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Willingness to Pay for Sustainable Investment Attributes: A Mixed Logit Analysis of SDG 11

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Abstract

The present article analyzes the value that investors assign to financial products that contribute to Sustainable Development Goal 11 (SDG 11): “Sustainable Cities and Communities” by comparing investor preferences in Spain and Mexico through a choice experiment. Spain and Mexico were selected due to their contrasting levels of economic development, sustainability awareness, and regulatory maturity, offering a meaningful basis for a cross-country comparison. Preferences for investment funds that promote SDG 11 are examined by evaluating key attributes such as financial institution type, expected return, risk level, and explicit contribution to SDG 11. The results, estimated using a mixed logit model applied to a choice experiment with 568 respondents, evaluating attributes such as institution type, return, risk, and contribution to SDG 11, reveal strong risk aversion and a differentiated willingness to pay for sustainable attributes, particularly among Spanish investors. Relevant differences between the two countries emerge, suggesting the need for tailored strategies to foster sustainable investment, especially in Mexico, where sustainability is less valued in investment decisions. The policy implications include the need for investment approaches and communication strategies that are adapted to national contexts. This article concludes with recommendations for designing financial products that better align with the values and expectations of responsible investors, particularly regarding sustainable cities and communities.

Keywords: sustainable investing; SDG 11; choice experiment; willingness to pay; Spain; Mexico; socially responsible finance

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1. Introduction

Cities play a pivotal role in achieving the Sustainable Development Goals (SDGs), particularly SDG 11, which seeks to ensure sustainable cities and communities by fostering urban areas that are safe, resilient, and sustainable for all residents [1]. This goal emphasizes the importance of inclusive and sustainable urbanization, as well as the effective planning and management of human settlements [2].

One of the priorities of SDG 11 is to improve resource efficiency and minimize the environmental impact of cities [3]. Enhancing air quality and managing urban waste effectively

are essential measures to reduce pollution and ensure a healthy living environment [4]. In addition, cities must implement strategies to mitigate the adverse effects of natural disasters through investments in resilient infrastructure and early warning systems [5], which involve the timely collection and analysis of environmental and meteorological data to anticipate hazards such as floods, earthquakes, or extreme weather events.

The protection of cultural and natural heritage is another fundamental aspect of sustainable urban development. Preserving both tangible and intangible cultural assets helps preserve a city's identity, fosters social cohesion, and contributes to economic growth through tourism [6]. Moreover, the availability of safe, inclusive, and accessible green and public spaces is essential for enhancing urban livability, promoting social interaction, and improving both the mental and physical well-being of the population [7].

Sustainable and affordable transport systems are essential to achieving SDG 11. Expanding public transportation networks and improving road safety can reduce congestion, lower carbon emissions, and enhance mobility for all citizens, particularly marginalized communities [8]. Similarly, ensuring access to safe and affordable housing is a main objective, as adequate shelter contributes to social stability and the economic development of communities [9]. Furthermore, supporting the least developed countries in constructing sustainable and resilient buildings is crucial for promoting global urban sustainability [10].

The financial implications of achieving SDG 11 are diverse. One of the main challenges is investment in infrastructure [11]. Significant funding is required to develop and maintain transportation systems, public spaces, and housing-oriented urban development. This includes the construction costs, maintenance, and upgrades required to meet safety and sustainability standards.

Another critical financial aspect is disaster risk reduction. Although investing in resilience measures can be costly, such expenditures are necessary to minimize the economic losses caused by natural disasters. The implementation of early warning systems and the reinforcement of infrastructure can significantly reduce long-term costs [12].

Environmental management also requires substantial financial resources. Efforts to reduce the environmental footprint of cities, such as improving waste management, reducing emissions, and increasing energy efficiency, demand targeted investments and policy interventions [13]. Similarly, the protection of cultural and natural heritage entails significant expenditures for restoration, maintenance, and conservation [14].

Despite the high upfront costs of sustainable urban development, the long-term economic and social returns are substantial. Sustainable cities attract businesses, improve public health, and enhance the overall quality of life, thereby fostering economic growth and development while protecting the environment. Therefore, financial commitments aimed at achieving SDG 11 can be highly attractive to private investors and companies, especially when working in partnership with governments and public authorities to create more sustainable and resilient urban environments [15].

Spain and Mexico were selected as case studies due to their contrasting levels of economic development, regulatory maturity, and cultural engagement with sustainability. Spain, as a member of the European Union, has a more consolidated framework for sustainable finance, including mandatory ESG disclosures and a growing market for green bonds. In contrast, Mexico, as an emerging economy, is still in the early stages of developing its sustainable finance infrastructure, with lower levels of financial literacy and regulatory enforcement. These differences offer a valuable opportunity to explore how national context influences investor preferences. At the same time, both countries share important similarities: they are Spanish-speaking, have strong urbanization trends, and face pressing challenges related to sustainable urban development. This renders them

suitable for examining cross-country heterogeneity in willingness to pay for sustainable investment attributes.

Regarding Spain, among the most persistent challenges in relation to SDG 11 are increasing urban fragmentation, lack of access to the housing market, and the internationalization of real estate ownership, which have intensified processes of gentrification and residential displacement in cities such as Madrid, Barcelona, Palma, and Las Palmas de Gran Canaria. Moreover, urban planning has shown a tendency toward exclusionary models, with limited citizen participation and a lack of inclusive governance mechanisms. These processes have contributed to greater socio-spatial segregation and the entrenchment of persistent urban inequalities, particularly in vulnerable neighborhoods [16].

In Mexico, sustainable finance has made notable progress in recent years, yet it still faces significant growth challenges. A pilot study conducted in 2024 by the Ministry of Finance and Public Credit and the Financial System Stability Council [17] revealed that only 3% of financial operations evaluated by institutions fully complied with the criteria of Mexico's Sustainable Taxonomy, while more than 50% lacked sufficient information for proper assessment. The study also noted that financial markets have yet to adequately integrate environmental risks, such as climate change and biodiversity loss, which pose systemic threats to the country's economic and financial stability [17]. Despite these challenges, growing investor interest (particularly among younger generations) and the development of regulatory frameworks are laying the groundwork for greater penetration of sustainable finance in Mexico's financial system.

Furthermore, Mexican cities face major challenges in urban sustainability. In areas such as Mexico City, a high percentage of the urban population lives in informal settlements with precarious access to basic services, exacerbating social vulnerability [18]. Similarly, recent studies on green infrastructure in León reveal that, despite the presence of key components, the network of natural spaces remains fragmented, and its planning does not yet fully integrate social dimensions, limiting its contribution to collective well-being [19].

