play a crucial role in the business performance. As a result, the business effectiveness improves employment, stakeholders' wellbeing, responsible production and consumption, and economic progress, which are part of 17 SDGs. Hence, organizational effectiveness improves the relationship between the investment in environmental issues and SGDs achievement.

The study results indicated that organizational effectiveness is a mediator between the investment on social issues and SGDs achievement. These results also agree with the previous study of Solarte-Toro and Alzate (2021), which reveals that the investment by business organizations in the communication network for the sake of retaining connections with the stakeholders like suppliers, managers, owners, investors, employees, and customers help to carry the business operations up-to the standards. When the organization operates its business effectively, it can reduce poverty through increased employment and creating wealth within the country. Thus, the organizational effectiveness improves the relationship between the investment in social issues and SGDs achievement. These results are also supported by the past study of Rubio-Mozos et al. (2019), which states that when the organizations have cooperative

Table 8. Cross-loadings.

	IEI	IGI	ISI	OE	SDG
IEI1	**0.923**	0.350	0.402	0.457	0.503
IEI10	**0.942**	0.302	0.417	0.459	0.504
IEI11	**0.921**	0.291	0.370	0.444	0.519
IEI2	**0.930**	0.296	0.428	0.463	0.489
IEI4	**0.934**	0.346	0.396	0.464	0.511
IEI5	**0.939**	0.306	0.413	0.457	0.509
IEI7	**0.923**	0.284	0.371	0.447	0.522
IEI9	**0.930**	0.335	0.393	0.460	0.508
IGI1	0.287	**0.773**	0.271	0.171	0.202
IGI2	0.310	**0.732**	0.164	0.140	0.182
IGI3	0.289	**0.784**	0.263	0.174	0.201
IGI4	0.291	**0.858**	0.130	0.066	0.109
IGI5	0.212	**0.825**	0.119	0.134	0.124
IGI6	0.287	**0.863**	0.111	0.121	0.119
IGI7	0.297	**0.864**	0.120	0.062	0.116
IGI8	0.272	**0.880**	0.109	0.109	0.104
IGI9	0.208	**0.828**	0.124	0.138	0.122
ISI1	0.351	0.191	**0.825**	0.324	0.359
ISI10	0.185	0.057	**0.578**	0.263	0.303
ISI2	0.354	0.148	**0.861**	0.398	0.397
ISI3	0.346	0.184	**0.849**	0.370	0.362
ISI4	0.379	0.194	**0.822**	0.400	0.387
ISI5	0.369	0.213	**0.870**	0.394	0.385
ISI7	0.376	0.175	**0.861**	0.415	0.426
ISI8	0.392	0.178	**0.851**	0.405	0.451
ISI9	0.352	0.182	**0.771**	0.346	0.377
OE1	0.405	0.151	0.375	**0.845**	0.725
OE10	0.393	0.129	0.360	**0.791**	0.641
OE11	0.386	0.170	0.353	**0.765**	0.643
OE12	0.353	0.104	0.397	**0.829**	0.652
OE14	0.324	0.079	0.354	**0.800**	0.595
OE15	0.452	0.158	0.351	**0.831**	0.752
OE16	0.435	0.141	0.379	**0.813**	0.778
OE17	0.451	0.117	0.369	**0.803**	0.710
OE18	0.315	0.102	0.350	**0.712**	0.527
OE19	0.398	0.124	0.367	**0.786**	0.638
OE2	0.351	0.103	0.399	**0.824**	0.653
OE20	0.380	0.165	0.352	**0.767**	0.641
OE3	0.326	0.069	0.359	**0.797**	0.592
OE4	0.395	0.166	0.372	**0.848**	0.718
OE5	0.425	0.148	0.385	**0.839**	0.754
OE6	0.415	0.147	0.374	**0.826**	0.735
OE7	0.442	0.169	0.349	**0.832**	0.749
OE8	0.456	0.122	0.376	**0.805**	0.703
OE9	0.314	0.105	0.347	**0.711**	0.518
SDG1	0.429	0.125	0.367	0.476	**0.665**
SDG11	0.460	0.143	0.353	0.791	**0.864**
SDG12	0.442	0.132	0.394	0.815	**0.785**
SDG14	0.463	0.134	0.355	0.783	**0.865**
SDG15	0.462	0.146	0.355	0.799	**0.862**
SDG16	0.444	0.131	0.396	0.814	**0.782**
SDG17	0.458	0.132	0.353	0.789	**0.862**
SDG2	0.344	0.198	0.360	0.428	**0.657**
SDG3	0.403	0.183	0.340	0.442	**0.624**
SDG4	0.306	0.112	0.314	0.380	**0.649**
SDG5	0.322	0.095	0.353	0.384	**0.614**
SDG6	0.332	0.144	0.357	0.417	**0.657**
SDG7	0.307	0.174	0.322	0.375	**0.635**
SDG9	0.398	0.152	0.344	0.465	**0.705**

