

# Impacting Information Technology on Investment Capital Attraction and Sustainable Development: A Case Study in Vietnam

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**ABSTRACT:** Vietnam and several countries worldwide are experiencing unprecedented impacts of climate change, the gradual depletion of natural resources, and the global Covid-19 pandemic; in addition, sustainable development has become an essential requirement and an inevitable path in the progression of human society. Objective: This paper analyzes the key factors affecting investment capital attraction and sustainable development, providing recommendations for improving this process. Methodology: The study utilized two methodologies: qualitative research conducted through interviews and focused on 15 discussions with economic experts to adapt the content of observable parameters to correspond with the firm's characteristics. A quantitative study was performed on 800 representative managers from three provinces and one city in Vietnam to assess the model and research hypotheses. Result: The findings reveal five factors affecting the allure of investment capital, with a significance level of five percent, and the attraction of investment capital influencing sustainable development in Vietnam. This contribution augments academic value and is a reference for future research on sustainable development in Vietnam. There are five policy implications and contributions to promoting sustainable development in Vietnam, encouraging innovation and excitement. Conclusion: This study's innovation asserts that sustainable development will enhance Vietnam's working and living conditions by promoting sustainable economic growth, a prosperous and equitable society, stable cultural diversity, a pristine environment, and the sustainable preservation of resources. Unique contribution: The novelty of this study was to supplement and complete the system of criteria for the framework of ethical principles for sustainable development, including the notions of sustainability within the economic, social, and environmental spheres. Key recommendation: The authors proposed recommendations for policymakers and investors to improve technology based on the results. Technology (TEC) emerges as the most influential factor, exerting the most substantial impact on investment capital attraction and sustainable development.

**Keywords:** Sustainable development, investment policies, regional connectivity, capital policy, and technology.

## I. INTRODUCTION

The policy system continues to exhibit deficiencies in its construction and execution, resulting in suboptimal effectiveness in policy enforcement. The framework of policy documents remains unwieldy and intricate; policy mechanisms lack synchronization and often overlap; the administrative capabilities of state agencies are still inadequate, particularly at the grassroots level; despite advancements in state management and corporate governance, they have not yet fully addressed the demands of the current context [1, 2]. Specific policies remain unimplemented due to vague objectives, impracticality, overly ambitious goals, and constrained resources for execution.

The existing policy development and implementation process remains predominantly top-down. The involvement of stakeholders directly impacted by the policy in the policy creation and implementation process remains constrained. Specific policy options do not stem from the rights and interests of the stakeholders; the dissemination of policies

exhibits deficiencies, particularly in recognizing the significance of stakeholder participation in both the implementation process and the formulation and announcement of implementation plans. The involvement of non-state and social organizations in policy formation, organization, implementation, and monitoring has not been stimulated or encouraged [3, 4].

The interaction and coordination across agencies and between policy-implementing agencies and policy topics have not received adequate attention. This is evident in instances where superiors are not intimately linked to subordinates, resulting in insufficient oversight, supervision, and modification of policy execution activities, which yields adverse outcomes; horizontal coordination among agencies remains inadequate, with persistent overlaps and duplications in tasks, as well as ambiguous responsibilities among certain agencies.

Financial resources for the implementation of sustainable development index objectives: To sustain its accomplishments in the future, Vietnam must, firstly, preserve the essential resources to advance the successfully attained sustainable development goals, and secondly, augment capital resources to facilitate the more effective realization of sustainable development objectives that continue to encounter significant challenges or are unlikely to be fulfilled by 2030. Nonetheless, organizing resources to fulfill the demands in the forthcoming years is complex, particularly in light of the Covid-19 pandemic, which has exerted a profound global impact. The significant challenges are as follows:

The Resolution of the 13th National Congress regarding the 10-year socio-economic development strategy for 2021-2030, with a vision extending to 2045, articulated by the Communist Party of Vietnam, explicitly stated: Accelerated and sustainable development mainly depends on science and technology, innovation, and digital transformation. Simultaneously, it is resolved to adhere to the trajectory and objectives of holistic advancement - sustainable development. Policies and guidelines for fostering a socialist-oriented market economy should be consistently implemented in economic development. Social development policies related to social security, culture, education and training, healthcare, and human development should be enhanced.

Adopt an environmentally sustainable strategy that emphasizes the scientific and rational management and utilization of natural resources, ecological protection measures, and the exploitation of clean energy sources in conjunction with renewable energy initiatives. Aim to evolve into a developing nation with a sophisticated industrial sector and elevated middle-income status by 2030 and to attain developed country status with high income by 2045. The 13th National Party Congress Resolution has delineated explicit sustainable development objectives. The 13th National Party Congress Resolution has delineated explicit sustainable development objectives. Currently, Vietnam has established a strategic vision and growth plan across multiple sectors with the following objectives:

The average annual growth rate of gross domestic product (GDP) is approximately 7%; by 2030, GDP per capita at current prices is projected to attain around 7,500 USD; the processing and manufacturing sector is expected to constitute about 30% of GDP, while the digital economy will also comprise approximately 30% of GDP; the urbanization rate is anticipated to exceed 50%. Total social investment is projected to average 33-35% of GDP; public debt will not surpass 60% of GDP; the contribution of total factor productivity (TFP) to growth is expected to reach 50%; the average growth rate of social labor productivity will exceed 6.5% per annum; energy consumption per unit of GDP will decline by 1-1.5% annually.

In recent years, budget revenue as a percentage of GDP (current prices) has declined from over 28% in the preceding decade to an average of 25% throughout 2013-2023, aligning with the ASEAN region's average. Enhancing the share of state budget revenue in the forthcoming years poses significant challenges, as the rise in domestic revenue cannot offset the decline in budget revenue due to Vietnam's obligation to fulfill tariff reduction commitments under international and regional free trade agreements amidst currently low crude oil prices. Simultaneously, the demand for budgetary allocations for developmental investments and routine expenditures is exceedingly high, exerting pressure on public debt, budget deficits, and macroeconomic stability shortly. The present difficulties in Vietnam's sustainable development sector, particularly in luring investment capital, are addressed in the study's problem statement. The study aims to inform policy recommendations by identifying and analyzing critical elements impacting Vietnam's investment capital attraction and sustainable development.

The research gap shows that sustainable development is required throughout the country's development process, closely combining economic growth with social security, environmental protection, independence, and national sovereignty. Building and implementing socio-economic development strategies, including attracting foreign investment, is a part of Vietnam's sustainable development strategy. In the current context, Vietnam's policy to attract

domestic and foreign investment capital strongly aims to attract selective projects and have spillovers to implementing Vietnam's Sustainable Development Strategy. Therefore, the study goal is to find out key factors affecting investment capital attraction and sustainable development, and based on the results, the authors had policy recommendations for highlighting its significance and contributions to both scientific inquiry and practical governance policies under the conditions of international integration with the goal of sustainable development in Vietnam. Based on the study goal, the authors gave the research question: What are the key determinants affecting the attraction of investment capital in Vietnam, and how do these determinants facilitate sustainable development amid economic and environmental challenges? What policy recommendations should be considered?.

## II. LITERATURE REVIEW

### 1. *SUSTAINABLE DEVELOPMENT (SUS)*

This notion primarily highlights the optimal utilization of natural resources and the preservation of the living environment for individuals during the development process. Sustainable development is a transformative framework that maximizes current economic and social advantages without jeopardizing the potential for analogous gains in the future [5, 24]. Sustainable development entails the concurrent advancement of three dimensions: sustainable economic growth, a thriving society characterized by equity and stability, cultural diversity, and an unpolluted environment, all supported by responsibly managed resources. Consequently, the comprehensive framework of ethical principles for sustainable development encompasses the tenets of sustainable development across all three pillars: economy, society, and environment [6, 7, 24].

