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Moderating the Effect of the Multidimensional Poverty Index on the Relationship between Sustainable Governance Indicators and Worldwide Governance Indicators

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Abstract: This research comprehensively addresses the complexity of the Multidimensional Poverty Index (MPI). The research objective is to understand the moderating effect of the MPI on the relationship between Sustainable Governance Indicators (SGIs) and World Governance Indicators (WGIs) in the context of 41 countries belonging to the Organization for Economic Cooperation and Development (OECD) while also analyzing the validity and reliability of the indicators. The applied methodology involves using Structural Equation Modeling with Partial Least Squares (SEM-PLS), and data from 41 OECD countries were analyzed. Data on SGIs, WGIs, and the MPI were extracted from the SGI-2022, WGI-2022, and SGI-MPI (2022) databases. Moderating the interaction between the MPI and SGIs reveals a significant overall negative effect (−0.184) on the relationship between SGIs and WGIs (total effect = 0.474); this implies that elevated levels of the MPI negatively impact sustainable governance between SGIs and WGIs, whereas lower levels of the MPI lead to a stronger relationship between SGIs and WGIs, enhancing sustainable governance. The validity of the structural model is affected by low Average Variance Extraction (AVE) in key variables, such as Economic Policy-EP (0.470) and MPI (0.439), indicating potential limitations in their measurement.

Keywords: sustainable governance indicators (SGIs); worldwide governance indicators (WGIs); multidimensional poverty index (MPI); organization for economic cooperation and development (OECD); structural equation modeling (SEM)

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1. Introduction

In its multiple and unidimensional facets, poverty poses critical challenges in some regions. This study focuses on the interrelationship between Sustainable Governance Indicators (SGIs), Worldwide Governance Indicators (WGIs), and the Multidimensional Poverty Index (MPI) in the context of 41 countries belonging to the Organization for Economic Cooperation and Development (OECD). Identifying a lack of validity and reliability among the dimensions and indicators of SGIs, WGIs, and MPI is emphasized. The central issue lies in the need for a comprehensive measure to evaluate poverty reduction or increase and its impact on sustainable and worldwide governance indicators. It is crucial to underscore that sustainable governance has emerged as an essential pillar for the effective management of public affairs, oriented towards long-term social development and the implementation of sustainable policies (Brusis and Siegmund) [1].

This research aims to investigate the reliability and validity of the constructs of SGIs, WGIs, and MPI, as well as to explore their interrelationships. The main objective is to understand how the Multidimensional Poverty Index (MPI) can moderate the relationship between Sustainable Governance Indicators (SGIs) and Worldwide Governance Indicators (WGIs) and the consequences this implies for sustainable governance. This approach has led to the creation of specialized indicators seeking to assess the effectiveness of government

policies in sustainability and governance. Among these indicators are the Sustainable Governance Indicators (SGIs), the Worldwide Governance Indicators (WGIs), and the Multidimensional Poverty Index (MPI). The SGI stands out for its comparative focus on sustainable policies and governance in OECD and EU countries (ONU, [2]; SGIs, [3]). This indicator addresses five crucial dimensions of sustainable development: Economic, Social, and Environmental Policies, evaluating governmental contributions to democratic quality in the Quality of Democracy (QD) pillar and the Good Governance (GG) pillar in 16 key policy fields.

On the other hand, the WGIs, proposed by Kaufmann et al. [4], are distinguished for providing detailed estimates of six dimensions of worldwide governance in numerous countries, using a model that incorporates individual perception variables from various sources. Complementing these metrics, the MPI, according to the definition of Alkire and Santos [5], focuses on assessing extreme poverty and establishing links between sustainable policies, equity, and poverty reduction.

In the current literature, researchers such as Jahn and Suda [6], Bazzan et al. [7], and Bandelow and Hornung [8] have examined the executive efficiency, consensus capacity, and democratic quality of sustainable policies. Furthermore, the importance of evaluating the validity and availability of these indicators (Kaufmann et al. [9]) has been highlighted, and a comparison between SGIs and WGIs in sustainable governance assessment has been conducted (Croissant and Pelke [10]). This article's main contribution lies in applying a Structural Equation Modeling with Partial Least Squares (SEM-PLS) approach to assess the relationship between latent and formative variables associated with SGIs, WGIs, and the MPI. This methodological approach allows for a detailed analysis of the model structure, identifying significant relationships and providing a comprehensive understanding of the dynamics among these indicators.