2. Theoretical Framework and Literature Review

2.1. Sustainable Cities: Their Role in Global Transformation

Since the beginning of the 21st century, cities have been established as the primary arenas for economic, social, and environmental transformation. According to the United Nations [20], more than 56% of the global population currently resides in urban areas, and this proportion is expected to reach 68% by the year 2050. This urban growth is seen as offering significant opportunities for economic development and social improvement, as it enables better living conditions for urban inhabitants. However, it also represents an unprecedented challenge to sustainability, as it concentrates resource consumption, increases pressure on natural systems, generates waste, exacerbates inequalities, and intensifies climate-related issues associated with uncontrolled development [20].

In this context, one of the most visible effects of accelerated urban growth is the transformation of land use. As cities rapidly expand for residential and commercial purposes, vast areas of arable land, pastures, and forests are being converted into urban zones. This transformation affects the exchange of energy and moisture between the land surface and the atmosphere [21], giving rise to the Urban Heat Island phenomenon [22]. Such changes are not only environmentally significant but also carry social and economic implications, influencing air quality, public health, and equitable access to urban services.

Within the Sustainable Development Goals (SDGs), the United Nations has emphasized concerns regarding the sustainability of human settlements, with particular focus on urban development. In this regard, SDG 11, aimed at making cities and human settlements inclusive, safe, resilient, and sustainable, has been identified as one of the key objectives

of the 2030 Agenda. As highlighted in the report *Rescuing SDG 11 for a Resilient Urban Planet*, without significant progress on SDG 11, the achievement of the remaining SDGs will be rendered unfeasible [20], as many of these goals are closely linked to the social and environmental challenges previously discussed [23]. Thus, SDG 11 not only addresses targets directly related to urban infrastructure (such as housing, transportation, public spaces, and disaster resilience), but also functions as a central node that interconnects the broader 2030 Agenda. This argument has been the subject of numerous studies that emphasize the structural role of cities in climate change governance [24], the energy transition [25], and the reduction of inequalities [26].

For these reasons, it is necessary that urban growth be accompanied by the implementation of sustainable and inclusive development models that incorporate the criteria of resilience, energy efficiency, and spatial justice. Within this context, the *New Urban Agenda* [27] has emerged as a strategic framework intended to guide the orderly and sustainable development of urban environments. Far from being a single or closed document, the New Urban Agenda is conceived as a flexible planning tool that articulates public policies, regulations, and actions aimed at improving urban environments from social, environmental, and economic perspectives. It is emphasized that not only are current policy frameworks relevant, but the historical processes that have shaped them are as well, allowing for an understanding of how different forms of knowledge influence the definition of urban agendas, policies, and actions [28]. One of the fields where this process becomes particularly visible is housing, as it constitutes a central component in discussions on urban justice and sustainability.

Progress toward the achievement of SDG 11 has been uneven at the global level. The most recent monitoring report [20] indicates that over one billion people currently live in settlements with substandard conditions and inadequate housing. Furthermore, insecurity, limited access to efficient public transportation, poor management of green spaces, low air quality, lack of potable water, and deficient waste management continue to affect numerous urban contexts. For instance, in regions such as sub-Saharan Africa and South Asia, more than 50% of urban populations reside in informal settlements, and millions of individuals lack access to basic services.

On the other hand, the continuous improvement of urban services has led to a concentration of migrants in urban areas, which has inevitably resulted in increased housing demand and rising housing costs [29]. These dynamics, in turn, influence the residential decisions of migrants. While some studies have examined the effect of city size and structure on migrants' housing investment intentions [30], few have explored the relationship between urban services and housing choices. Urban services affect the inflow of migrants to specific destinations and may also influence the dynamic balance between supply and demand in housing markets [31]. Thus, a complex relationship is established between migration to urban centers and housing prices [32], which in many cases hinders access to adequate housing.

These shortcomings in the fulfillment of SDG 11 highlight the need to analyze and revise traditional models of urban development. The causes of this slow progress are manifold. On one hand, local governments face chronic budgetary constraints and limited technical capacities to manage urbanization sustainably [26]. On the other hand, public investment in urban infrastructure is often insufficient and subject to shifting policies, which hinder the achievement of long-term goals. In this context, the role of the private sector as a key actor in sustainable urban transformation is becoming increasingly evident.

2.2. Sustainable Investment as a Key Tool for Urban Development

The achievement of SDG 11 requires substantial investments in elements such as green infrastructure, sustainable mobility, efficient and accessible public transportation, adequate social housing provision, urban energy efficiency, resilience to natural disasters, and inclusive architectural design. According to estimates from the Climate Emergency Urban Opportunity report [33], the global investment required to implement urban policies aligned with the Paris Agreement exceeds USD 4.5 trillion. This figure far surpasses the budgetary capacities of most governments, thereby highlighting the urgency of mobilizing private capital toward sustainable urban objectives.

In urban contexts of the Global South, it has been observed that private investors, including sovereign wealth funds, construction firms, investment banks, and technology companies, have increasingly directed their capital toward urban development. This trend has been driven by expectations of real estate appreciation, extractive rents, and business opportunities associated with the discourse of “green development” [34].

According to Zoomers et al. [35], the investments required to construct these urban landscapes do not always adhere to sustainability criteria, and on the contrary, in numerous cases, a broad process of land accumulation has been observed, whereby a small number of investors—often financial actors—have acquired urban or suburban land for speculative purposes. These acquisitions are frequently carried out without environmental considerations, resulting in the displacement of vulnerable communities and the widening of social gaps and inequalities [35,36], not to mention the associated risks of corruption among public officials [37]. In this regard, the challenge lies not only in attracting private capital, but also in establishing regulatory frameworks, incentives, and evaluation criteria that can guide such investments toward outcomes aligned with the SDGs.

In contrast to the negative cases, numerous documented experiences of private investment aligned with SDG 11 have been reported, and for instance, the UN-Habitat report [20] highlights several initiatives recognized by the Guangzhou International Award for Urban Innovation, in which urban regeneration projects, clean mobility systems, and participatory public space design have been promoted with active involvement from companies, investment funds, and financial institutions. A notable example is Denmark’s network of cycle highways, which has been driven by municipal governments and supported by private consortia, representing a flagship case of sustainable urban infrastructure financed through public–private collaboration [38].