### 2. *INVESTMENT CAPITAL ATTRACTION (CAP)*

Infrastructure development is crucial to attract investment capital and ensure sustainable development, as it is used for transportation, telecommunications, electricity, clean water, and other utilities, which also strongly affects businesses' investment decisions. (1) A clean, transparent, and stable legal environment helps investors feel secure when capitalizing on projects. (2) For investors, a highly skilled workforce that can meet the development needs of the business is an essential factor in investment decisions. (3) Economic stability, including low inflation, stable exchange rates, and a developed financial system, are favorable conditions for attracting investment capital. (4) Specific factors such as geographical location, natural resources, or market development potential also attract investment capital from outside [8, 9, 24].

### 3. *INVESTMENT POLICIES (POL)*

Preferential policies, administrative reforms, and infrastructure upgrades will increase the market's attractiveness to foreign investors. Industrial parks with good conditions, tax exemptions, and logistics support will promote FDI inflows. Reasonable investment policies also help domestic businesses become bolder in expanding production scale and improving technology. Macroeconomic stability and specific industry development policies will create favorable conditions for domestic investment growth [10, 24].

### 4. *WORKING AND LIVING ENVIRONMENT (ENV)*

Businesses play an important role in improving the living environment through social activities, environmental protection, and community development. This benefits residents and enhances the image and brand of businesses. Living and working environments are two factors that determine individual happiness and success. The government and companies must coordinate to create the best conditions for both aspects to improve quality of life and work efficiency [11, 24].

### 5. *REGIONAL CONNECTIVITY (CON)*

Corporations, non-profit organizations, families, and individuals are the primary participants in this partnership. This component connects entities situated in distinct locations (horizontally linked) and is highly marketable, encompassing purchase and sale transactions, contract kinds, and corporate shares. Research indicates that regional

economic linkage is crucial, defined as the interconnection of various financial entities within a region, grounded in economic interests, to enhance comparative advantage and foster greater economic competitiveness [13, 24].

#### 6. *HUMAN RESOURCES (HUM)*

Consequently, the host nation must proactively elevate its intellectual capacity to augment its access to innovative technology and methodologies and refine its economic management practices. Human resources refers to people's abilities, skills, knowledge, and potential to perform tasks and achieve specific goals. This resource includes not only labor but also the intelligence, creativity, and dedication of everyone [14, 15]. Human resources can be measured through factors such as education level, professional skills, work experience, and sense of responsibility at work. Human resources are a core factor for the sustainable development of any organization or country [24].

#### 7. *TECHNOLOGY (TEC)*

Scientific and technological advancements enhance the efficiency of investment capital, facilitate the optimal utilization of natural resources, and augment labor productivity. Furthermore, it improves quality and reduces production costs [16, 17]. The rapid advancement of technology, particularly in information technology, biotechnology, and new materials technology, has enhanced manufacturing efficiency. Nevertheless, achieving such outcomes necessitates investment in research and development. Technology is a significant driving force promoting the development of modern society [24].

#### 8. *INVESTMENT CAPITAL ATTRACTION AFFECTING SUSTAINABLE DEVELOPMENT*

Investment capital, especially from Foreign Direct Investment (FDI) projects, helps create job opportunities, increase labor productivity, and promote production [18]. When investment projects focus on green technology and clean production, they help improve the working environment and increase productivity without harming the environment. Foreign investment often comes with the transfer of modern technology, assisting domestic businesses to access new technologies. This improves productivity and helps companies operate more efficiently, using fewer resources, thereby minimizing their environmental impact [19].

### III. THEORETICAL FRAMEWORK

#### 1. *INVESTMENT POLICIES (POL)*

Investment policy is essential in attracting investment capital, especially in global competition. Factors such as a stable legal environment, tax incentives, infrastructure development, open trade policies, encouragement of critical industries, human resource training, and foreign relations can strengthen attraction to investors [20, 21]. Effective policies help reduce risks, increase trust, and create competitive advantages by attracting capital from both domestic and foreign sources. In addition to attracting capital, investment policies also directly affect sustainable development. Policies encouraging investment in green technology, renewable energy, and efficient resource use can promote economic development associated with environmental protection [22]. At the same time, policies supporting human resource development and improving quality of life contribute to comprehensive sustainable development, ensuring a balance between economic growth, social welfare, and environmental protection. Thus, the author proposed hypotheses H1 and H2 as follows:

H1: Investment policies positively influence the attraction of investment capital.

H2: Investment policies positively influence the sustainable development.

#### 2. *WORKING AND LIVING ENVIRONMENT (ENV)*

Living environment and working conditions play an essential role in attracting investment capital. A high-quality living environment with modern infrastructure, complete utility services, and stable security helps attract quality human resources, creating favorable conditions for businesses to develop [13, 23]. At the same time, good working conditions, including labor safety, social benefits, and support from the government, create an attractive investment environment. Investors often prioritize areas with positive living and working environments to ensure sustainability

and long-term efficiency for business activities. Therefore, living environment and working conditions significantly impact sustainable development. A healthy, safe, and sustainable living environment promotes quality of life, minimizing negative impacts on health and the environment [14, 24]. Good working conditions include ensuring labor safety and social welfare, developing employee capacity, improving productivity, and helping maintain high-quality human resources in the long term. Both factors contribute to sustainable economic development, social stability, and environmental protection for future generations. Thus, the authors proposed hypotheses H3 and H4 as follows:

H3: Working and living environment positively influencing the investment capital attraction.

H4: Working and living environment positively influencing the sustainable development.

### 3. *REGIONAL CONNECTIVITY (CON)*

Regional linkages are essential in attracting investment capital, especially globalization and economic integration. The connection between economic regions, transport infrastructure, logistics, and the development of communication networks create favorable conditions for the circulation of goods, services, and human resources [15, 18, 25]. Strong regional links help investors take advantage of each region's advantages, such as resources, human resources, and markets, thereby optimizing costs and increasing business efficiency. Areas well connected to major economic centers often attract more substantial investment capital thanks to their ability to expand markets and optimize supply chains. Besides attracting investment capital, regional integration also significantly impacts sustainable development. Effective connectivity between regions helps rationally allocate resources, minimize economic development gaps between regions, and promote equitable development. Regional connectivity also helps optimize infrastructure and energy use, reducing emissions and negative environmental impacts [17, 23, 24]. Furthermore, sharing technology, knowledge, and resources between regions helps promote innovation and develop green economic sectors, contributing to environmental protection and maintaining long-term sustainable development. Thus, the authors proposed hypotheses H5 and H6 as follows:

H5: Regional connectivity positively influencing investment capital attraction.

H6: Regional connectivity positively influencing the sustainable development.

### 4. *HUMAN RESOURCES (HUM)*

Human resources are a vital factor affecting investment attraction. A highly skilled, well-trained, and dynamic workforce will create favorable business conditions for efficient and creative operations. Investors often look for areas with abundant, quality human resources to ensure long-term operation and development [19, 23]. In addition, human resource development policies, including training, improving skills, and improving working conditions, are essential in creating an attractive investment environment and enhancing competitiveness in national or regional competition in the global market. Besides attracting investment capital, human resources also profoundly impact sustainable development [20, 24, 25]. A highly qualified workforce trained in green skills and environmental protection awareness will contribute to building sustainable economic sectors. Human resources have the right skills and knowledge to ensure social welfare and sustainable human resource development, which also helps maintain social stability and ensures balanced development between the economy, society, and the environment. Thus, the authors proposed hypotheses H7 and H8 as follows:

H7: Human resources positively affect the investment capital attraction.

