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ANALYSIS OF THE IMPACT OF ESG CRITERIA ON REAL ESTATE INVESTMENT DECISIONS OF INDIVIDUAL INVESTORS IN VIETNAM

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ABSTRACT

This study investigates the influence of Environmental, Social, and Governance (ESG) criteria on individual real estate investment decisions in Vietnam. As ESG becomes increasingly important in sustainable development and investment practices, understanding how these factors affect investor behavior is crucial, particularly in emerging markets. Using a quantitative approach, data was collected from 170 individual investors via structured surveys. Statistical analyses, including Cronbach's Alpha, Exploratory Factor Analysis (EFA), correlation, and multiple linear regression, were employed to assess the reliability and impact of ESG-related variables. The findings reveal that among several ESG components, environmentally friendly projects and social housing initiatives have the most significant positive influence on investment decisions. These results offer valuable insights for real estate developers and policymakers aiming to attract investment by aligning with ESG priorities and promoting sustainable housing development.

KEYWORDS:- ESG, Real Estate Investment, Individual Investors, Vietnam, Sustainable Development, Cronbach's Alpha, Exploratory Factor Analysis (EFA), Regression Analysis, Green Housing, Social Housing, Investment Behavior.

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1. INTRODUCTION

In recent years, ESG (Environmental, Social, and Governance) criteria have become crucial factors in investment decision-making, not only for institutional investors but also for individual investors. The real estate sector—an industry with significant impacts on the environment, society, and governance—has been drawing increasing attention as the global economy shifts towards sustainable development.

Modern real estate projects are required not only to minimize negative environmental impacts but also to contribute to community development while ensuring transparency and efficiency in management. These requirements align with the trend of Sustainable and Responsible Investment (SRI), where ESG criteria serve as essential tools for investors to assess the long-term potential of projects.

However, in Vietnam, the adoption of ESG criteria in the real estate sector remains relatively new. Most individual investors have yet to fully understand ESG and its impact on their investment decisions. Therefore, studying the influence of ESG on individual investors' real estate investment decisions is crucial to providing appropriate recommendations for both investors and businesses operating in the real estate sector.

This study aims to analyze the impact of ESG (Environmental, Social, and Governance) criteria on the real estate investment decisions of individual investors in Vietnam. It will examine the extent to which each ESG factor influences investment intentions and behaviors, thereby offering recommendations to help real estate enterprises enhance sustainability and attract more investment capital.

2.0 LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1 Literature review

The study "Role of ESG Disclosure in Determining Asset Allocation Decision: An Individual Investor Perspective" by Muhammad Naveed, Muhammad Khalid Sohail, Syed Zain ul Abdin, Madiha Awais, and Noshaba Batool, published in 2020 in *Paradigms* (Vol. 14, No. 1, pp. 157-165), focuses on analyzing the role of ESG disclosure in individual investors' asset allocation decisions. The research is based on the Information Utility Theory and Signaling Theory, where the authors propose four key hypotheses. Specifically:

- Environmental information has a positive impact on individual investors' asset allocation decisions.
- Risk tolerance acts as a mediator between ESG information and asset allocation decisions.
- Corporate governance information and social information both have positive effects on asset allocation decisions.

The study employs quantitative research methods, utilizing the Structural Equation Modeling (SEM) approach based on covariance for data analysis. Data was collected through surveys with 300 questionnaires, of which 254 responses were valid. The AMOS software was used for SEM analysis, and the findings confirmed that all hypotheses were supported, reinforcing the link between ESG disclosure and individual investors' asset allocation decisions.

In another study, "The Effects of ESG Issues on Investment Decision through Corporate Reputation: Individual Investors' Perspective" by Nafisa Rounok, Aimin Qian, and Mohammad Ashraful Alam (2023), the authors explore the impact of ESG factors on investment decisions through corporate reputation. The research, published in the *International Journal of Research in Business and Social Science* (Vol. 12, Issue 2), is grounded in the Theory of Planned Behavior (TPB) and Signaling Theory. The authors propose six hypotheses, emphasizing that environmental,

social, and governance factors all positively influence individual investors' decisions. Additionally, corporate reputation plays a mediating role in the relationship between ESG factors and investment decisions, specifically linking environmental, social, and governance aspects to investment choices. The study follows a quantitative approach, collecting data via online surveys and analyzing it using the Partial Least Squares Structural Equation Modeling (PLS-SEM) method. The findings indicate that all hypotheses were confirmed, further supporting the idea that ESG factors not only directly influence investment decisions but can also exert an indirect impact through corporate reputation.