Source: authors estimation.

Table 9. Heterotrait Monotrait ratio.

	IEI	IGI	ISI	OE	SDG
IEI					
IGI	0.343				
ISI	0.445	0.202			
OE	0.500	0.157	0.479		
SDG	0.562	0.187	0.511	0.820	

Source: authors estimation.

Table 10. Path analysis.

Relationships	Beta	S.D.	T Statistics	P Values	L.L.	U.L.
IEI -> SDG	0.157	0.043	3.634	0.000	0.087	0.219
IGI -> SDG	−0.001	0.035	0.026	0.490	−0.059	0.056
ISI -> SDG	0.072	0.039	1.852	0.034	0.014	0.141
OE -> SDG	0.732	0.033	22.108	0.000	0.670	0.782
IGI -> OE -> SDG	−0.018	0.035	0.505	0.308	−0.058	0.054
ISI -> OE -> SDG	0.222	0.052	4.267	0.000	0.133	0.312
IEI -> OE -> SDG	0.270	0.044	6.080	0.000	0.197	0.337

Source: authors estimation.

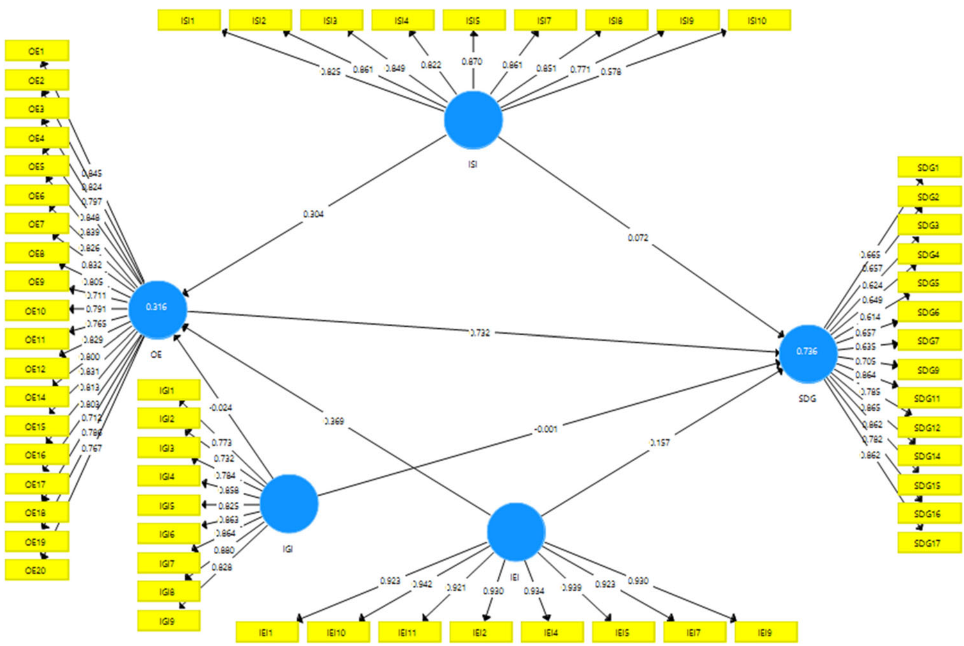

Figure 2. Measurement model assessment.
Source: authors estimation.