H8: Human resources positively affect the sustainable development.

### 5. *TECHNOLOGY (TEC)*

Technology plays an essential role in attracting investment capital. The application of advanced technology improves production efficiency and reduces costs, and regions or countries with developed technology platforms, including digital infrastructure, artificial intelligence, and automation technology, are often more attractive to investors due to their potential for growth and innovation [18, 19, 24, 26]. High technology also helps businesses optimize supply chains, manage risks, and access global markets more quickly. Policies to support research and development (R&D) and technology transfer will create favorable conditions for attracting investment capital flows from domestic and foreign countries. Besides attracting investment capital, technology also significantly impacts sustainable development.



Advanced technologies, especially green technology and renewable energy, help minimize negative environmental impacts, save resources, and limit greenhouse gas emissions. Technology also plays an essential role in optimizing production processes, improving energy efficiency, and managing natural resources sustainably. In addition, digital technologies such as artificial intelligence and big data help improve urban management, smart agriculture, and socio-economic planning, ensuring economic development, protecting the environment, and improving quality of life. Thus, the authors proposed hypotheses H9 and H10 as follows:

H9: Technology positively affects the investment capital attraction.

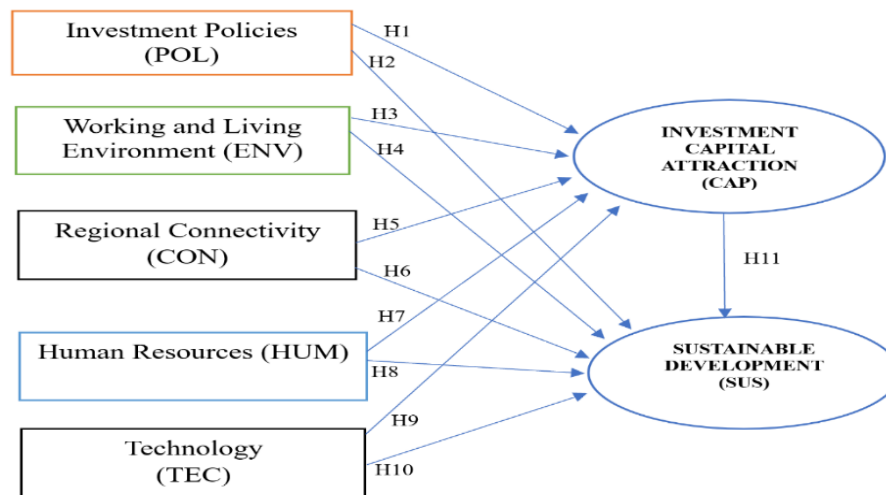
H10: Technology positively affects sustainable development.

#### 6. INVESTMENT CAPITAL ATTRACTION AFFECTING SUSTAINABLE DEVELOPMENT

Attracting investment capital impacts sustainable development, primarily when investment capital is directed to environmentally friendly and socially responsible projects. Investing in renewable energy, green technology, and sustainable infrastructure helps reduce pollution, protect natural resources, and respond to climate change [23, 24, 26]. In addition, investment flows into social development projects, such as education, health, and community development, which contribute to improving quality of life and reducing inequality. Investing investment capital effectively promotes economic growth and ensures long-term, sustainable development, harmoniously combining economic, social, and environmental benefits. Thus, the authors proposed hypothesis H11 as follows:

H11: Investment capital attraction affecting sustainable development.

Finally, the authors investigated and integrated the theoretical framework and relevant research from local and international sources, resulting in the research model. Following the development of a study model, the authors created a proposed scale, analyzed both the model and the scale and collected preliminary data to test the scale's reliability and validity to assess the study model and hypothesis based on 05 factors that have been adjusted to suit the actual situation in Vietnam specifically; the research model is as follows.



Source: The authors proposed

**FIGURE 1.** A research model for factors affecting investment capital attraction and sustainable development.

Figure 1 depicts five critical factors of investment capital attraction and sustainable development in Vietnam: (1) Investment policies (POL), (2) Working and living environment (ENV), (3) Regional connectivity (CON), (4) Human resources (HUM), and (5) Technology (TEC). Dependent variables: (1) investment capital attraction and sustainable development, (2) sustainable development.

## IV. METHODOLOGY AND DATA

### 1. QUALITATIVE RESEARCH

The authors analyzed and synthesized the theoretical framework and relevant works from domestic and international contexts, thus developing the research model. Following establishing a primary scale, the authors collected official data to assess the research model and hypothesis [12]. The authors formulate conclusions and suggest policy implications to attract investment capital. The study utilized the scale development research methodology, which was carried out through two phases following:

*Phase 1:* The authors formulated conceptual content based on a theoretical framework in the qualitative research phase. Phase 1 of the investigation had three components: (1) An analytical framework to explore concepts such as capital, capital attraction, and sustainable development. Identify the variables affecting sustainable development; (2) Determine the relationships among the concepts within the research model; (3) Create an initial scale for the research concepts with a measurable scale, namely the scale of factors influencing sustainable development. The authors advanced the creation of variables to quantify notions through empirical research and interviews with a cohort of 15 managers regarding capital attraction. This phase has two separate tasks: (1) Altering and enhancing the magnitude of current concepts and (2) Defining a set of variables for the magnitude of new images integrated into the model. Initial research was undertaken to refine and improve the fundamental scales through focus group discussions. Focus group interviews were conducted. Multiple groups were established and interviewed, comprising business directors and departmental leaders. This phase leads to the alteration of the original scale, known as the adjustable scale.

The authors conducted the initial quantitative research via direct interviews with individual clients, employing the questionnaire established at the end of step 2. The data collection sample comprises  $n = 150$  business executives questioned across three provinces. Perform a preliminary scale assessment using Cronbach's alpha reliability coefficients and exploratory factor analysis on the dataset collected in step 3. The revised scale was assessed in a first quantitative study with a sample of  $n = 150$  business leaders, employing a random sampling method. The scales were calibrated utilizing two principal methodologies: (1) the reliability coefficient approach of Cronbach's Alpha and (2) exploratory factor analysis (EFA). The Cronbach's Alpha coefficient is utilized to evaluate the reliability of 0.6.

### 2. QUANTITATIVE RESEARCH

*Phase 2:* In the quantitative phase of the research, the authors conducted official studies in Vietnam, including Dong Nai Province, Ba Ria–Vung Tau Province, Binh Duong Province, and Ho Chi Minh City. A poll of business executives in the three provinces above is being conducted. Direct interviews with a structured questionnaire are used to acquire information from 800 company leaders. The evaluation used probability and random sampling; however, only 785 samples were valued. Only 785 samples were processed after the data was encrypted, input, and analyzed using SPSS 20.0 and AMOS. To test scale reliability, Cronbach's Alpha was used on the dataset. The coefficients were evaluated to review scale dependability in this phase. Cronbach's Alpha comes from official research. The scale value was assessed using exploratory and confirmatory factor analysis (EFA and CFA) in structural equation modeling (SEM). The research framework has these novel aspects [12]. These indicators evaluate the proposed model's fit with the data. Common indications are below: (1) GFI > 0.90; (2) RMSEA < 0.08; (3) CFI > 0.90; (4) SRMR < 0.08; (5) CFI > 0.90; (6) Tucker-Lewis Index (TLI) or Non-Normed Fit Index (NNFI) > 0.90; (7) Chi-Square/ Degrees of Freedom ( $\chi^2/df$ ) < 5.0. The authors constructed the standard scale and investigated the SEM structure to test the model and hypothesis [12]. The compatibility of theoretical models and research assumptions is assessed using SEM structural analysis. The authors applied model test results to policy, detailed expert opinions, and more generalized views from company leaders by combining purposive and random sampling techniques for the qualitative and quantitative phases.