The study "L'effet des critères ESG sur les décisions d'investissement" by Ahmed Outouzzalt, Abdelkbir Elouidani, and Rania Elouidani, published in 2022 in the *Revue des Etudes Multidisciplinaire en Sciences Economiques et Sociales* (Vol. 7, Issue 2), focuses on analyzing the impact of ESG criteria on investment decisions. Based on the Theory of Planned Behavior (TPB), the study employs attitude components to predict individual investors' investment intentions through ESG criteria. The authors propose five key hypotheses, emphasizing that environmental, social, and governance factors positively influence investment intentions and decisions. Additionally, investment intention plays a mediating role between ESG criteria and stock market participation.

In the study "Integration of ESG Information Into Individual Investors' Corporate Investment Decisions: Utilizing the UTAUT Framework", So Ra Park and Kum-Sik Oh analyze the integration of ESG information into individual investors' corporate investment decisions using the UTAUT (Unified Theory of Acceptance and Use of Technology) framework, a theoretical model commonly used to understand innovation acceptance and adoption. The authors propose two main hypotheses: ESG is a non-financial factor that influences individual investors' decisions and Factors in the UTAUT model affect the ability to integrate ESG information into investment decisions. This study primarily adopts a theoretical analysis and literature review approach, utilizing the UTAUT framework to evaluate influencing factors. Secondary data was collected and analyzed through comparative research and synthesis of findings. The research results confirm that all hypotheses were accepted, demonstrating that ESG is not only a significant factor in investment decisions but can also be effectively integrated through the components of the UTAUT model.

The study "Environmental-, Social-, and Governance-Related Factors for Business Investment and Sustainability: A Scientometric Review of Global Trends" by Hadiqa Adma, Muhammad Yaqub, and Seung Hwan Lee provides a comprehensive scientific review of global trends related to ESG, business investment, and sustainability. Based on the ESG framework, Disclosure Theory, and Legitimacy Theory, the authors propose three key hypotheses:

1. ESG factors positively impact business performance and sustainable investment capacity.
2. ESG disclosure enhances transparency, increases corporate value, and reduces financial risk.
3. Gender diversity on the board of directors influences ESG disclosure and corporate financial performance.

To test these hypotheses, the authors apply a systematic review methodology following the PRISMA protocol and conduct meta-analysis to determine the relationship between ESG factors and sustainable investment. Data was collected from scientific articles, which were then coded,

categorized, and synthesized to draw conclusions. The study results confirm that the hypotheses regarding the impact of ESG on business performance, sustainable investment, and disclosure were supported. However, the hypothesis regarding the effect of gender diversity on ESG disclosure and financial performance was not confirmed.

The study "How does environmental, social, and governance (ESG) performance determine investment mix? New empirical evidence from BRICS" by Zhichao Yu, Umar Farooq, Mohammad Mahtab Alam, and Jiapeng Dai examines how ESG performance influences investment structure in BRICS countries. The research is based on three foundational theories—Stakeholder Theory, Modern Portfolio Theory, and Trade-Off Theory—and proposes two main hypotheses:

- ESG performance has a positive relationship with capital investment (H1).
- ESG performance has a negative relationship with environmental investment (H2).

To test these hypotheses, the study employs an econometric model, using data collected from Thomson Reuters DataStream and processed through the Generalized Method of Moments (GMM). The final results confirm that both hypotheses are supported, highlighting that ESG plays a crucial role in promoting capital investment while potentially reducing investment in environmental sectors.

The study "The relevance of factors affecting real estate investment decisions for post-pandemic time" by Nguyễn Minh Ngọc, Lê Đoàn Minh Đức, Nguyễn Hoàng Tiến, and Vũ Minh Hiếu, published in 2022 in the *International Journal of Business and Globalization*, examines key factors influencing individual real estate investment decisions in the post-pandemic era. The authors identify six critical factors: political and legal conditions, macroeconomic influences, cultural and social aspects, market conditions, business opportunities, and the impact of the pandemic. Using a mixed-method approach, the study combines qualitative and quantitative research, applying Exploratory Factor Analysis (EFA) to uncover relationships among these factors. Data collected through questionnaire surveys was analyzed using SPSS software to test the validity of hypotheses. The results confirm that all six factors significantly affect real estate investment decisions, highlighting that investors have become more cautious due to market volatility in the post-pandemic period.