The findings section details the evaluation results, addressing critical aspects such as measurement quality, indicator reliability, internal consistency, and discriminant validity. Additionally, the path coefficients and total effects of the structural model are analyzed, highlighting significant relationships and their impact on understanding sustainable governance and the moderating effect of the Multidimensional Poverty Index. This research represents a significant step towards a comprehensive understanding of governance indicators and their impact on sustainable development, providing valuable insights for policymakers and academics interested in addressing contemporary governance and poverty challenges.

2. Materials and Methods

2.1. Sustainable Governance Indicators (SGIs)

The central theme addressed in the texts is the assessment of governance quality and the measurement of multidimensional poverty through specific tools. The Sustainable Governance Indicators (SGIs) from the Bertelsmann Foundation evaluate governance quality in various countries, the Worldwide Governance Indicators (WGIs) from the World Bank measure the perception of governance quality globally, and the United Nations Multidimensional Poverty Index (MPI) evaluates poverty considering various dimensions. The studies explore the relationship between governance and sustainable development and how these tools provide a detailed understanding of this relationship.

Various authors have addressed the topic of Sustainable Governance Indicators (SGIs). Bandelow and Hornung [8] explore the relationship between governance, democracy, and political performance. Brusis and Siegmund [1] focus on evaluating sustainable governance in OECD countries. Jahn and Suda [6] analyze the connection between executive efficiency, consensus, and sustainable performance. Jindra and Vaz [11] investigate the relationship between good governance and multidimensional poverty in 71 countries. Lameira and Ness [12] examine the relationship between governance and sustainable development in various countries. Anand and Sen [13] address integrating human development and economic sustainability with equity. Croissant and Pelke [10] evaluate Sustainable Governance

Indicators (SGIs). Tosun and Howlett [14] analyze national policy styles using sustainable indicators. The critical analysis of Sustainable Governance Indicators (SGIs) highlights their contributions and limitations. This index is valuable for assessing governance quality globally, providing significant insights. However, the main criticism lies in the need for a comprehensive focus on the relationship between SGIs, WGIs, and the MPI and their impact on financial crises, executive efficiency, and sustainable policies. Additionally, there is a need for more precise and contextualized measures to address the complexities of governance and multidimensional poverty.

In light of this, researchers have directed their attention to measuring multidimensional poverty. Antoniades et al. [15] theorize that sustainable governance and worldwide governance indices are valuable tools for evaluating governance quality and policy development globally. However, these indices primarily focus on governance and must adequately address multidimensional poverty or its relationship with SGIs and WGIs. The comprehensive understanding of the underlying causal mechanisms of key indicators proposed by various studies highlights the complex interaction between governance quality, policy development, and multidimensional poverty. Antoniades et al. [15], Bandelow and Hornung [8], Brusis and Siegmund [1], Jahn and Suda [6], Jindra and Vaz [11], Lameira and Ness [12], Ward and Dorussen [16], Anand and Sen [13], Croissant and Pelke [10], Saladini et al. [17], Tosun and Howlett [14], and Wagschal [18] have significantly contributed to emphasizing the relevance of understanding how these indicators relate to each other. From the perspective of these studies, recognizing the connection between governance, resource distribution, and poverty is essential for informing effective policies and development strategies that comprehensively address these challenges globally.

The identified research gap focuses on the need for more understanding of the complex interactions between key indicators such as Sustainable Governance Indicators (SGIs), Worldwide Governance Indicators (WGIs), and the Multidimensional Poverty Index (MPI). This study's key focus is addressing this gap through a comprehensive analysis of how these indicators interact, offering a deeper insight into the relationship between governance and poverty. By examining the underlying causal mechanisms, the research proposes to fill this gap by providing a detailed understanding of how these factors intertwine, informing more effective policies and promoting sustainable development.

Sustainable governance involves the administration of public affairs with a focus on long-term social, environmental, and economic development, considering future interests (Brusis and Siegmund [1]). Similarly, SGIs provide sustainable policies and governance for OECD and EU countries (ONU, [2]; SGI, [3]), as seen in Figure 1. Studies by Jahn and Suda [6] and Bazzan et al. [7] examine executive efficiency and consensus capacity about sustainable policies. These authors aim to analyze democratic institutional frameworks, governance capabilities, and outcomes in crucial policy areas using sustainable policy methodology, with their respective dimensions and indicators ensuring better understanding.