## V. STUDY RESULTS

Vietnam proposes the orientation of selectively attracting foreign investment; the Ministry of Planning and Investment has recently advised and submitted to the Prime Minister to issue the Foreign Investment Cooperation Strategy for the period 2021 - 2030 to improve the efficiency and comprehensive quality in attracting and using foreign investment capital; attracting high-tech projects, new technologies, modern management, high added value, positive spillover effects, connecting global production and supply chains; building and developing innovation centers, financial

centers of regional and international stature to create momentum for socio-economic development in the coming period. Over the next five years, the Resolution underscores the necessity to concentrate on the following specific transformative objectives to adapt to evolving situations and requirements:

First: Perfecting and synchronously developing institutions for developing a socialist-oriented market economy and innovating national governance in a modern and highly effective direction. Focus on prioritizing the synchronous completion and exemplary implementation of the legal system, introducing mechanisms and policies to create a favorable, fair, and healthy investment and business environment for all economic sectors; mobilizing, managing, and effectively using all resources for development, especially in the fields of land and finance; implementing reasonable and effective decentralization and delegation of power, while strengthening inspection, supervision, and control of power through the legal system.

Second: Prioritize the development of high-quality, technically qualified human resources; focus on developing human resources for leadership and management in critical areas; improve and create a robust and comprehensive change in the quality of education and training; develop mechanisms and policies to prioritize recruitment, use, and reward talents. Promote research, transfer, and application; create favorable conditions for science and technology development; arouse the desire for the country to develop, to live a happy and prosperous life; promote cultural values, the strength of the Vietnamese people; call for national pride, solidarity in the cause of building and defending the country. The 2023 Annual Business Survey by the National Statistics Office indicates that small and medium companies (SMEs) represent more than 97% of all registered firms nationwide. To test the five key factors affecting investment capital attraction and sustainable development in Vietnam, a comprehensive approach involving qualitative and quantitative research methods can be employed by testing Cronbach's Alpha for factors in Table 1.

**Table 1.** Testing of Cronbach's Alpha for factors affecting investment capital attraction and sustainable development.

Code	Items	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
<b>Investment policies (POL): Cronbach's Alpha is 0.866</b>		-	-
POL1	You opt to invest in Vietnam because of the advantageous policies for the leasing of premises for investment objectives	0.698	0.837
POL2	You have decided to invest in Vietnam due to its transparent tax system, which is efficiently overseen by tax authorities that maintain integrity and avoid using the system for personal benefit	0.782	0.802
POL3	You have decided to invest in Vietnam due to the transparent and efficient execution of legal procedures and documents, which greatly facilitates company operations	0.648	0.856
POL4	You opt to invest in Vietnam because of the proactive and inventive leadership at the local level, which actively fosters and promotes the growth of businesses	0.741	0.819
<b>Working and living environment (ENV): Cronbach's Alpha is 0.956</b>		-	-
ENV1	You decided to invest in Vietnam because of the government's efficient and satisfactory handling of disputes between workers and business owners	0.903	0.94
ENV2	You have decided to invest in Vietnam due to its highly developed education system that effectively caters to the requirements of both the workers and enterprises	0.864	0.952
ENV3	You have decided to invest in Vietnam because of its high-quality healthcare system that guarantees sufficient medical services	0.878	0.947
ENV4	You opted to invest in Vietnam due to its pristine environment and affordable cost of living	0.928	0.932
<b>Regional connectivity (CON): Cronbach's Alpha is 0.856</b>		-	-
CON1	You have decided to invest in Vietnam because of the widespread presence of supporting industries throughout the provinces and cities in the region	0.732	0.805



CON2	You have selected Vietnam as an investment destination due to the robust collaboration between provinces and cities in fostering trade and investment	0.705	0.815
CON3	You decided to invest in Vietnam due to the presence of a supply chain that is compatible with your business operations	0.633	0.846
CON4	You have decided to invest in Vietnam because of the well-coordinated production and economic activity among the provinces in the region	0.737	0.802
<b>Human resources (HUM): Cronbach's Alpha is 0.943</b>		-	-
HUM1	You selected to invest in Vietnam because of the presence of top-notch vocational training institutions that cater to the requirements of enterprises	0.878	0.921
HUM2	You have decided to invest in Vietnam due to the large availability of low-skilled workforce	0.853	0.929
HUM3	You have selected Vietnam as an investment destination due to its highly disciplined workforce that possesses the ability to swiftly adapt to emerging technology	0.844	0.931
HUM4	You have decided to invest in Vietnam due to the ease of recruiting managers who possess the necessary knowledge and skill set	0.879	0.92
<b>Technology (TEC): Cronbach's Alpha is 0.956</b>		-	-
TEC1	You have decided to invest in Vietnam due to the consistent provision of timely training for equipment transfer	0.897	0.941
TEC2	You decide to invest in Vietnam because of the continuous support for particular preferred industries that provide advantages to businesses	0.857	0.954
TEC3	You have decided to invest in Vietnam due to the country's stringent enforcement of copyright and trademark protection	0.887	0.944
TEC4	You have decided to invest in Vietnam due to the consistent backing for financing research and the implementation of advanced technologies in manufacturing operations	0.933	0.931
<b>Investment capital attraction (CAP): Cronbach's Alpha is 0.940</b>		-	-
CAP1	You have decided to invest in Vietnam based on your anticipation that the company's profitability will align with your intended expectations	0.854	0.928
CAP2	You have decided to invest in Vietnam based on your belief that your firm would create lasting value	0.912	0.883
CAP3	In general, you are really content with your financial investment in Vietnam	0.859	0.925
<b>Sustainable development (SUS): Cronbach's Alpha is 0.869</b>		-	-
SUS1	The attraction of investment capital is a key factor in achieving consistent annual economic growth	0.677	0.850
SUS2	The attraction of investment capital not only creates job opportunities for the people of Vietnam but also supports environmental conservation efforts	0.792	0.804
SUS3	The firm continually endeavors to responsibly contribute to the economy, community, and society	0.660	0.857
SUS4	Attracting investment capital improves the total income and quality of life for the people in Vietnam	0.760	0.817

Source: Own calculations in SPSS 20.0.