The study "ESG Ratings and Real Estate Key Metrics: A Case Study" by Joël Vonlanthen, published in 2024, explores the relationship between ESG ratings and key real estate metrics. The author proposes a single hypothesis: ESG ratings significantly influence factors such as discount rates, rental income, and property vacancy rates. Grounded in economic theories of risk management and sustainable finance, the study views ESG as a tool for assessing non-financial factors, providing critical insights into long-term risks and opportunities for investors. To test the hypothesis, the author employs an OLS regression model combined with LASSO to analyze expert valuation data and market transactions. The findings confirm the initial hypothesis, demonstrating that real estate metrics are significantly affected by ESG ratings, reinforcing the importance of ESG in real estate investment decision-making.

The study "The Role of ESG Disclosure Practices in Investment Decisions" by Rajani Bhandary D (2024), published in the *EPRA International Journal of Environmental Economics, Commerce and Educational Management*, examines the impact of ESG disclosure on investment decisions. The author proposes four key hypotheses: ESG disclosure positively influences capital allocation decisions (H1), governance has the strongest impact among ESG factors (H2), company size, industry, and legal environment moderate the relationship between ESG and investment decisions (H3), and the extent of ESG disclosure correlates with corporate financial performance (H4). Grounded in Stakeholder Theory, Agency Theory, Legitimacy Theory, and Modern Portfolio Theory, the study employs a qualitative approach using secondary data from case studies, corporate websites, and academic articles. The data is processed using the SWOC analytical framework to assess the influence of various factors. The findings confirm that H1, H2, and H3 are fully supported, while H4 is only partially accepted, suggesting that while ESG affects financial performance, its impact depends on multiple factors.

The study "Corporate ESG issues and retail investors' investment decision: a moral awareness perspective" by Rounok Nafisa, Mohammad Ashraful Alam, and Aimin Qian (2023) explores ESG investment decisions from the perspective of retail investors' moral awareness. Grounded in the Theory of Planned Behavior (TPB), the study proposes six key hypotheses examining the impact of environmental (H1), social (H2), and governance (H3) factors on investment decisions, as well as the moderating role of moral awareness (MA) in these relationships (H4, H5, H6). Using a quantitative research approach, the authors collect data through surveys and apply Ordinary Least Squares (OLS) structural equation modeling for analysis. The reliability of the measurement scales is assessed using Cronbach's Alpha, Composite Reliability (CR), and Average Variance Extracted (AVE). The findings confirm that H1, H2, H3, H4, and H6 are supported, while H5 is not, indicating that moral awareness moderates the relationship between ESG factors and investment decisions, but its impact varies across different ESG dimensions.

The study "ESG: Research Progress and Future Prospects" by Ting-Ting Li, Kai Wang, Toshiyuki Sueyoshi, and Derek D. Wang (2021) examines the evolution of ESG research and its future directions. The authors propose two key hypotheses: (H1) ESG has a significant impact on corporate financial and social performance, and (H2) environmental, social, and governance factors are interconnected rather than independent, collectively driving corporate sustainability. Based on ESG theory, the study explores the origins of ESG and its relationship with Corporate Social Responsibility (CSR) and sustainable development, emphasizing the strong connection between economic, social, and environmental factors. The research employs a quantitative approach, utilizing CiteSpace software to conduct a bibliometric analysis of scholarly articles in business, finance, and management. By analyzing metrics such as citation frequency and centrality, the study identifies key trends and research hotspots in ESG studies. The findings confirm that ESG positively influences financial performance, helping businesses mitigate risks and achieve long-term sustainability.

Although Environmental, Social, and Governance (ESG) factors are increasingly considered in real estate investment decisions, most existing research primarily focuses on institutional investors, investment funds, or real estate enterprises, while the role of individual investors—a group that

significantly contributes to the real estate market—remains underexplored. Current studies have addressed the impact of climate change, sustainable development policies, and green standards on real estate, but none have specifically analyzed how individual real estate investors make decisions in the context of ESG, considering the simultaneous influence of personal perception, social factors, and corporate governance effectiveness.