Bandelow and Hornung [8] also compare democracy, governance, and public policies using SGIs, WGIs, and other indicators to analyze two pillars (see Figure 1). First, the democratic quality is assessed in the Quality of Democracy (QD) pillar, considering the stability and performance of the political system. Democratic participation, oversight, and respect for civil rights are fundamental. Indicators evaluate electoral processes, access to information, civil rights, political freedoms, and the rule of law. Second, in the Good Governance (GG) pillar, governance capacities are examined regarding executive capacity and accountability. Sustainable governance involves long-term political management, considering future interests, and facilitating social changes.

Three dimensions of sustainable development are addressed: Economic, Social, and Environmental Policies, each with their respective indicators. Sixteen Quality of Democracy (QD) and Good Governance (GG) indicators are evaluated using a qualitative approach and quantitative data, examining governmental contributions to global public goods.

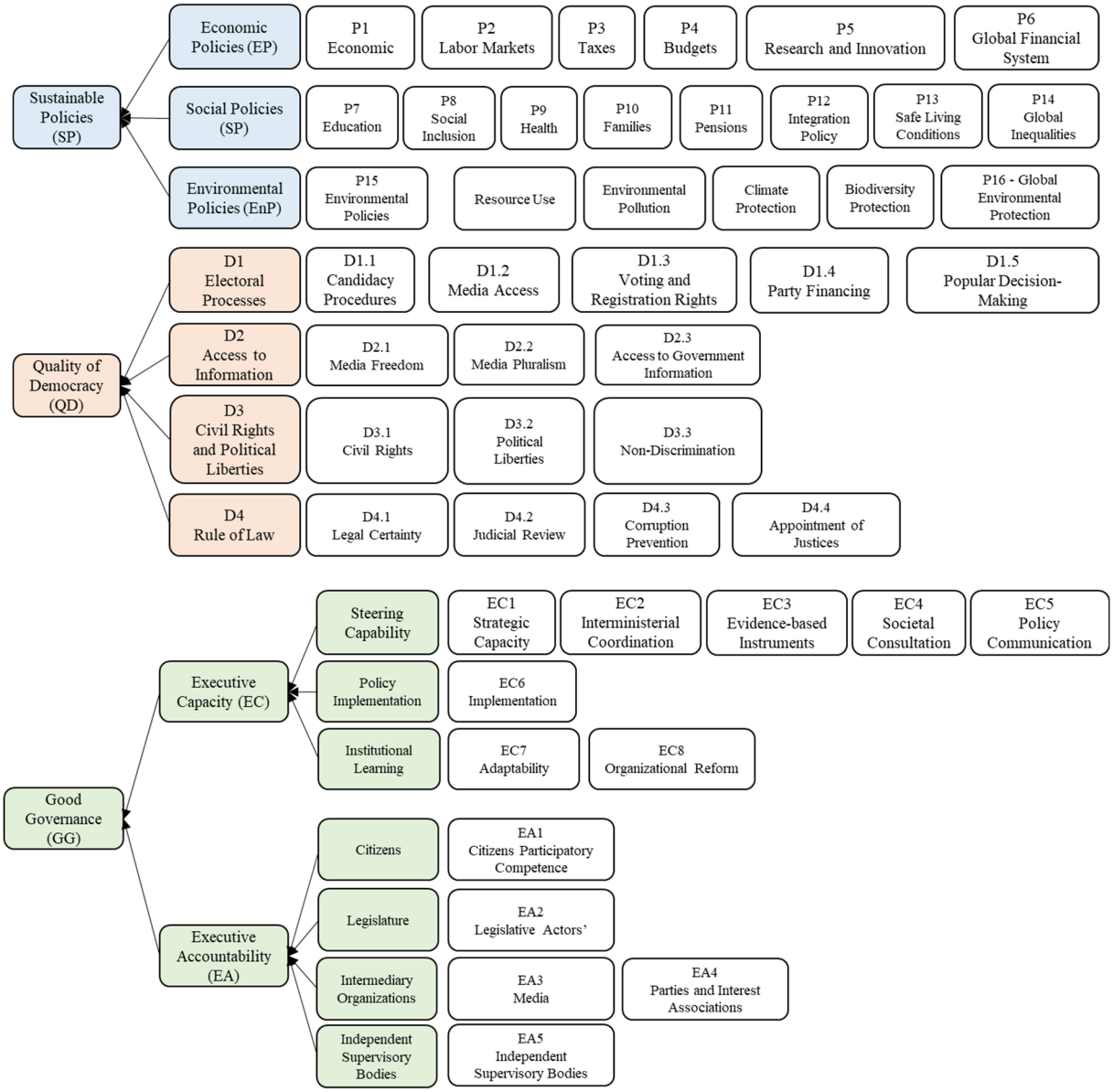

Figure 1. Sustainable Governance Indicators (SGIs). The indicators have been taken from the Sustainable Governance Indicators (SGIs), [3]. Retrieved from https://www.sgi-network.org/2022/Data, accessed on 11 September 2023.