Another relevant example is the Making Cities Resilient 2030 (MCR2030) initiative, led by the United Nations Office for Disaster Risk Reduction (UNDRR), which has established partnerships with the private sector through the ARISE network [39]. This platform mobilizes businesses to co-finance resilient infrastructure, early warning systems, and nature-based solutions, with the aim of reducing urban disaster risk, representing an example of an emerging model of shared responsibility in urban financing and governance.

In local development contexts, joint community and business investment initiatives have also been documented, and for example, in Accra (Ghana), the Ga-Mashie community has promoted neighborhood funds to regenerate districts, support green jobs, and improve basic services in collaboration with local small- and medium-sized enterprises [20]. These experiences demonstrate that private investment is not homogeneous and that different scales, actors, and motivations can contribute meaningfully to the achievement of SDG 11.

In this context, the development of sustainable financial instruments is required as a means to channel capital toward urban projects with positive social and environmental impacts, without neglecting investment profitability. The Coalition for Urban Transitions [33] estimates that each dollar invested in sustainable urban infrastructure can generate between two and four dollars in net economic benefits. However, achieving this impact requires

not only appropriate investment instruments for small-scale investors—such as green bonds, thematic funds, or public–private partnerships—but also transparent evaluation procedures that allow for the assessment of the benefits generated by such investments [40].

Moreover, as previously mentioned, urban sustainability is a central element in the fulfillment of the 2030 Agenda and, therefore, plays a key role in the energy transition, and as analyzed by Bąk and Sompolska-Rzechuła [25], the objectives of SDG 11 are strongly connected to SDG 7 (affordable and clean energy), given that energy consumption in cities—particularly in buildings and transportation—constitutes one of the main sources of greenhouse gas emissions. In this regard, data show that countries with stronger performance in sustainable energy tend to coincide with those leading in sustainable city indicators [41,42], which underscores the need for coordinated policies and investments to achieve both SDGs. In this context, advancing toward decentralized, collaborative, and sustainability-oriented financing models becomes essential for cities to meet the commitments of SDG 11 and the broader 2030 Agenda.

2.3. Sustainable Finance and Investor Behavior

The transition toward a sustainable economy has involved substantial changes in investor preferences, and the emergence of sustainable finance has transformed the traditional investor mindset. Rather than focusing solely on maximizing financial returns, investors are increasingly integrating environmental, social, and governance (ESG) criteria into their investment decisions [43–45]. Sustainable finance has moved beyond a niche to become a dominant segment in global financial markets [46,47], which is further driven by regulatory frameworks and mandatory transparency requirements [48]. According to data from the Global Sustainable Investment Alliance [49], more than 36% of global assets under management are linked to some form of ESG criteria.

In any case, expected return remains a central variable in sustainable investment decisions, particularly when investors are faced with trade-offs between financial performance and social or environmental impact. Several studies have shown that while sustainability considerations are increasingly relevant, return expectations continue to exert a strong influence on investor behavior [50–54]. This tension between ethical commitment and economic rationality underscores the importance of designing financial instruments that balance impact with competitive returns.

This transition in investors preferences has been motivated by a growing recognition of the systemic risks associated with climate change, inequality, and social instability, as well as by empirical evidence showing that ESG integration does not necessarily imply lower returns and may even improve the risk–return profile [43]. This is important since risk tolerance is another critical determinant of sustainable investment behavior. While some investors are willing to accept lower returns for social or environmental impact, their decisions are often constrained by perceived financial risk. As highlighted by several studies [46,52,55], high levels of portfolio risk tend to reduce the attractiveness of sustainable products, even among ethically motivated investors. This aversion to risk is particularly pronounced in emerging markets, where economic volatility and limited financial safety nets amplify sensitivity to downside scenarios. In our study, risk is modeled through categorical variables representing low, medium, and high risk levels, allowing us to capture how different degrees of uncertainty influence investor preferences.

There is an increasing interest in financial products specifically oriented toward the SDGs, such as sustainable bonds, impact funds, or thematic vehicles linked to resilient cities. Multiple studies have demonstrated that a significant segment of investors expresses a preference for investments that generate collective benefits [50,51] and in this context, understanding investor motivations in relation to SDG 11-linked investment opportunities

becomes increasingly relevant. To do so, it is important to apply empirical approaches capable of capturing the heterogeneity of investor preferences and their willingness to pay for intangible social or environmental benefits.

The type of financial institution also plays a significant role in shaping investor preferences for sustainable products. Trust, reputation, and perceived alignment with ethical values often influence how investors evaluate providers. Previous research has shown that sustainable institutions tend to be viewed more favorably than conventional banks or cooperatives, particularly among investors with strong ESG awareness [53,56]. However, preferences are not uniform: while some investors associate cooperatives with social responsibility, others perceive them as less professional or financially robust. For this reason, in our study, we include provider type as a categorical variable, distinguishing between conventional banks, cooperatives, and sustainable institutions.

In this context, it is essential to position the present study within the broader literature on ESG integration and investor behavior across different economic environments. Prior research has shown that investors in developed markets tend to incorporate ESG criteria more systematically, driven by mature regulatory frameworks, enhanced corporate transparency, and higher levels of financial literacy [43,47]. Conversely, in emerging markets, sustainable investment adoption is often constrained by income volatility, limited investor education, and weaker institutional enforcement [46,57].

The comparative analysis between Spain and Mexico provides empirical insights into how national context shapes investor preferences for sustainability-oriented financial products. Spain, as a developed economy embedded in the European sustainable finance architecture, exhibits a stronger willingness to trade-off financial returns for social impact. Mexico, representing an emerging market, reflects a more risk-sensitive investment logic, where sustainability considerations are secondary to financial performance.

This contribution is particularly relevant to the literature on responsible investment, as it combines a robust methodological approach, a choice experiment, and mixed logit modeling, with a cross-country perspective, thus revealing differentiated valuation patterns of sustainable attributes. Moreover, by focusing on SDG 11, this study engages directly with the global debate on mobilizing private capital toward urban sustainability goals, offering evidence that can inform both academic discourse and policy design. Prior research has emphasized that transparency regarding social and environmental impact enhances the perceived legitimacy and attractiveness of sustainable investments [51,55,58]. In particular, investors are more likely to support products that clearly communicate their alignment with specific SDGs, as this facilitates impact assessments and reinforces ethical commitments. In our study, the inclusion of a binary attribute indicating whether a fund contributes to SDG 11 allows us to isolate the value investors assign to urban sustainability.