relations with the employees as a result of investment in social governance within the country, they perform the business operations with a great sense of responsibility leading the organization towards business effectiveness and participating in the achievement of SDGs. Thus, organizational effectiveness mediates between social issues and SGDs achievement. The study of ElAlfy et al. (2020) is also supportive of these results, with debate on the mediating influences of organizational effectiveness on the association between investment in social issues and SDGs achievement.

The study results indicated that organizational effectiveness is an insignificant mediator between the investment on governance issues and SGDs achievement. These

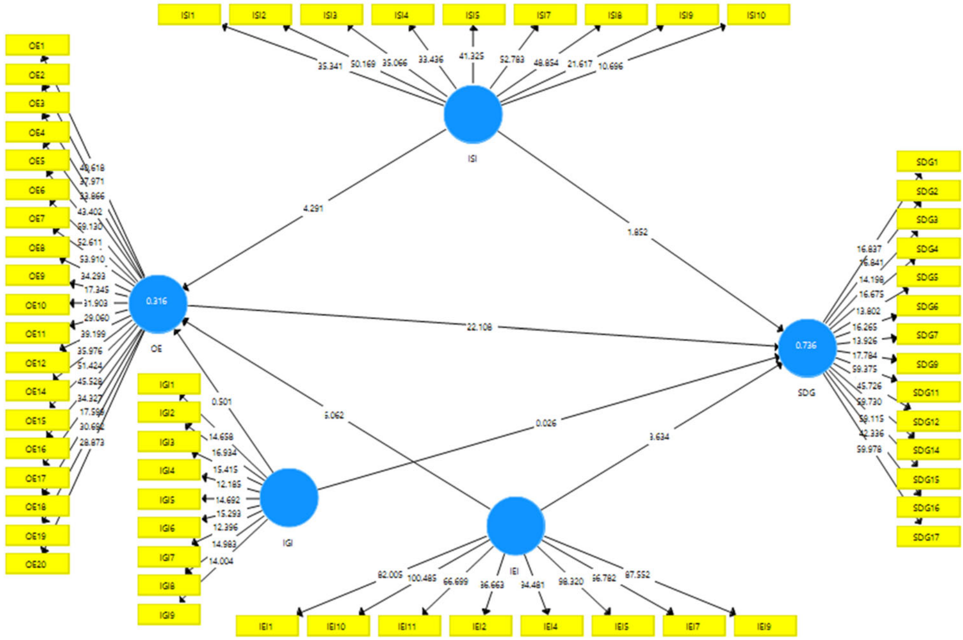

Figure 3. Structural model assessment.
Source: authors estimation.

results are also supported by the literary article of Jan et al. (2021), which argues that for the achievements of SDGs, the enterprises in different economic sectors must be operating effectively and the effectiveness of a business organization is dependent on the internal governance of the organizations. Corporate governance there may be many issues like lack of fairness, transparency, weak leadership, stakeholder engagement, and accountability. The investment in governance issues improves organizational effectiveness and helps achieve SDGs. These results are also in line with the previous study of García-Sánchez et al. (2020). According to the results of this study, organizational effectiveness is an insignificant mediator between the investment in corporate governance and SDGs.