2.1.1. Economic Policies (EP)

In the present study, to support the central hypothesis, there is a need to better understand the convergent validity of variables and the complex interactions between Sustainable Governance Indicators (SGIs), World Governance Indicators (WGIs), and the Multidimensional Poverty Index (MPI), as well as the total effect of the key indicators; this study represents a crucial opportunity to understand international problems according to the variables to be considered. The objective is to address this gap through a comprehensive analysis of the interaction between these indicators, which will provide a deeper understanding of the relationship between Economic Policy (EP) and SGIs. The present study is based on the theory of the Structural Equation Model using the Partial Least Squares Method (SEM-PLS), in line with the guidelines of Hair et al. [19] and Ringle et al. [20]. These authors suggest that the results must demonstrate a reliability of each indicator greater than 0.50 and an AVE greater than 0.50 in all cases. Furthermore, the Internal Consistency Reliability results for the hypotheses, measured through Cronbach's Alpha for

all latent variables, must exceed 0.70. The Discriminant Validity (HTMT) results must be significantly higher than 0.85, as recommended by Hair et al. [19] and Henseler et al. [21]. These findings support the hypotheses supported by previous research, such as those of Jahn and Suda [6] and Bazzan et al. [7], who examine executive efficiency and the capacity for consensus on sustainable policies, thus validating the assumptions about the reliability and validity of Economic Policy (EP), the relationship between latent variables and the total effect between them.

Hypotheses regarding the reliability and validity of EP measurements are proposed:

H1a. *Indicators for the EP latent variable exhibit convergent validity with loadings greater than 0.70, indicator reliability greater than 0.50, and Average Variance Extracted (AVE) greater than 0.50.*

H1b. *The EP latent variable has good internal consistency, as indicated by Cronbach's Alpha values greater than 0.70.*

H1c. *The EP latent variable has discriminant validity, with the squared correlation between EP and other latent variables significantly less than 0.85.*

Hypotheses regarding the relationship between latent variables are proposed:

H7a,b. *The variable EP demonstrates a positive and significant relationship with the latent variables: EnP and SGI.*

Hypotheses regarding the total effect between latent variables are proposed:

H8a–c. *It is posited that EP maintains significant and positive relationships with the latent variables: EnP, SGI, and WGI. This hypothesis implies that, in general terms, an increase in EP has a positive effect leading to improvements in all three latent variables.*

2.1.2. Environmental Policies (EnPs)

To support the hypothesis about the significant relationship between Environmental Policy (EnP) and SGIs, the theoretical findings provide a solid basis for the hypotheses raised by previous research, such as Croissant and Pelke [10], who evaluate the Sustainable Governance Indicators (SGIs), Tosun and Howlett [14] analyze the three pillars of the SGI, in terms of Economic Policies, Environmental Policies, and Social Policies, as stated in the Brundtland report. These national policy styles using sustainable indicators such as Ecological Policy are evaluated with values between 1 and 10, and values greater than 6 points are considered sustainable policies. These results reflect that the Environmental Policy, acting as strategic planning, is above the acceptable parameters. These findings allow us to validate the assumptions about the reliability and validity of the Environmental Policy (EnP), the relationship between latent variables, and the total effect between them.