2.4. Choice Experiments and Willingness to Pay Estimation: Tools for Assessing the Value of Social Investment

Choice experiments (CEs) have been established as one of the most robust methodologies for analyzing investment decisions involving multiple attributes. Based on random utility theory [59], CEs allow for the estimation of the marginal utility of different characteristics of a good or service, as well as the willingness to pay (WTP) for non-monetary attributes [60,61]. This methodology, widely used in environmental economics and public policy analysis, enables the capture of preference heterogeneity across different investor groups (by gender, age, financial experience, personality, ideology, etc.).

When applied to the field of sustainable urban investments, CEs make it possible to construct hypothetical profiles of financial products (e.g., green bonds for social housing, thematic funds for clean urban mobility) and to analyze how different attributes (return, risk, sustainability impact) influence investment decisions. By estimating the marginal

utility of each attribute and the willingness to pay for improvements in sustainability, this methodology provides key insights for designing more attractive, personalized, and effective financial instruments.

This methodology has been successfully applied in the field of urban sustainability [62–66], and more recently, it has also been used to explore preferences in sustainable investments. Studies such as those by Bruno et al. [51], de Carlos Fraile et al. [52], Mirón-Sanguino et al. [53], Muñoz-Muñoz et al. [54], and Barber et al. [67] have shown that a significant proportion of investors, particularly those with ethical profiles, are willing to sacrifice part of their returns in exchange for measurable sustainability impacts.

Based on this literature, the key factors influencing sustainable investment decisions included in this paper are as follows: expected return, perceived risk, the nature of the financial institution, and the fulfilment of sustainability goals. These dimensions are operationalized in the econometric model through the variables ASC (Alternative Specific Constant), capturing the utility of the opt-out option; Coop, a dummy variable indicating whether the provider is a cooperative; Sust, a dummy variable for sustainable financial institutions; Ret, a continuous variable representing the expected return (interest rate); Risk_m and Risk_h, dummy variables for medium and high risk levels, respectively (with low risk as the reference category); and SDG, a dummy variable indicating whether the fund explicitly contributes to SDG 11.

Consequently, applying a CE to the context of SDG 11 is highly relevant, as this design allows for the construction of investment scenarios that combine different levels of return, risk, and urban impact, and for the analysis of how investors respond to these attributes. Moreover, it enables the identification of investor segments more inclined to value social or environmental attributes, which is crucial for the design of tailored financial products.

Willingness to Pay (WTP) refers to the maximum amount an individual is willing to sacrifice in monetary terms to obtain a specific attribute or improvement in a good or service. In the context of this study, WTP is used to quantify the trade-offs investors are willing to make between financial return and non-monetary attributes such as sustainability impact. This concept is grounded in random utility theory and is commonly applied in discrete choice experiments to derive the implicit value of non-market attributes [60]. In our model, WTP is calculated as the ratio between the coefficient of a non-monetary attribute and the coefficient of the monetary attribute (interest rate), allowing us to express investor preferences in comparable monetary terms. While the CE presents hypothetical investment options defined by specific attributes (e.g., risk, return, provider type, and SDG contribution), the WTP estimation translates the relative importance of these attributes into a monetary value, offering a more interpretable measure of investor preferences.

Complementarily, WTP estimation can contribute to the economic quantification of the benefits perceived by private investors in sustainable urban projects, thereby facilitating public policy decision-making, the design of co-financing mechanisms, and the structuring of SDG-linked thematic bonds.

The degree of penetration of sustainable investments varies across countries, and this is evident in the comparison between Spanish and Mexican companies. Spanish firms have shown significant progress according to sustainability reports following the implementation of EU directives [68], highlighting the institutionalization of ESG transparency. Likewise, the growth of sustainable bonds in Spain, with issuances exceeding EUR 24 billion in 2024, equivalent to 18% of corporate bond emissions, clearly demonstrates that SDG-linked financing has assumed a significant role in the Spanish financial market [69].

3. Materials and Methods

The literature on behavioral economics and development finance has begun to explore these questions, and multiple studies have demonstrated that a significant segment of investors expresses a preference for investments that generate collective benefits [50,51], even at the expense of reduced returns. These findings suggest that not all investors operate under a purely profit-maximizing logic, but rather incorporate ethical, reputational, social, and environmental considerations into their decision-making processes. This leads to the formulation of the first working hypothesis:

Hypothesis 1: *A significant segment of investors is willing to accept lower financial returns in exchange for measurable improvements in urban sustainability.*

As previously discussed, countries with more advanced development in the field of energy sustainability tend to coincide with those that focus more intensively on developing sustainable cities. In this context, factors such as financial culture, the maturity level of sustainable investment markets, perceived institutional risk, and the degree of environmental awareness can significantly shape how investors evaluate different attributes of an urban project. The nationality of the investor may also play a role in determining investment preferences and behaviors within the framework of sustainable urban development. Given that progress in both sustainable finance and sustainable urban development appears to be more advanced in the case of Spain, it is expected that our comparative CE study between the two countries will reveal a greater willingness to invest in SDG 11-oriented financial products among Spanish investors. Thus, the following hypothesis can be formulated:

Hypothesis 2: *Spanish investors exhibit a higher willingness to pay (WTP) for sustainable financial products than Mexican investors.*

The CE methodology was considered the most appropriate tool for estimating investor preferences regarding funds that promote the development and implementation of SDG 11: Sustainable Cities and Communities, thereby enabling a comparative analysis of the investment decisions made by Spanish and Mexican investors. The CE approach is grounded in the assumption that a good or service can be described by its constituent attributes [59–61], and that consumers or, as in this case, investors, make decisions based on these attributes. In a CE, alternative versions of the same product are presented, each characterized by different combinations of attributes, and respondents are asked to select the option that best reflects their preferences [56,70].

In this context, the application of a Choice Experiment (CE) to investors from different countries is considered a suitable approach not only for comparing their willingness to accept financial commitments with urban impact, but also for identifying structural differences in how various attributes—such as social and environmental impact, risk level, or profitability—are valued. For this reason, in the present study, the willingness of investors to choose sustainability-aligned financial products is analyzed across the Spanish and Mexican markets. This comparison is regarded as particularly useful for the design of financial products tailored to national contexts and for the development of investment strategies that are better adapted to the sociocultural realities of each country. Furthermore, this approach allows for the exploration of whether common patterns exist across countries that could serve as a foundation for transnational sustainable financing mechanisms, or whether specific adaptations are required depending on the investor's country of origin.

Therefore, based on these hypotheses, a CE study has been conducted among investors in Mexico and Spain in order to analyze sustainable investment preferences oriented toward the achievement of SDG 11.

The first step in a CE study is the selection of the attributes and levels that will define the different products presented to investors. Table 1 presents the attributes and levels selected for this study. The choice of attributes and levels that compose the various products offered to investors was carried out using the existing literature on investor preferences [53,55,56,58,70].