Particularly in Vietnam, where the government is actively promoting sustainable development policies and green real estate projects, no research has thoroughly assessed how ESG factors shape individual investment behavior, especially in relation to specific real estate segments, such as:

- Properties in areas vulnerable to climate change
- Green-certified or environmentally friendly real estate
- Real estate serving social needs for vulnerable groups such as low-income individuals, workers, or the elderly

Furthermore, government incentives for sustainable real estate development and the role of corporate governance in influencing individual investment decisions have yet to be examined in Vietnam's specific market context.

This study aims to fill this research gap by analyzing the impact of ESG criteria on individual real estate investment decisions, providing insights into how ESG considerations affect investor behavior and shaping recommendations for policymakers and real estate developers.

2.1 Research Hypotheses

The study examines the impact of ESG factors on individual real estate investment decisions through the following hypotheses:

- H1: Real estate properties located in climate-vulnerable areas influence investors' decisions to rent or purchase real estate.
- H2: Changes in consumer perception of ESG factors affect real estate rental or purchase decisions.
- H3: Government policies supporting sustainable real estate development (such as tax incentives or construction regulations) influence the growth of green real estate projects, thereby attracting investors.
- H4: Environmentally friendly real estate projects that meet green standards impact investors' decisions to rent or purchase properties.
- H5: Real estate projects that provide housing for low-income families, workers, and the elderly attract individual investors.
- H6: Real estate projects managed by reputable firms with strong risk management capabilities and sustainable profitability attract individual investors.

These hypotheses aim to investigate the relationship between ESG criteria and investment decisions, providing insights into how environmental, social, and governance factors shape investor behavior in the Vietnamese real estate market.

3.0 RESEARCH METHODOLOGY

To achieve the research objectives, the study employs a quantitative research method through survey-based data collection. The research team utilizes structured questionnaires created in Google Forms to directly gather information from respondents. The collected data is then analyzed and evaluated using SPSS software. Based on the quantitative results, the study provides statistical insights, measurements, and interpretations of the relationships between ESG criteria and individual real estate investment decisions in Vietnam. The typical quantitative research process includes defining research questions, designing the questionnaire, collecting data, and processing it for analysis. To ensure objectivity and minimize bias, the research team does not participate in the survey responses. Descriptive statistical analysis is the simplest technique in quantitative research, used to summarize and describe the characteristics of the dataset. Every quantitative study includes this type of analysis, at least to provide an overview of the surveyed population.

4.0 RESULTS

4.1 Overview of the sample

The survey collected 170 valid responses from individual investors interested in real estate in Vietnam. In terms of gender, male investors slightly outnumbered female investors, accounting for 54.1% and 45.9% respectively. The age distribution revealed that nearly half of the respondents (47.6%) were between 18–21 years old, followed by 22–25 years old (21.2%) and those above 25 (31.2%), indicating a predominantly young investor demographic. Regarding current residence, the majority of respondents (82.4%) lived in Hanoi, with smaller proportions in Ho Chi Minh City (4.7%) and other locations (12.9%). In terms of education, most participants had a high level of academic attainment, with 42.4% currently pursuing university and 44.1% having already graduated, while only 13.5% held a high school education.

4.2 Reliability tests

Cronbach's Alpha is a widely used metric for assessing the reliability of variable scales, with a threshold value of $\alpha \geq 0.7$ generally considered acceptable for internal consistency (Nunnally & Bernstein, 1994). As presented in Table 2, all seven factor groups exhibit Cronbach's Alpha coefficients exceeding 0.7, surpassing the recommended cut-off point. This indicates that the scales demonstrate adequate reliability, supporting the internal consistency and construct validity of the measurement model. All corrected item-total correlations exceeded 0.3, and "Alpha if item deleted" values were acceptable. These results confirm strong internal consistency and suggest that the constructs are statistically and conceptually sound, though further validation through factor analysis is recommended.

Table 1. Reliability test

Variable	Cronbach's Alpha
A - Climate Vulnerability	0.717
B - ESG Perception Changes	0.733
D - Public Policy Impact	0.725
E - Eco-friendly Projects	0.740

F - Socially Targeted Housing	0.807
G - Project Credibility	0.780
T - ESG Perception (Dependent)	0.822

4.3 Exploratory factor analysis (EFA)

The standard for factor analysis requires the KMO (Kaiser-Meyer-Olkin) index to be greater than 0.5 (Garson, 2003), and Bartlett's test must have a significance level (sig) less than 0.05 to confirm that the data is suitable for factor analysis and that the variables are correlated. The calculated KMO value is 0.929. This result indicates that the data is highly appropriate for factor analysis. Additionally, Bartlett's Test of Sphericity shows a significance level of 0.000 (< 0.05), confirming that the observed variables are correlated within each factor group.