Hypotheses regarding the reliability and validity of EnP measurement are proposed:

H2a. *Indicators for the EnP latent variable exhibit convergent validity with loadings greater than 0.70, indicator reliability greater than 0.50, and an AVE greater than 0.50.*

H2b. *The EnP latent variable has good internal consistency, as indicated by Cronbach's Alpha values greater than 0.70.*

H2c. *The EnP latent variable has discriminant validity, with the squared correlation between EnPs and other latent variables significantly less than 0.85.*

The hypothesis regarding the relationship between latent variables is proposed:

H7c. *It is expected that EnPs will positively and significantly impact SGIs, suggesting that better Environmental Policies are related to better sustainable governance.*

Hypotheses regarding the total effect between latent variables are proposed:

H8d,e. *It is posited that EnP maintains significant and positive relationships with the latent variables: SGIs and WGIs. This hypothesis implies that, in general terms, an increase in EnP has a positive effect leading to improvements in both latent variables.*

2.1.3. Social Policies (SPs)

To support the hypotheses about the significant relationship between Social Policy (SP) and SGIs, Sustainable Governance involves the administration of public affairs with a focus on long-term social, environmental, and economic development, considering future interests as mentioned above in the study by Brusis and Siegmund [1]. The study results consider that Social Policy adopts a long-term vision as political management, which considers future generations' interests and maintains capacities for social change. This statement allows us to evaluate the assumptions about the reliability and validity of Social Policy (SP), the relationship between latent variables, and the total effect between them.

Hypotheses regarding the reliability and validity of SP measurements are proposed:

H3a. *Indicators for the SP latent variable exhibit convergent validity with loadings greater than 0.70, indicator reliability greater than 0.50, and an AVE greater than 0.50.*

H3b. *The SP latent variable has good internal consistency, as indicated by Cronbach's Alpha values greater than 0.70.*

H3c. *The SP latent variable has discriminant validity, with squared correlation between SP and other latent variables significantly less than 0.85.*

Hypotheses regarding the relationship between latent variables are proposed:

H7d,e. *SP maintains a positive and significant relationship with the latent variables: EnP and SGI.*

Hypotheses regarding the total effect between latent variables are proposed:

H8f–h. *It is posited that SP maintains significant and positive relationships with the latent variables: EnP, SGI, and WGI. This hypothesis implies that, in general terms, an increase in SP has a positive effect leading to improvements in all three latent variables.*

2.1.4. Quality of Democracy (QD)

To support the hypotheses regarding the significant relationship between the quality of democracy (QD) as a formative construct, it is essential to highlight the study by Ward and Dorussen [16], who argue that WGIs offer transparent data on governance but does not guarantee improvements in democratic quality and may depend on specific contextual factors. The reported results only capture instantaneous and not necessarily equilibrium effects and consider that there is no evidence of such impacts on government effectiveness and the quality of democracy and regulation. This statement allows for a critical analysis of the reliability and validity of the quality of democracy (QD), the relationship between latent variables, and the total effect between them.

Hypotheses regarding the reliability and validity of QD measurement are proposed:

H3d. *Indicators significantly contribute to the QD construct, as their external weight is significant.*

Hypotheses regarding the relationship between latent variables are proposed:

H7f–h. *The QD has a positive and significant relationship with the latent variables: EP, EnP y SP.*

Hypotheses regarding the total effect between latent variables are proposed:

H8i–m. *It is posited that QD maintains significant and positive relationships with the latent variables: EP, EnP, SP, SGI, and WGI. This hypothesis implies that, in general terms, an increase in QD has a positive effect leading to improvements in all five latent variables.*

2.1.5. Good Governance (GG)

To support the hypotheses about the significant relationship between good governance (GG) as a formative construct, Jindra and Vaz [11] and Lameira and Ness [12] highlight the positive impact of good governance on reducing multidimensional poverty and promoting sustainable development. However, Antoniades et al. [15] emphasize that good governance occurs in financial crises, while Lameira and Ness [12] specify a positive relationship between governance levels and economic development. This statement allows for a critical analysis of the reliability and validity of good governance (GG), the relationship between latent variables, and the total effect between them.

Hypotheses regarding the reliability and validity of GG measurement are proposed:

H3e. *Indicators significantly contribute to the GG construct, as their external weight is significant.*

Hypotheses regarding the relationship between latent variables are proposed:

H7i–k. *GG maintains a positive and significant relationship with the latent variables: EP, EnP, and SP.*

Hypotheses regarding the total effect between latent variables are proposed:

H8n–r. *It is posited that GG maintains significant and positive relationships with the latent variables: EP, EnP, SP, SGI, and WGI. This hypothesis implies that, in general terms, an increase in GG has a positive effect leading to improvements in all five latent variables.*

2.1.6. Score Sustainable Governance Indicators (SGIs)

The need to better understand the convergent validity of variables and complex interactions and the total effect between critical indicators such as the Sustainable Governance Indicators (SGIs) and the World Governance Indicators (WGIs) is postulated to support the hypotheses. The studies by Anand and Sen [13] address the integration of human development and economic sustainability with equity; Croissant and Pelke [10] evaluate Sustainable Governance Indicators (SGIs); and Tosun and Howlett [14] analyze national policy styles using sustainable indicators. These results allow a critical analysis of the reliability and validity of the Sustainable Governance Indicators (SGIs), the relationship between latent variables, and the total effect between the World Governance Indicators (WGIs).