Table 1 shows the Cronbach's Alpha test results for different parameters influencing investment capital attractiveness and sustainable growth in Vietnam. This summarizes the principal insights from Table 1: (1) Investment policies (POL): This factor exhibits internal solid consistency, as evidenced by Cronbach's Alpha of 0.866. The individual items (POL1 to POL4) have robust relationships, with adjusted item-total correlations between 0.648 and 0.782. Should any component be removed, Cronbach's Alpha would stay comparatively steady, signifying that all items significantly contribute to the overall scale. (2) Working and living environment (ENV): This component exhibits an exceptional Cronbach's Alpha of 0.956, indicating substantial reliability. The corrected item-total correlations for items ENV1 to

ENV4 are notably strong, ranging from 0.864 to 0.928, with negligible effects on Alpha upon item deletion. (3) Regional connectivity (CON): This factor demonstrates strong internal consistency, as evidenced by Cronbach's Alpha of 0.856. The adjusted item-total correlations vary from 0.633 to 0.737, and removing any item would not substantially impact the overall alpha coefficient. (4) Human resources (HUM): A Cronbach's Alpha of 0.943 signifies exceptional dependability for this aspect. The corrected item-total correlations vary from 0.844 to 0.879. The Alpha consistently remains steady across the objects. (5) Technology (TEC): An additional variable with a commendable Cronbach's Alpha of 0.956. The adjusted item-total correlations range from 0.857 to 0.933, indicating a robust internal consistency among the items. (6) Investment capital attraction (CAP): This component demonstrates excellent reliability, as evidenced by Cronbach's Alpha of 0.940. The items (CAP1 to CAP3) demonstrate robust relationships, with adjusted item-total correlations between 0.854 and 0.912. (7) Sustainable development (SUS): A Cronbach's Alpha of 0.869 indicates internal solid consistency for this factor. The corrected item-total correlations range from 0.660 to 0.792, maintaining consistent alpha values with the deletion of any item.

In conclusion, all factors exhibit good to exceptional internal consistency as indicated by their Cronbach's Alpha values, signifying that the items within each factor reliably measure the examined construct.

**Table 2.** Descriptive statistics for factors affecting investment capital attraction and sustainable development.

Code	N	Minimum	Maximum	Mean	Std. Deviation
POL1	785	1	5	2.333	0.657
POL2	785	1	5	2.431	0.676
POL3	785	1	5	2.381	0.656
POL4	785	1	5	2.431	0.713
ENV1	785	1	5	3.041	0.993
ENV2	785	1	5	3.048	1.000
ENV3	785	1	5	3.085	0.964
ENV4	785	1	5	3.071	0.999
CON1	785	1	5	3.382	0.873
CON2	785	1	5	3.502	0.961
CON3	785	1	5	3.315	0.972
CON4	785	1	5	3.363	0.892
HUM1	785	1	5	3.012	0.990
HUM2	785	1	5	3.045	0.989
HUM3	785	1	5	3.090	0.947
HUM4	785	1	5	3.065	0.991
TEC1	785	1	5	3.074	0.988
TEC2	785	1	5	3.061	1.008
TEC3	785	1	5	3.110	0.963
TEC4	785	1	5	3.103	0.982
CAP1	785	1	5	3.412	0.950
CAP2	785	1	5	3.327	0.969
CAP3	785	1	5	3.289	0.979
SUS1	785	1	5	2.325	0.653
SUS2	785	1	5	2.418	0.677
SUS3	785	1	5	2.371	0.656
SUS4	785	1	5	2.413	0.702

Source: own calculations in SPSS 20.0.

Table 2 shows descriptive statistics regarding the elements influencing investment capital attractiveness and sustainable growth. The statistics encompass the sample size (N), minimum, maximum, mean, and standard deviation (Std. Deviation) for each item. The following is an overview of the principal insights: (1) Investment policies (POL): The average values for POL1 to POL4 fluctuate between 2.333 and 2.431, suggesting that respondents predominantly favor

the lower end of the scale (with 1 as the minimum and 5 as the maximum). The standard deviations are comparatively low, ranging from 0.657 to 0.713, indicating that responses are closely grouped around the mean. (2) Occupational and residential environment (ENV): The average values for ENV1 to ENV4 fluctuate between 3.041 and 3.085, indicating a predominantly neutral or somewhat favorable evaluation of the working and residential environment. The standard deviations vary from 0.964 to 1.000, signifying more significant response variability relative to POL. (3) Regional connectivity (CON): The average values for CON1 to CON4 span from 3.315 to 3.502, suggesting that respondents predominantly hold a positive perspective on regional connectivity. The standard deviations for these items vary from 0.873 to 0.972, indicating considerable response variability. (4) Human resources (HUM): The average values for HUM1 to HUM4 fluctuate between 3.012 and 3.090, indicating a predominantly neutral to positive assessment of human resources in Vietnam. The standard deviations vary from 0.947 to 0.991, signifying uniform responses throughout the sample. (5) Technology (TEC): The average values for TEC1 to TEC4 fluctuate between 3.061 and 3.110, indicating that participants possess a predominantly neutral perspective about the technology infrastructure. The standard deviations vary from 0.963 to 1.008, indicating moderate variability in the replies. (6) Attraction of Investment Capital (CAP): The average values for CAP1 to CAP3 range from 3.289 to 3.412, indicating a marginally favorable evaluation of investment capital attraction. The standard deviations range from 0.950 to 0.979, signifying reasonable consistency in the replies. (7) Sustainable development (SUS): The average values for SUS1 to SUS4 are lower, ranging from 2.325 to 2.418, suggesting a predominantly unfavorable perception of sustainable development initiatives. The standard deviations range from 0.653 to 0.702, indicating reasonable response consistency.

In conclusion, the findings indicate that respondents predominantly possess neutral to somewhat positive perceptions of most characteristics, exhibiting more significant heterogeneity in the working and residential environment and regional connectivity. Sustainable development seems to be assessed considerably lower than other variables, suggesting potential for enhancement in this domain.

**Table 3.** Testing SEM model for factors affecting investment capital attraction and sustainable development.

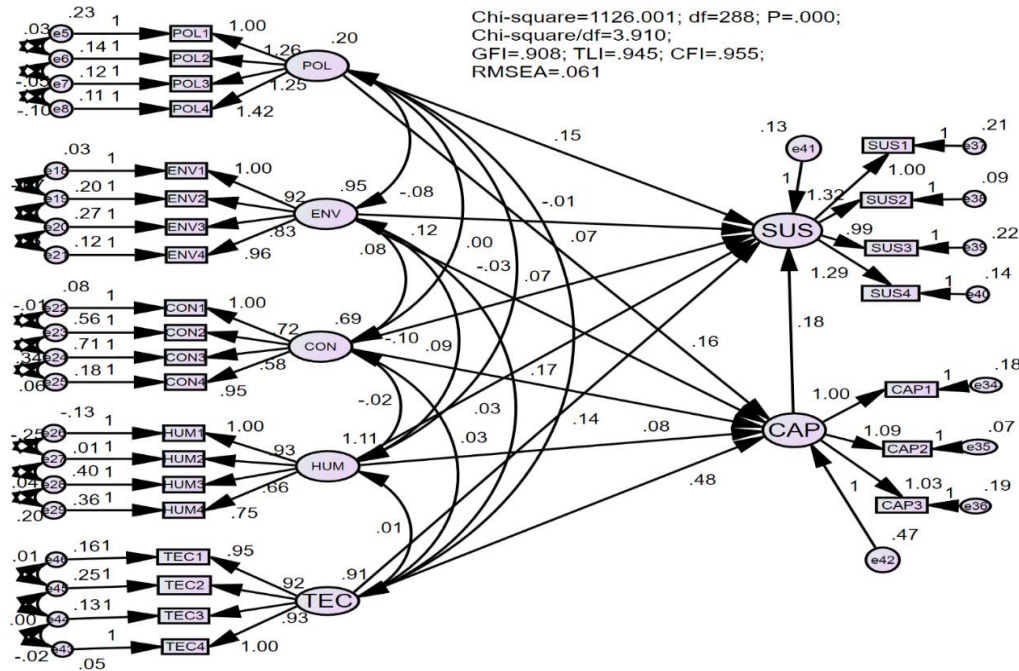
Relationships	Standardized estimate	Unstandardized estimate	S.E	C.R	P	Result
CAP <--- POL	0.164	0.086	0.059	2.794	0.005	Accepted H1
CAP <--- ENV	0.076	0.087	0.027	2.776	0.006	Accepted H3
CAP <--- CON	0.172	0.168	0.034	5.090	***	Accepted H5
CAP <--- HUM	0.084	0.104	0.026	3.293	***	Accepted H7
CAP <--- TEC	0.481	0.540	0.030	16.300	***	Accepted H9
SUS <--- CAP	0.179	0.332	0.023	7.951	***	Accepted H11
SUS <--- POL	0.149	0.145	0.033	4.503	***	Accepted H2
SUS <--- ENV	0.074	0.157	0.016	4.761	***	Accepted H4
SUS <--- CON	0.069	0.125	0.019	3.705	***	Accepted H6
SUS <--- HUM	0.028	0.065	0.013	2.238	0.025	Accepted H8
SUS <--- TEC	0.141	0.292	0.019	7.335	***	Accepted H10