Table 2. The Kaiser-Meyer-Olkin and Bartlett's test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,926
Bartlett's Test of Sphericity	Approx. Chi-Square	1866,323
	df	276
	Sig.	,000

Table 3. Rotated Component Matrix (first time)

	Component			
	1	2	3	4
cf.2	,724			
cb.1	,668			
cf.3	,656			
cg.4	,554			
cd.2	,554			
cf.4	,521			
cd.3	,504			
cf.1	,502			
cg.1				
cg.3				
ce.1		,725		
ce.3		,639		
ce.2		,585		
cd.4				
ca.4				
cg.2				
cb.3			,749	
cb.4			,707	
cb.2			,630	
ce.4				

ca.1				,726
ca.3				,638
ca.2				,562
cd.1				,558

Table 4. Component Transformation Matrix

Component Transformation Matrix				
Component	1	2	3	4
1	,593	,507	,450	,435
2	-,079	,184	,626	-,754
3	-,763	,107	,434	,466
4	-,244	,835	-,467	-,157

The factor loadings in the rotated component matrix are generally around 0.7, indicating that the observed variables have strong statistical significance. Given the sample size of 170, which falls within the recommended range of 120 to 350, a loading threshold of 0.5 is considered acceptable, further supporting the suitability of the variables for factor analysis.

Table 5. Rotated Component Matrix (2nd time)

	Component			
	1	2	3	4
cf.2	,748			
cf.3	,686			
cb.1	,664			
cg.4	,574			
cd.2	,569			
cf.4	,535			
cf.1	,531			
cd.3	,509			
ca.1		,732		
ca.3		,658		
ca.2		,643		
cd.1		,585		
cb.3			,761	

cb.4			,674	
cb.2			,656	
ce.3				,813
ce.2				,513
ce.1				

After re-running the rotated component matrix, the results showed that 18 observed variables were grouped into two new factors. Due to overlaps among variables from different original factors, the research team reconstructed the factor structure. As a result, the study now focuses on two independent variables:

- Changes in consumer perception regarding ESG factors that influence decisions to rent or buy real estate.
- Real estate projects that create value for high-demand housing groups such as low-income families, workers, and the elderly, which attract individual investors.

4.4 Correlation

Table 6. Correlations

		T	A	B	D	E	F	G
T	Pearson Correlation	1	,660**	,627**	,766**	,725**	,975**	,773**
	Sig. (2-tailed)		,000	,000	,000	,000	,000	,000
	N	170	170	170	170	170	170	170
A	Pearson Correlation	,660**	1	,449**	,668**	,559**	,638**	,644**
	Sig. (2-tailed)	,000		,000	,000	,000	,000	,000
	N	170	170	170	170	170	170	170
B	Pearson Correlation	,627**	,449**	1	,626**	,617**	,571**	,636**
	Sig. (2-tailed)	,000	,000		,000	,000	,000	,000
	N	170	170	170	170	170	170	170
D	Pearson Correlation	,766**	,668**	,626**	1	,611**	,739**	,714**
	Sig. (2-tailed)	,000	,000	,000		,000	,000	,000
	N	170	170	170	170	170	170	170
E	Pearson Correlation	,725**	,559**	,617**	,611**	1	,626**	,694**
	Sig. (2-tailed)	,000	,000	,000	,000		,000	,000
	N	170	170	170	170	170	170	170
F	Pearson Correlation	,975**	,638**	,571**	,739**	,626**	1	,739**
	Sig. (2-tailed)	,000	,000	,000	,000	,000		,000
	N	170	170	170	170	170	170	170
G	Pearson Correlation	,773**	,644**	,636**	,714**	,694**	,739**	1
	Sig. (2-tailed)	,000	,000	,000	,000	,000	,000	
	N	170	170	170	170	170	170	170