Table 1. Attributes and levels used in the CE.

Attribute	Levels
Provider (Type of financial institution)	Conventional Bank; Cooperative; Sustainable institution
Return (yield)	1%; 3%; 5%
Risk level	Low; Medium; High
Contribution to SDG 11	Yes; No

Source: Own elaboration.

The provider is defined as the financial entity authorized to market investment funds. The interest rate represents the return offered by the fund, while risk is associated with the composition of its portfolio. The variable related to contribution to the SDG reflects the information reported by the fund regarding its specific contribution (yes/no) to SDG 11. A brief explanation was provided to ensure a minimum level of contextual understanding, helping to reduce varied interpretations and, thus, the potential impact of the binary framing of the “contribution to SDG 11” attribute, an acknowledged but minor limitation.

The total number of hypothetical products that could be generated by combining the selected attributes and levels amounts to 54. This number would be excessive for a survey. Given that respondents are presented with “choice sets” consisting of two products and a “no choice” option, the total number of possible comparisons would reach 2862 (54×53), rendering the survey unfeasible. Therefore, a fractional factorial design was employed to reduce the number of comparisons to an efficient level, using the “Dcreate” module in Stata 14.0. This module generates efficient designs based on the Fedorov algorithm [71,72], successfully reducing the number of comparison scenarios to eight.

Table 2 presents an example of the choice sets shown to investors. Each set includes three options: two alternatives representing different combinations of attribute levels, and a third option labeled “none of the above”, allowing respondents to indicate that none of the alternatives align with their preferences, thereby reflecting the option to maintain the status quo. The survey is introduced with a detailed description of the terms used and an explanation of the available options. To mitigate the potential bias associated with a hypothetical market, a “Cheap Talk” script and an “Out-opt” reminder were included, in line with methodological recommendations by Fiebig et al. [73]. Eight choice sets similar to those in Table 2 were generated and used in the survey.

Table 2. Example of choice sets presented in the survey.

Attribute	Levels		
	Option 1	Option 2	Option 3
Provider	Conventional bank	Sustainable institution	None
Return	1%	3%	
Risk	Low	High	
Contribution to SDG 11	Yes	No	

Source: Own elaboration.

To address concerns regarding external validity, it is important to note that CEs are a widely accepted and methodologically robust tool for eliciting preferences in contexts where real-world experimentation is impractical or ethically unfeasible. While CEs rely

on hypothetical scenarios and do not involve actual financial commitments, they allow researchers to simulate realistic decision-making environments and explore preferences for products or attributes that may not yet exist in the market [74].

This feature is particularly relevant in the field of sustainable finance, where emerging products, such as SDG-linked investment funds, are still under development. Moreover, the inclusion of opt-out options and a “cheap talk” script in the survey design helps mitigate hypothetical bias and enhances the realism of the responses. Despite their limitations, CEs remain a preferred method for analyzing consumer and investor behavior, especially when the goal is to understand trade-offs involving intangible attributes such as social or environmental impact [75].

To model the results, the mixed logit model was employed, allowing for the detection of heterogeneous choices among investors. We will briefly outline the method; for a detailed description of the practical application, see ref. [53]. This model is based on Random Utility Theory [59,76], which assumes that an investor’s utility can be expressed as the sum of two components: one deterministic (the investor’s utility), which can be derived from observable influencing factors, and another stochastic, which is unobserved and unpredictable. Thus, the utility U_{njt} for investor n choosing alternative j in choice situation t is defined as

$$U_{njt} = \beta_n x_{njt} + \varepsilon_{njt} \quad (1)$$

where β_n is the vector of individual-specific coefficients, x_{njt} is the vector of attributes for the individual n , and ε_{njt} is the random error term, assumed to be independently and identically distributed. The term U_{njt} represents the latent utility or preference of the individual n for the alternative j in choice situation t , which underlies the probability of that alternative being selected.

One limitation of the conditional logit model is its assumption that all individuals share the same preferences. In contrast, the mixed logit model allows for individual-specific coefficients, meaning that preferences may vary across individuals. Therefore, the probability that investor n chooses alternative j in choice situation t , conditional on a given draw of β_n , is modeled as a function of the observed attributes x_{njt} , which represent the characteristics of each alternative.

$$P_{njt}(\beta_n) = \frac{\exp(x_{njt}\beta_n)}{\sum_{j=1}^J \exp(x_{njt}\beta_n)} \quad (2)$$

Then, since β_n is assumed to follow a specified distribution across the population, the unconditional choice probability is obtained by integrating the conditional probability over the distribution of β_n . This distribution is governed by a vector of parameters θ , which typically includes the means and variances of the random coefficients. These parameters characterize the prior distribution assumed for β_n across the population.

$$P_{njt} = \int \frac{\exp(x_{njt}\beta_n)}{\sum_{j=1}^J \exp(x_{njt}\beta_n)} f(\beta|\theta) d\beta \quad (3)$$

Probabilities are approximated through simulation for any given value of θ , thus providing the simulated log likelihood from the values of a particular draw r .

$$SLL(\theta) = \sum_{n=1}^N \ln \left\{ \frac{1}{R} \sum_{r=1}^R \prod_{t=1}^T \prod_{j=1}^J \left[\frac{\exp(x_{njt}\beta_n^r)}{\sum_{j=1}^J \exp(x_{njt}\beta_n^r)} \right]^{y_{njt}} \right\} \quad (4)$$

where R is the number of draws, and y_{njt} is 1 if n chose j at draw t and 0 otherwise. Equation (4) provides a simulated approximation of the integral in Equation (3) using a finite number of random draws from the distribution of β_n . This simulation-based approach is necessary because the integral in Equation (3) generally lacks a closed-form solution. The parameter vector θ governs the distribution from which these draws are generated.

Base levels were selected for each qualitative attribute to establish a reference framework (zero utility) for comparison with other attribute levels. The chosen base levels were “Conventional” for the “Provider” attribute, “Low” for the “Risk” attribute, and “No” for the SDG contribution attribute. The interest rate was treated as a continuous variable to allow for monetization. Accordingly, the econometric model is defined as

$$U_{njt} = \beta_0 ASC + \beta_1 Coop_{njt} + \beta_2 Sust_{njt} + \beta_3 Ret_{njt} + \beta_4 Risk_m_{njt} + \beta_5 Risk_h_{njt} + \beta_6 Ods_{njt} + \epsilon_{njt} \quad (5)$$

where β_0 refers to the status quo (Alternative-Specific Constant, ASC), i.e., the option of not choosing either of the proposed products, and β_k represents the marginal utility associated with each attribute of the specific product.