Note \*\*\* denote statistical significances at 1%, processed from SPSS 20.0, Amos.

Table 3 indicates a significant threshold of 0.05 for the critical components of investment capital attraction and sustainable development in Vietnam. All proposed hypotheses (H1 to H11) are accepted, indicating significant relationships between the identified factors and investment capital attraction or sustainable development. Notably, technology (TEC) emerges as the most influential factor, exerting the most substantial impact on investment capital attraction and sustainable development. The findings suggest that fostering technological advancements and improving policy frameworks are critical for enhancing capital attraction and long-term sustainable growth in Vietnam.

In conclusion, the SEM analysis offers compelling evidence that investment policies, working and living conditions, regional connectivity, human resources, and technology significantly impact investment capital attraction and sustainable development in Vietnam. Technology emerges as the preeminent element in attracting investment, but other assessed factors positively contribute to sustainable development. These findings highlight the necessity of a

comprehensive strategy in formulating investment plans that correspond with long-term sustainability objectives, especially in growing countries such as Vietnam. Consequently, policymakers and company leaders must prioritize enhancements in these domains to guarantee that Vietnam remains an appealing locale for investors while fostering sustainable development. The capacity to capture dynamic changes in capital attraction and sustainability is diminished when cross-sectional data is relied upon. To overcome this shortcoming, this study incorporates time-sensitive variables and uses longitudinal data whenever feasible to fill in the gaps in our understanding of their dynamic interplay.



Source: Author collected and processed from SPSS 20.0, Amos

**FIGURE 2.** Testing SEM for factors affecting investment capital attraction and sustainable development.

Figure 2 depicts the significance threshold of 0.05 for assessing the five essential components of investment capital attraction and sustainable development. The following statistical metrics measured the model's fit: GFI = 0.908 (>0.900), TLI = 0.945 (>0.900), CFI = 0.955 (>0.900), and RMSEA = 0.061 (<0.08). According to the data presented above, research model testing showed five critical factors of investment capital attraction and sustainable development in Vietnam: (1) Investment policies (POL), (2) Working and living environment (ENV), (3) Regional connectivity (CON), (4) Human resources (HUM), and (5) Technology (TEC).

To assess the Structural Equation Model (SEM), this research employed the following model fit indices: Chi-square/df ratio, Goodness-of-Fit Index (GFI), Tucker-Lewis Index (TLI), Comparative Fit Index (CFI), and Root Mean Square Error of Approximation (RMSEA). These metrics shed light on the model's ability to capture the observed data: First, the chi-square/df ratio: if it's less than 5.0, it means the model's complexity is reasonable with the data variance, which is a good thing. (2) Goodness-of-Fit Index (GFI): When the GFI is more than 0.90, the model fits the data well and accounts for a significant amount of the observed variation. (3) The Tucker-Lewis Index (TLI) and the Comparative Fit Index (CFI): When these indices are more significant than 0.90, it means that the data and the proposed model are very well-matched and that the model accurately portrays the interrelationships between the variables. (4) RMSEA: When the RMSEA value is less than 0.08, the model and the population covariance matrix are very well-fitting and have very few differences. The study's findings are strengthened by these fit indices, which prove that the SEM model accurately depicts the interrelationships between the variables impacting Vietnam's capacity to attract investment capital and long-term sustainability. The chosen variables, investment policies, working and living conditions, regional connectivity,



human resources, and technology, are enough to describe the dynamics of investment attraction and its effect on sustainable development, according to the high model fit values.

## VI. DISCUSSION OF FINDINGS

Also included are bullet points that highlight the authors' most important findings: Transparent tax systems, effective legal procedures, and advantageous conditions for foreign direct investment (FDI) are essential factors that influence investment capital attraction. Investment policies that are clear and consistent with these policies play a positive role. The significance of a stable, high-quality living environment for workers and investors is underscored by the fact that a supportive environment at work and home, including access to high-quality healthcare and education, was found to have a modest impact on capital attraction and sustainable development. (3) The importance of inter-regional solid connectivity in improving Vietnam's investment attractiveness was highlighted as a critical component since it allowed for more efficient supply chains, logistics, and partnerships among provinces. The need for continuous workforce quality improvements for sustained expansion is highlighted by the favorable effect of human resources based on trained labor and training opportunities on investment capital attractiveness (4). The fifth and last aspect is technology. Research has demonstrated that technical progress, particularly in green and renewable technology, is crucial to investment capital attractiveness and sustainable growth. (6) Attracting investment capital greatly aided sustainable development by highlighting the importance of both local and international investments in fostering economic growth, creating jobs, and protecting the environment. Based on the results of testing factors influencing investment capital attraction and sustainable development, the authors discussed findings and proposed five policy implications for investment capital attraction and sustainable development:

1. Investment policies (POL) affect investment capital attraction (CAP), with the unstandardized estimate being 0.086 and the P-value being 0.005 in Table 3; consistent with earlier research, this study emphasizes the importance of investment policies in creating a favorable climate for investments. [3, 13, 24, 27]. The positive relationship between investment policies and capital attraction suggests that favorable policies, such as tax transparency and efficient legal processes, directly attract investment capital. Though the estimate is modest at 0.086, improving policies could slightly enhance Vietnam's attractiveness to investors. This supports the idea that clear, consistent, and investor-friendly policies are foundational to attracting foreign direct investment (FDI) and boosting economic growth. Besides, Investment policies (POL) affect sustainable development (SUS) with an unstandardized estimate of 0.145 and a P-value: \*\*\* (highly significant). Policies that promote investment also positively impact sustainable development (0.145). This suggests that sound investment policies attract capital and foster sustainable growth by ensuring that investments align with long-term environmental and social goals. Effective policies can ensure responsible investment practices that benefit the economy and society.
2. The working and living environment (ENV) affects investment capital attraction (CAP), with the unstandardized estimate being 0.087 and the P-value being 0.006 in Table 3 and the living and working conditions as well as human resources are consistent with research results. [15, 18, 24]. A similar modest effect is observed for the working and living environment, where a conducive environment, including quality education, healthcare, and living conditions, influences the decision to invest. A positive living environment not only impacts the well-being of employees but also reassures investors that the workforce is supported and stable, enhancing business operations. Besides, the working and living environment (ENV) affects sustainable development (SUS) with an unstandardized estimate of 0.157 and P-value: \*\*\* (highly significant). The working and living environment moderately affect sustainable development (0.157). A favorable environment promotes economic growth and sustainability by improving the quality of life for workers and their families. Investments in education, healthcare, and living standards contribute to sustainable social progress.
3. Regional connectivity (CON) affects investment capital attraction (CAP), with the unstandardized estimate being 0.168 and the P-value being \*\*\* in Table 3, and previous research has demonstrated regional interconnectedness [16, 19, 24, 25, 27]. Regional connectivity has a more substantial effect on investment capital attraction (estimate = 0.168). This highlights the importance of infrastructure, supply chains, and inter-provincial collaboration in attracting investments. Investors prefer regions with efficient logistics and strong connections among provinces, which support seamless production and trade operations, boosting the region's economic appeal. Besides, regional connectivity (CON) affects sustainable development (SUS) with an unstandardized estimate of 0.125 and a P-value