**. Correlation is significant at the 0.01 level (2-tailed).

Based on the correlation analysis between the independent variables and the dependent variable, all significance values (Sig.) are less than 0.05 (5%). This indicates that independent variables A, B, D, E, F, and G are significantly correlated with the dependent variable T. Moreover, all correlation coefficients are positive, suggesting that each independent variable has a positive relationship with the dependent variable T

4.5 Linear Regression Model Analysis

Table 7. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,986 ^a	,973	,972	,13016

a. Predictors: (Constant), G, B, A, E, F, D

ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	100,190	6	16,698	985,697	,000 ^b
Residual	2,761	163	,017		
Total	102,952	169			

a. Dependent Variable: T

b. Predictors: (Constant), G, B, A, E, F, D

After performing the significance (Sig.) analysis, all values for Y are less than 0.05, indicating that the reliability of the model is confirmed.

Table 7. Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	-,076	,062		-1,234	,219		
A	,004	,018	,004	,194	,847	,472	2,120
B	,028	,018	,028	1,556	,122	,491	2,035
D	,033	,024	,031	1,404	,162	,331	3,018
E	,158	,018	,166	8,592	,000	,440	2,271
F	,797	,021	,826	37,820	,000	,345	2,896
G	,005	,023	,005	,207	,836	,312	3,202

a. Dependent Variable: T

The significance (Sig.) values for independent variables E and F are less than 0.05, while the remaining independent variables have significance values greater than 0.05. Therefore, only variables E and F have a statistically significant impact on the dependent variable T.

All Variance Inflation Factor (VIF) values are below 5, indicating no multicollinearity among the independent variables.

Unstandardized regression equation:

$$T = -0.76 + 0.004A + 0.028B + 0.33D + 0.158E + 0.797F + 0.005G$$

Standardized regression equation:

$$T = 0.004A + 0.028B + 0.31D + 0.166E + 0.826F + 0.005G$$

5.0 CONCLUSION AND IMPLICATION

The study employs a quantitative research approach, utilizing SPSS and Excel for data analysis. The authors conducted descriptive statistical analysis, Cronbach's Alpha reliability testing for independent and observed variables, Exploratory Factor Analysis (EFA), correlation analysis, and linear regression modeling.

The descriptive statistics indicate that most investors are male, aged 18-21, residing in Hanoi, and holding a university degree. Additionally, these investors show interest in ESG criteria when making real estate investment decisions.

In the study, Cronbach's Alpha was used to assess the reliability of measurement scales, ensuring high internal consistency among observed variables within an independent variable. If Cronbach's Alpha < 0.6, the authors considered removing or adjusting observed variables to improve reliability. Moreover, the "Cronbach's Alpha if Item Deleted" test was performed to identify variables with low total-item correlation (<0.3) for removal, ensuring a stable scale before proceeding with EFA and regression analysis.

The study proceeds with Exploratory Factor Analysis (EFA) to reduce data complexity, identify latent factors, and group closely related observed variables, ensuring a simplified research model and measurement validity. After running the rotated factor matrix twice, the authors extracted two new independent variables from the original six:

- Independent Variable B: Changes in consumer perception of ESG factors influencing real estate rental or purchase decisions.
- Independent Variable F: Real estate projects that provide housing solutions for low-income families, workers, and the elderly, attracting individual investors.

Following this, the authors conducted a correlation analysis to determine the strength and direction of relationships between variables, serving as a preliminary hypothesis test before performing more complex analyses. The results showed that independent variables A, B, D, E, F, and G all had a positive correlation with the dependent variable T (correlation coefficients > 0).

Finally, the authors conducted a linear regression analysis to examine how independent variables influence the dependent variable, predicting trends and testing causal relationships. Since the two new variables (B and F) extracted from EFA were actually refinements of the original variables

rather than completely new factors, the authors included both the new and remaining original variables in the regression model.

To ensure no multicollinearity, the authors checked the Variance Inflation Factor (VIF). The p-values (Sig.) for independent variables E and F were < 0.05 , indicating that only E and F had a significant impact on the dependent variable T.

- Independent Variable E: Environmentally friendly real estate projects meeting green standards influence investors' decisions in renting and purchasing properties.
- Independent Variable F: Real estate projects addressing the housing needs of low-income families, workers, and the elderly attract individual investors.

Thus, the study concludes that green-certified properties (E) and social housing projects (F) significantly influence individual real estate investment decisions, reinforcing the importance of ESG factors in investment behavior.

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