6. Conclusion

China is the country getting more populous rapidly, and it is the 2nd largest emitter of greenhouse and other polluting factors. Natural resources (energy resources, physical resources, and living creatures) and human resources are all being affected by environmental pollution. Similarly, the quality of life which includes, health, education, and livelihood, is vulnerable. Through many struggles have been made for sustainable development, and goals for sustainable development have been set, still much more work is needed. The present study tried to overcome this problem. The study aims to examine the impact of investment strategies like investment on environmental issues, social issues, and governance issues on the SDGs achievement and the role of business effectiveness between the investment on environmental issues, social issues, and governance issues and the SDGs achievement. The authors applied a quantitative research method and, through questionnaires based research survey, collected relevant data from the manufacturing enterprise in China. The results showed a positive association between investment strategies like investment on environmental issues and social issues on the SDGs achievement. The organizations which spend enough amount of money for investment on the projects meant for removing environmental issues like pollution, global warming, overpopulation, waste disposal, ocean acidification, and loss of biodiversity improve the environmental quality and related elements and achieve SDGs. Similarly, the investment in the social issues removes social distinction, economic problems, public health problems, age discrimination, inequality, education issues, and employment problems which all are focused on by SDGs. Hence, the investment in social issues guarantees the achievement of SDGs. The results showed an insignificant negative impact of investment on governance issues on SDGs achievement. It means, that the increase in the investment in the governance is possible to reduce the social and environmental performance and adversely affect the SDGs achievement, but the effect is insignificant. The study also concluded that improvement in the investment on ecological issues and social issues enhances the rate of organizational effectiveness, which ultimately leads to the SDGs achievement.

6.1. Implications

The current study carries many theoretical implications. The main subject of the current study is the SDGs, on which a detailed description has been given. It has been looked at from all three perspectives social, environmental, and economic. This study examines the influences of investment strategies like investment on environmental issues, social issues, and governance issues on the SDGs achievement. Several research studies have already discussed the influences of Investment on environmental issues, Investment on social issues, and Investment on governance issues on the SDGs achievement but not at the same time. The study has also addressed the business effectiveness as a mediator between the investment on environmental issues, social issues, and governance issues and the SDGs achievement. Many scholars who have written about the SDGs achievement have analyzed the influences of organizational effectiveness on the direct relation of investment on environmental issues, social issues, and governance issues and the SDGs achievement. As this study addresses mediating role of organizational effectiveness between the investment on environmental issues, social issues, and governance issues and the SDGs achievement, it extends the literature. The environmental problems, social issues, and governance issues have been getting the major concern in the way to get the sustainable development as there has been an increase in the number or variety of technologies and economic activities. For the countries which want to apply SDGs proposed in the 2030 agenda for sustainable development, this study is an appropriate guideline as it presents an easy way to gain these goals. The government must formulate the policies as it can encourage investment in removing the environmental issues, social issues, and governance issues within the economy for gaining 17 SDGs. Individual business firms can have a high level of organizational effectiveness, which leads to the achievement of SDGs, by forming investment policies to reduce the social, environmental, and governance issues.

6.2. Limitations and future recommendations

Several limitations are associated with the present study, even though it has great theoretical and empirical implications. A good study is expected to be comprehensive, encompassing all possible perspectives. But the current study, which deals with only Investment strategies like investment on environmental issues, social issues, and governance issues to determine the possibility of SDGs achievement without analyzing the role of government attention, climate situation, and social conditions, is less comprehensive. So, it is required for future authors to focus on the maximum possible factors for a standardized study. Here, business effectiveness has been addressed as a mediator between investment on environmental issues, social issues, and governance issues, and the SDGs achievement. As organizational effectiveness is the source of the rise in profitability and economic progress, which are key factors of investment, it should be better for it to be a moderator among investment on environmental issues, social issues, governance issues, and the SDGs achievement. So, the authors in the future must also analyze moderating influences of organizational effectiveness among the factors addressed. Moreover, the authors have collected data from china to place evidence against the study hypothesis. China has particular social, environmental, and economic conditions raising the question of the study's validity. Thus, authors must analyze the relationship among the factors in more regions of the country.

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