of \*\*\* (highly significant). Regional connectivity positively influences sustainable development (0.125). Well-connected regions facilitate economic growth and equitable development across provinces, ensuring sustainability goals are met throughout the country. Efficient infrastructure and regional collaboration also support environmental sustainability by reducing inefficiencies in production and transportation.

4. Human resources (HUM) affect investment capital attraction (CAP) with the unstandardized estimate of 0.104 and P-value: \*\*\* in Table 3 and human resources also parallel findings in studies [17, 23, 24, 26]. Human resources also play a critical role in attracting capital, with a positive effect of 0.104. This reflects that the availability of skilled labor, vocational training, and adaptability to emerging technologies make Vietnam a more attractive destination for businesses. Recruiting and training workers efficiently is vital for companies looking to expand operations or start new ventures. Besides, Human resources (HUM) affect sustainable development (SUS), with the unstandardized estimate being 0.065 and the P-value being 0.025 (significant). Although human resources have a more negligible effect on sustainable development (0.065), they are still substantial. A skilled and adaptable workforce is essential for ensuring businesses operate sustainably, innovate, and responsibly contribute to the economy. This highlights the importance of human capital in achieving long-term sustainable development.
5. Technology (TEC) affects investment capital attraction (CAP) with an unstandardized estimate of 0.540 and a P-value of \*\*\* in Table 3, and technology as the most influential factor aligns with findings [11, 15, 24, 26, 27]. The most significant positive relationship is between technology and investment capital attraction, with an estimated 0.540. This indicates that technological infrastructure and support, such as advanced training, intellectual property protection, and research funding, are potent investment drivers. Investors are attracted to regions where technological innovations are supported, helping them stay competitive in a global market. Besides, Technology (TEC) affects sustainable development (SUS) with an unstandardized estimate of 0.292 and a P-value of \*\*\* (highly significant). Technology plays a critical role in advancing sustainable development (0.292). Investments in technology, especially in research, innovation, and intellectual property protection, ensure that businesses can operate efficiently while minimizing environmental impacts. Technological advancements also enable the development of green technologies, further promoting sustainability. Finally, investment capital attraction (CAP) affects sustainable development (SUS), with the unstandardized estimate being 0.332 and the P-value being \*\*\* (highly significant). A positive relationship (0.332) shows that the more investment capital attracted, the more outstanding the contributions to sustainable development. This reflects the notion that foreign and domestic investments drive economic growth, job creation, and improvements in living standards, aligning with broader sustainability goals such as environmental conservation and social welfare.

In the Vietnamese context, where some small inconsistencies arise in the impact of human resources and the workplace, these results highlight the applicability of existing theories while providing new insights. With this detailed knowledge, we can develop targeted plans to boost investment and long-term growth.

## VII. CONCLUSION AND RECOMMENDATIONS

The information collection approach entails direct interviews using a structured questionnaire, with a sample size of  $n = 800$  business leaders (managers), adopting a probability sampling method and a random sampling strategy for assessment. This study's results illustrate the consequences of a Structural Equation Modeling (SEM) analysis, investigating the influence of multiple factors on investment capital attraction and sustainable growth. The principal associations, their unstandardized estimates, significant values ( $P$ ), and acceptance of hypotheses (from  $H1$  to  $H11$ ) are accepted with statistical significance at 5%. The analysis results showed several key findings, such as technology (TEC) emerging as the most influential factor for both investment capital attraction (CAP) and sustainable development (SUS). This underscores the critical role of technological infrastructure and innovation in driving investment and sustainability. Investment policies (POL), working and living environment (ENV), regional connectivity (CON), and human resources (HUM) all have significant impacts on both capital attraction and sustainable development, indicating that these factors are essential for creating an environment conducive to both economic growth and sustainability. Besides, Investment capital attraction (CAP) significantly contributes to sustainable development (SUS), showing that a strong focus on attracting investment capital is essential for fostering long-term sustainability. Based on the results mentioned above, improving the investment capital attraction and sustainable development in Vietnam following:

1. Improve technology: Technology (TEC) exhibits the most substantial influence on investment capital attraction, with a standardized estimate of 0.481 and an unstandardized estimate of 0.540. The S.E. is 0.030, and the C.R. is 16.300 ( $p < 0.001$ ), indicating a highly significant relationship, thereby confirming the hypothesis accepted. Therefore, Vietnam must prioritize attracting domestic and foreign capital into high-tech, advanced industries and fields, environmentally friendly technology, clean and renewable energy, high-tech agricultural production, and intelligent agriculture. Developing modern technical infrastructure, especially new sectors on the 4.0 industry platform. Technological advancements should be promoted to enhance investment capital attraction and sustainable development; it is crucial to invest in cutting-edge technologies. Governments and businesses should improve technological infrastructure, encourage research and development, and foster innovation. Moreover, improving technology infrastructure through application and establishing specialized technology zones that offer incentives for R&D, Vietnam can attract investment in high-tech sectors like intelligent agriculture and renewable energy. Funding tech startups and forming partnerships with multinational tech companies helps accelerate the development and widespread use of cutting-edge technology. Problems: There has to be a lot of money and trained people to set up high-tech infrastructure. Potentially discouraging potential international investors is the necessity of IP protection. Therefore, Vietnam can simplify the patent application procedure and provide tax incentives for research and development expenditures to tackle these issues. A workforce proficient in new technologies can be nurtured through partnerships with educational institutions to offer tech-focused curricula.
2. Improve regional connectivity: The standardized estimate (0.172) and unstandardized estimate (0.168), with an S.E. of 0.034 and a C.R. of 5.090 ( $p < 0.001$ ), demonstrate a strong positive impact of regional connectivity (CON) on investment capital attraction, the hypothesis is therefore accepted. Therefore, Vietnam should establish suitable incentives and processes to enhance the connection between foreign direct investment and domestic investment, focusing on priority sectors for attraction. Establishing industry clusters and value chains to enhance domestic added value, product competitiveness, and the nation's standing in the global value chain. Promote the transfer of technology and management to Vietnamese firms. Investment in transportation, communication, and digital infrastructure to connect regions more effectively will enhance capital attraction and sustainability. Integrated regional planning can help distribute resources more efficiently and promote balanced growth. Moreover, enhancing regional connectivity based on logistics can be improved by linking industrial zones across regions by constructing transport networks like high-speed rail and contemporary highways. Digital infrastructure, such as the extension of broadband, can also improve regional connection, which is essential for e-commerce and digital enterprises. Problems: Infrastructure projects are notoriously expensive, necessitating meticulous planning and cross-regional collaboration. They also frequently encounter funding challenges and intricate regulatory approval processes. Solutions for public-private partnerships (PPPs) could help Vietnam overcome its financial problems by attracting investment from the private sector. A unified digital platform might standardize approval processes across jurisdictions to expedite essential projects. The use of foreign infrastructure funds is another potential source of additional funding.
3. Improve the investment policies: The standardized estimate (0.164) and unstandardized estimate (0.086), with a standard error (S.E.) of 0.059, yield a critical ratio (C.R.) of 2.794 ( $p = 0.005$ ). This indicates a statistically significant positive relationship between investment policies (POL) and investment capital attraction (CAP), thus supporting the hypothesis accepted. Therefore, Vietnam should continue to review and create a favorable investment and business environment for investors, entrepreneurs, and enterprises in the area; increase the attraction of all investment resources from all economic sectors, especially resources from the private sector and foreign-invested sectors; have policies to promote and support start-ups and innovative start-ups in the area. Review and develop investment promotion plans in priority sectors and fields and proactively attract and receive truly effective investment projects, aiming at advanced technology, energy saving, and environmental friendliness; closely monitor the construction and operation of factories and architectural works to contribute to creating a green economy. Consult and widely collect opinions from entrepreneurs and enterprises in building and organizing the implementation of mechanisms, policies, and plans to support business development following the level of support needs of enterprises and the capacity to implement policies locally. Moreover, strengthening Investment Policies by implementing investment strategies, Vietnam should cut bureaucratic red tape and provide clear and consistent tax incentives to priority industries. Tax incentives for investments in