In this specification, the covariates, x_{njt} , represent the observed attributes of each investment alternative. The variable for expected return is treated as continuous, allowing for the estimation of willingness to pay (WTP), while the remaining attributes are included as dummy variables.

It is important to clarify that in the context of CE the dependent variable is the investor’s choice among hypothetical investment alternatives. Each alternative is defined by a set of attributes, including return, risk, provider type, and sustainability impact. The utility function models how these attributes influence the probability of choosing a given option. The hypothesis that some investors are willing to accept lower returns is tested indirectly through the estimation of WTP.

The price (interest rate or return) is included as a monetary attribute in the choice model. Therefore, WTP can be defined as the ratio between a non-monetary coefficient, β_k , and the return coefficient, β_{ret} , representing how much an investor would be willing to pay (or forego) in monetary terms (percentage points of the interest rate) to obtain an improvement in attribute k .

$$WTP_k = - \left(\frac{\beta_k}{\beta_{ret}} \right) \quad (6)$$

The data were collected during the years 2024 and 2025 from a sample of investors in Spain and Mexico. A total of 568 responses were obtained. The survey was conducted using Google Forms and distributed to participants via social media and databases previously used in similar research. No financial compensation was provided to participants, and anonymity was guaranteed. It is worth noting that data collection in Mexico was more limited due to budgetary and time constraints.

The questionnaires, written in Spanish, were divided into two sections: one focused on the Choice Experiment, and the other included a series of questions aimed at gathering information on the respondents’ socioeconomic characteristics.

A pre-test was conducted to identify and correct any comprehension issues in the survey. Before administering the main survey, a preliminary pilot test was conducted with an independent sample to identify and resolve any comprehension issues, ambiguities, or potential biases in the formulation of the questions and the presentation of the attributes. Although the survey design is consistent with earlier studies—such as those by de Carlos Fraile et al. [52], Mirón-Sanguino & Díaz-Caro [53], and Muñoz-Muñoz et al. [54]—the instrument used in this research was specifically adapted to the cross-national context of Spanish and Mexican investors. This entailed changes in wording, cultural framing, and the contextual relevance of the investment scenarios. The pilot test ensured clarity in the

language used, verified that participants interpreted the choice sets appropriately, and confirmed the robustness of the experimental design for eliciting valid preference data in both countries.

Table 3 presents the frequency analysis of the results to contextualize the sample. The representative respondent in the sample is characterized as being 34 years old, predominantly female (60%), with a monthly income above EUR 1500. The typical household includes members across all age categories, with the majority of respondents being married and holding a university-level education.

Table 3. Statistical characteristics of the sample.

Variable	Average Value
Age	34
Gender: Female	62.33%
Monthly income: less than EUR 900	13%
Monthly income: EUR 901–1500	25%
Monthly income: EUR 1501–2500	32%
Monthly income: more than EUR 2501	30%
Single-person household	11%
Two-person household	28%
Three-person household	27%
Household with 4 or more members	34%
Married	48%
Divorced	15%
Single	32%
Widowed	5%
Basic education	11%
Vocational training	20%
University education	68%
No formal education	1%

Source: Own elaboration.

4. Results

4.1. General Model

The mixed logit model enables the capture of heterogeneity in investor decision-making by allowing preferences to vary across individuals. Table 4 presents the estimation results for the general model—that is, without distinguishing between Spanish and Mexican investors—based on the mixed logit approach. Table 5 reports the corresponding WTP estimations derived from this model. Table 4 includes columns for the estimated coefficient for each attribute in the mixed logit model (Coef.), standard errors (Std. Err.), z-values (Z), p-values ($p > |z|$), and confidence intervals. Table 5 presents the monetary valuation of each attribute, accompanied by the lower (Ll) and upper (Ul) bounds of the 95% confidence interval.

As shown in Table 4, the most influential attributes in determining utility are the interest rate and the level of risk. The interest rate is positively associated with utility, indicating that higher returns are generally preferred. However, interest rates are not always the decisive factor in an investment decision. Risk, by contrast, has a significant negative effect on utility; higher levels of risk reduce the attractiveness of investment alternatives. This suggests a strong aversion to high risk levels and a clear preference for low or moderate levels of risk.

Table 4. Model mixed logit: general model.

		Number of obs		13,422			
		Log likelihood		−3736.649			
General model		LR chi2(6)		1633.260			
Mixed logit model		Prob > chi2		0.000			
Attribute	Coef.	Std. Err.	Z	<i>p</i> > z	[95% conf. Interval]		
Mean							
Return	0.114	0.018	6.360	0.000	0.079	0.149	
Asc	−0.988	0.206	−4.790	0.000	−1.393	−0.584	
Cooperative	−0.309	0.103	−3.000	0.003	−0.511	−0.107	
Sustainable	−0.096	0.088	−1.090	0.276	−0.269	0.077	
Risk: medium	−0.907	0.085	−10.700	0.000	−1.073	−0.741	
Risk: high	−2.275	0.151	−15.120	0.000	−2.570	−1.980	
SDG	0.133	0.062	2.150	0.032	0.012	0.255	
SD							
Asc	2.700	0.149	18.180	0.000	2.409	2.992	
Cooperative	0.415	0.148	2.800	0.005	0.125	0.705	
Sustainable	0.455	0.113	4.040	0.000	0.234	0.676	
Risk: medium	0.794	0.096	8.260	0.000	0.605	0.982	
Risk: high	1.651	0.137	12.090	0.000	1.384	1.919	
SDG	−0.295	0.122	−2.410	0.016	−0.535	−0.055	

Source: Own elaboration.

Table 5. WTP results based on interest rate: general model.

	Asc	Coop.	Sustain.	Risk: Med.	Risk: High	SDG
WTP	8.692	2.719	0.844	7.978	20.010	−1.171
LI	3.254	0.522	−0.770	4.885	13.118	−2.238
UI	14.131	4.916	2.458	11.072	26.903	−0.104

Source: Own elaboration.

Regarding the type of financial institution, a preference is observed for funds offered by sustainable institutions over those marketed by cooperative financial institutions, the latter being perceived less favorably in terms of utility contribution. Additionally, the ASC, which captures a preference for maintaining the status quo (i.e., not choosing any of the offered alternatives), yields negative utility. This indicates that maintaining the current investment configuration is perceived as less attractive than making a change, even compared to a medium-risk investment.

Although the ‘Sustainable’ provider attribute does not yield a statistically significant average effect in the general model, it was retained to preserve the integrity of the experimental design and to allow for the detection of preference heterogeneity. The relatively large standard deviation suggests that certain investor segments may value sustainable providers, particularly in specific national contexts such as Spain (see below).

Table 5 presents the willingness-to-pay results, which quantify the monetary value investors assign to each attribute by estimating the amount of interest rate (in percentage points) they are willing to accept or give up. In particular, the WTP for high-risk investments reaches 20 percentage points, indicating that investors require a substantial return premium to accept highly risky portfolios. This highlights a marked sensitivity to risk. Moderate risk also requires a positive interest premium, though less than that needed for high-risk investments.

Interestingly, contributions to Sustainable Development Goal 11 (SDG 11) are associated with a negative WTP value of 1.17 percentage points, meaning that investors are willing to forgo part of a return in order to invest in products that promote sustainable cities and communities. This confirms a positive disposition toward sustainability, even when it involves a lower financial return.

In summary, the most influential factors in investors' choices were as follows: expected return, level of risk, and the product's contribution to SDG 11. Among these, risk emerges as the attribute for which the highest price is demanded in return for acceptance—particularly when associated with high-risk, equity-heavy portfolios. In contrast, sustainable financial institutions are not penalized in terms of utility or WTP, suggesting that they are viewed favorably compared to cooperatives.

4.2. Cross-Country Comparison: Spain vs. Mexico

In this model, investor choices are analyzed separately for Spain and Mexico, allowing for a comparison of how preferences differ between the two countries. Tables 6 and 7 present the utility and WTP results by country.

Table 6. Model mixed logit: cross-country model.

		Number of obs		13,422		
		Log likelihood		−3719.699		
General model		LR chi2(6)		1633.260		1571.290
Mixed logit model		Prob > chi2		0.000		0.000
Attribute	Coef.	Std. Err.	Z	<i>p</i> > z	[95% conf. Interval]	
Mean						
Return	0.114	0.018	6.380	0.000	0.079	0.149
Asc	−0.967	0.206	−4.700	0.000	−1.370	−0.564
Cooperative	−0.291	0.103	−2.820	0.005	−0.493	−0.089
Sustainable	−0.092	0.089	−1.040	0.299	−0.266	0.082
Risk: medium	−0.907	0.085	−10.660	0.000	−1.074	−0.740
Risk: high	−2.271	0.150	−15.190	0.000	−2.564	−1.978
SDG	−0.632	0.146	−4.320	0.000	−0.919	−0.345
SD						
Asc	0.578	0.100	5.760	0.000	0.382	0.775
Cooperative	2.640	0.146	18.100	0.000	2.354	2.926
Sustainable	0.394	0.152	2.600	0.009	0.097	0.692
Risk: medium	0.475	0.108	4.390	0.000	0.263	0.687
Risk: high	0.801	0.096	8.340	0.000	0.613	0.989
SDG	1.628	0.136	12.010	0.000	1.363	1.894

Source: Own elaboration.

Table 7. WTP results based on interest rate: cross-country model.

	Asc	Coop.	Sustain.	Risk: Med.	Risk: High	SDG	SDG MEXICO
WTP	8.467	2.548	0.808	7.943	19.892	5.538	−5.064
LI	3.107	0.387	−0.807	4.866	13.055	2.440	−7.346
UI	13.828	4.708	2.423	11.021	26.729	8.636	−2.781

Source: Own elaboration.

The results suggest that Mexican investors assign less importance to sustainability attributes and the type of financial institution, whereas Spanish investors place greater weight on these factors. In contrast, Mexican respondents prioritize return and risk, indicating a stronger focus on financial rather than social or environmental considerations. These findings point to a more consolidated, socially responsible investment profile among Spanish investors.

Spanish investors are shown to be willing to forgo higher returns when investing in funds that are marketed by sustainable institutions or that explicitly contribute to Sustainable Development Goal 11 (SDG 11), as evidenced by positive utility contributions and a negative WTP value for sustainability attributes. In contrast, Mexican investors

exhibit a lower willingness to pay for sustainability, with negative WTP values, and instead assign greater value to economic attributes such as return and risk mitigation.

This pattern may reflect the macroeconomic and political context of Mexico as an emerging or developing country, where investment decisions tend to be driven more by financial security and performance than by social or environmental considerations. Additionally, it could be argued that Spanish investors, embedded within the European financial system, are more exposed to sustainability-oriented policies, education, and public discourse on sustainable finance.

After risk aversion and return preferences, a fund's explicit contribution to SDG 11 was the third most influential attribute in terms of willingness to pay (WTP). In the general model, investors were willing to forego an estimated 1.17 percentage points of return in favor of a sustainable urban impact, suggesting an ethical investment orientation in support of inclusive and resilient cities.

Moreover, the cross-country differences in WTP were statistically significant. Spanish investors exhibited a WTP value of -5.06% , indicating an acceptance of lower returns for sustainable attributes. Mexican investors, conversely, showed a WTP value of $+5.54\%$, suggesting that sustainability requires a higher return incentive to be considered.

5. Discussion

The results obtained through the implementation of the mixed logit model allow for the identification of heterogeneous investor preferences regarding investment funds that promote SDG 11: "Sustainable Cities and Communities". In general terms, a strong aversion to risk is observed, particularly toward portfolios with medium and high levels of risk. This finding aligns with previous literature that emphasizes the importance of financial security in investment decisions [70]. The results are also consistent with prior studies on sustainable investment. Apostolakis et al. [58] highlight the growing relevance of ethical values in investment behavior, while Gutsche and Ziegler [70] demonstrate that sustainable attributes increase the likelihood of selection. Similarly, Lagerkvist et al. [56] found that consumers positively value financial products with a social impact. Mirón-Sanguino and Díaz-Caro [53] confirm a trend among Spanish investors toward urban impact investment.

A significant preference is also observed for funds that explicitly report their contribution to SDG 11, suggesting a growing sensitivity toward urban sustainability. This finding is consistent with previous studies [51,55] that emphasize that transparency regarding social impact is a key factor in promoting responsible investment.

Regarding the type of financial institution, the results reveal an ambiguous valuation. While the general model shows negative coefficients for both the 'Cooperative' and 'Sustainable' provider types, these results must be interpreted with caution. The negative coefficient for 'Cooperative' suggests a lower average utility compared to conventional banks, possibly reflecting concerns about financial strength or market reputation. In contrast, the coefficient for 'Sustainable' exhibits a high standard deviation, indicating substantial heterogeneity in investor preferences. This heterogeneity is further confirmed in the cross-country model, where Spanish investors show a statistically significant positive valuation of sustainable providers. These findings suggest that investor attitudes toward provider type are context-dependent and vary across segments and national settings. This heterogeneity has also been documented by Lagerkvist et al. [56], who identify different investor profiles based on their sensitivity to ESG criteria.