environmentally friendly technologies and expedited approvals for projects contributing to sustainability objectives are two examples of such policies. Problems It can be challenging to ensure uniformity across different government levels and balance tax benefits and revenue demands. Policy implementation may be inconsistent if there aren't clear guidelines. Therefore, a possible solution to address regional investment policy variations is to create a national investment coordination agency to monitor and standardize these policies. Policies can also be reviewed regularly with industry stakeholders to ensure they are still practical and relevant.

4. **Improve human resources:** The relationship between human resources (HUM) and investment capital attraction is significant, with a standardized estimate of 0.084, an unstandardized estimate of 0.104, an S.E. of 0.026, and a C.R. of 3.293 ( $p < 0.001$ ). Hence, the hypothesis is supported. Therefore, Vietnam should persist in formalizing collaboration agreements with colleges to cultivate human resources for socio-economic advancement. Continuous efforts to improve education, skills training, and workforce development are critical. Human resources remain a vital asset, and investing in them will pay dividends in attracting capital and promoting sustainable development. To improve human resource quality and attract investment, executing a thorough array of solutions concerning education, training, the workplace environment, and supportive legislation is essential. The education and training system must be modified to align with business requirements by integrating theoretical knowledge with practical application and enhancing vocational training quality in critical sectors such as information technology and manufacturing. Cultivating soft skills and digital competencies for employees is crucial for their adaptation to the contemporary workplace. Organizations must provide conducive working environments, promote a transparent corporate culture, and provide appealing welfare benefits to attract and retain people. They must also offer financial assistance and tax advantages to enterprises that invest in workforce training while promoting collaboration among state businesses. Moreover, investing in human resource development based on creating a competent workforce, businesses and schools can work together to modify course offerings to better suit business demands, particularly in technology, environmental consciousness, and leadership. The preparedness of the workforce could be enhanced by vocational training programs focusing on hard and soft skills. Problems: It takes time for educational reforms to take effect, and it can be challenging to adapt training programs to meet the needs of always-evolving industries. Efforts to provide ongoing education can face financial constraints. Therefore, one possible solution is to offer tax credits or grants to companies so they can help pay for employee training programs. This would reduce the government's spending burden. Furthermore, by establishing industry advisory boards, real-time insights may be gleaned to regularly update training programs, bringing them closer to market demands.
5. **Improve working and living environment:** The standardized estimate (0.076) and unstandardized estimate (0.087), with an S.E. of 0.027, resulted in a C.R. of 2.776 ( $p = 0.006$ ). This confirms a statistically significant but modest effect of the working and living environment (ENV) on investment capital attraction, validating the hypothesis accepted. Therefore, Vietnam should implement a suitable framework for identifying, nurturing, and valuing talent to cultivate a cadre of intellectuals for the new era. Furthermore, the province is enhancing the unpolluted living environment with a robust healthcare system, a significant consideration for investors focused on human resource development. Focusing on improving the quality of life and work environments is essential to attract investors and skilled labor. Investment in healthcare, education, and public infrastructure will support this goal. Moreover, improving the Working and Living Environment by improving healthcare, housing, and social amenities in strategic industrial zones can increase their appeal to investors and workers. The air and water quality, as well as the availability of affordable housing, can be improved by local governments. Difficulty: implementing environmental standards and providing cheap housing can be expensive and complicated without increasing city traffic congestion. Therefore, one possible solution is for Vietnam to embrace green urban planning practices to guarantee its cities' sustainable growth. Affordable housing might be achieved through public subsidies or partnerships with developers, while pollution could be reduced and healthier living conditions promoted through eco-friendly zoning regulations and incentives.

*Limitations and future research:* Although the research has achieved particular success, Vietnam's sustainable development has not only begun in the past five years but has also been under pressure from the output market and increasingly clear and strict government regulations. The research results still have many limitations, and the correlation between implementing sustainable development and investment capital attraction efficiency for businesses has not been evaluated. Therefore, subsequent research should investigate the influence of additional variables absent from this

study, like political stability, environmental legislation, economic policies, or corporate governance. Analyzing these variables would provide a more thorough understanding of the elements influencing investment capital attractiveness and sustainable development. Utilizing qualitative research approaches, such as interviews or case studies, can yield profound insights into the mechanisms underlying the connections observed in the SEM model. A mixed-methods approach may integrate quantitative analysis with qualitative research to provide a comprehensive knowledge of the phenomenon. Finally, the research only covers business executives from three provinces, a significant restriction. Future studies should consider increasing the sample's diversity to cover more regions and sectors in Vietnam to overcome these constraints. This would improve the generalizability of the results by providing a more thorough understanding of the factors affecting the attraction of investment capital and sustainable development.

Despite its large sample size, the study could only include company executives from three provinces and a single city in Vietnam. Due to this spatial specialization, the findings may not apply to other parts of Vietnam, which could limit our understanding of how different regions attract investment capital. Another issue with using cross-sectional data is that it limits our capacity to track changes over time, which are crucial for comprehending how investment and sustainable development patterns are changing. We could learn more about their relationships over time if the variables were researched using a longitudinal approach. Moreover, the study's methodology included conducting qualitative interviews and analyzing the data using Structural Equation Modeling (SEM). These approaches help understand causal links, but they could miss some of the subtleties of context that affect investment and sustainable development. For a more complete picture and to overcome these constraints, future research might use mixed-method approaches, such as longitudinal and case studies.

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### Author Contribution

The authors made contributions to the development and planning of the study. The authors did everything equally; Lam Thanh Hien wrote the conception, method and design, and data analysis. Phan Thanh Tam wrote critical revisions of intellectual content and the final approval version.

### Conflict of Interest

The authors declare no conflicts of interest.

### Data Availability Statement

Data is available from the authors upon request.

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