The estimation of WTP reinforces these findings. Investors are willing to sacrifice part of their financial return in exchange for attributes such as a fund's contribution to SDG 11. Conversely, they demand a substantial return premium to accept higher levels of risk.

These results are consistent with those of [50,77], de Carlos Fraile et al. [52], and Harasheh et al. [57].

Finally, when comparing the results between Spain and Mexico, it becomes evident that Spanish investors exhibit a greater willingness to pay for sustainable funds than their Mexican counterparts. This difference may be attributed to cultural factors, the maturity level of the sustainable financial market in each country, or varying levels of financial literacy. In Mexico, although risk aversion is also significant, the valuation of sustainability is more moderate, suggesting opportunities to strengthen the supply and communication of financial products with a social impact.

Based on the findings, several practical recommendations can be made for financial institutions and policymakers. First, product design should emphasize transparency and clearly communicate a fund's contribution to SDG 11, as this attribute positively influences investor preferences. Second, marketing strategies should be tailored to national contexts: in Mexico, where sustainability is less prioritized, campaigns could focus on the financial benefits of urban impact investments and include educational components to raise ESG awareness. Third, regulatory bodies may consider incentivizing sustainable investment, particularly for emerging markets. These measures could help align investor expectations with sustainability goals and foster broader participation in responsible finance.

Beyond the specific comparison between Spain and Mexico, the findings of this study offer broader insights for the global sustainable finance agenda. The observed heterogeneity in investor preferences underscores the importance of tailoring financial products and communication strategies to the cultural, regulatory, and economic contexts of each region. However, the general patterns identified, such as the willingness to trade-off returns for sustainability impact, may be relevant to other countries facing similar global urban sustainability challenges. These results can inform the design of SDG-linked investment instruments and public-private partnerships in regions with comparable socioeconomic profiles, particularly in Latin America, Southern Europe, or other emerging markets. Moreover, the methodological approach employed here can be replicated in other national contexts to support evidence-based policymaking and the development of inclusive sustainable finance ecosystems.

6. Conclusions and Limitations

This study highlights that investors value not only financial returns but also attributes related to sustainability and social impact. The comparison between countries reveals significant differences in willingness to pay for sustainability, suggesting that strategies for promoting sustainable funds should take into account the sociocultural and economic context of each market. The observed heterogeneity in preferences underscores the need to segment the offering of sustainable financial products, by tailoring them to specific investor profiles.

While some investor segments (particularly in Spain) value provider sustainability, the general model does not show a statistically significant preference for sustainable providers overall. This indicates that such preferences are not uniform across the sample. The recent literature supports this cultural divergence and shows that, globally, sustainability is becoming a key factor in investment decisions, albeit with marked heterogeneity.

In the case of Mexican investors, as residents of an emerging or developing country, the relevance of sustainability in investment decisions appears to be comparatively lower than it is among Spanish investors. This disparity in sustainability valuation may stem from several factors. First, the financial literacy levels in Mexico are comparatively lower. Second, the development of sustainable finance is significantly more advanced in Europe than in Latin American countries. Additionally, political and financial market volatility

in Latin America may influence or explain part of the observed risk preferences, placing sustainability as a secondary consideration in investment decisions.

These insights have practical implications for financial institutions and policymakers. In markets where sustainability is not yet a primary driver of investment decisions, targeted education campaigns and incentive structures may be necessary to foster greater engagement. Conversely, in more mature markets, the emphasis could shift toward refining product offerings and enhancing transparency regarding social impact.

A limitation of this study is the lack of additional resources to expand the survey and obtain more responses from Mexican participants. Thus, the representation of Mexican respondents was notably lower than that of Spanish participants. While time and budgetary constraints contributed to this imbalance, it may also reflect a lower level of engagement with sustainable finance among Mexican respondents. Given that the study's findings suggest a stronger inclination toward sustainable investment among Spanish investors, this topic may have resonated less with potential respondents in Mexico, further contributing to the disparity in participation. While this limits the generalizability of the cross-country comparison and calls for caution in interpreting the results for Mexico, we believe the observed differences still offer valuable preliminary insights. Future research with more balanced and representative samples would be essential to validate and deepen these findings.

It is important to acknowledge that the sample was obtained through an online survey distributed via social media, which may have introduced a self-selection bias. Individuals with a greater interest in sustainability or investment-related topics were likely more inclined to participate, potentially skewing the sample toward more engaged respondents. While this limits the generalizability of the findings to the broader population, it may also enhance the relevance of the results for understanding the behavior of those most likely to engage in sustainable investment practices.

Another limitation of this study lies in the simplicity of the experimental design. The choice to focus on four core attributes—type of financial institution, expected return, risk level, and contribution to SDG 11—was made to ensure clarity, reduce respondent fatigue, and maintain the internal validity of the CE. Given the large number of possible combinations, an efficient design was employed to reduce the number of scenarios while preserving statistical efficiency. This is a widely accepted approach in discrete choice modeling, particularly when working with complex profiles and limited survey time. Nonetheless, we acknowledge that other relevant factors, such as liquidity, transparency, ESG certifications, or even investors' personalities, may also influence their decisions. Moreover, since the survey did not collect detailed information on variables such as income, financial literacy, or risk tolerance, it is not possible to determine the extent to which these factors rather than country of residence may explain the observed differences in preferences. Excluding these attributes narrows the analytical scope and constrains the identification of broader preference heterogeneity.

We also acknowledge that investor preferences are also shaped by more granular contextual factors such as regional regulatory environments. Due to the limited sample size—particularly in the case of Mexico—the analysis does not capture the full complexity of within-country heterogeneity. Future research could address this limitation by incorporating a broader set of contextual variables and expanding the sample to allow for more detailed segmentation and analysis. Future research could also disaggregate the SDG 11 attribute to examine how investors value specific sub-goals such as affordable housing, sustainable transport, or access to green spaces, thus enabling a more detailed understanding of sustainability preferences.

Additionally, as a cross-sectional study, the results reflect investor preferences at a single point in time, limiting the ability to assess how these preferences may evolve in response to changing market or policy conditions. Future research should consider expanding the attribute set and incorporating longitudinal data to better assess the evolving relevance of sustainability in investment decisions.

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