Hypotheses regarding the reliability and validity of SGI measurements are proposed:

H4a. *Indicators for the SGI latent variable exhibit convergent validity with loadings greater than 0.70, indicator reliability greater than 0.50, and an AVE greater than 0.50.*

H4b. *The SGI latent variable has good internal consistency, as indicated by Cronbach's Alpha values greater than 0.70.*

H4c. *The SGI latent variable has discriminant validity, with the squared correlation between SGIs and other latent variables significantly less than 0.85.*

The hypothesis regarding the relationship between latent variables is proposed:

H7l. *Sustainable Governance Indicators (SGIs) are expected to impact Worldwide Governance Indicators (WGIs) positively and significantly, suggesting that better sustainable governance is associated with better global governance.*

The hypothesis regarding the total effect of latent variables is proposed:

H8s. *A significant and positive relationship between SGIs and WGIs indicates a positive total effect between these variables.*

2.2. Worldwide Governance Indicators (WGIs)

Kaufmann et al. [4] present estimates of six dimensions of global governance in 199 countries and territories during 1996, 1998, 2000, and 2002. Based on hundreds of individual variables measuring perceptions of governance from 25 studies, they construct indicators using data from 18 organizations. They use an unobserved components model to create six indicators aggregated over different periods. In addition to presenting point estimates, they address methodological issues, including the interpretation of data with estimated error margins. This effort is part of the World Bank's initiative to generate and analyze global governance indicators and understand their causes and consequences. Also, Kaufmann et al. [9] emphasize the validity and availability of the six indicators on www.govindicators.org, accessed 11 September 2023, facilitating access for researchers and analysts contributing to the perception of governance in developing long-term policies and strategies. Similarly, Croissant and Pelke [10] compare the validity of SGIs and WGIs in evaluating sustainable governance. Table 1 delineates the Worldwide Governance Indicators (WGIs), which are compartmentalized into six quintessential domains: Voice and Accountability (wgi_1), Political Stability and Absence of Violence/Terrorism (wgi_2), Government Effectiveness (wgi_3), Regulatory Quality (wgi_4), Rule of Law (wgi_5), and Control of Corruption (wgi_6). These indicators furnish a comprehensive analysis of governmental capacity to administer efficaciously, bolster stability, and nurture institutional development.

Table 1. Worldwide Governance Indicators (WGIs).

Code	Worldwide Governance Indicators (WGIs)	Description
wgi_1	Voice and Accountability	Reflects perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and free media.
wgi_2	Political Stability and Absence of Violence/Terrorism	Measures perceptions of the likelihood of political instability and/or politically motivated violence, including terrorism.
wgi_3	Government Effectiveness	Reflects perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies.
wgi_4	Regulatory Quality	Reflects perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development.
wgi_5	Rule of Law	Reflects perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence.
wgi_6	Control of Corruption	Reflects perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests.

Note. WGIs taken from website www.govindicators.org. Kaufmann et al. [4], *World Bank Policy Research Working Paper*, *3106*, 1–116.

To support the hypotheses, there is a need to understand better the convergent validity of variables and complex interactions, as well as the total effect between critical indicators such as World Governance Indicators (WGIs). In this regard, the studies by Croissant and Pelke [10] evaluate the correlation between the SGI governance index and the WGIs for government effectiveness. This correlation coefficient result is 0.782 and is weaker than the correlation of V-Dem and SIG of 0.847.

In this context, hypotheses are proposed regarding Worldwide Governance Indicators (WGIs) to underscore the importance of the validity and availability of these indicators for researchers and analysts:

H5a. *Indicators for the WGI latent variable exhibit convergent validity with loadings greater than 0.70, indicator reliability greater than 0.50, and Average Variance Extracted (AVE) greater than 0.50.*

H5b. *The WGI latent variable has good internal consistency, as indicated by Cronbach's Alpha values greater than 0.70.*

H5c. *The WGI latent variable has discriminant validity, with the squared correlation between WGIs and other latent variables significantly less than 0.85.*

2.3. Multidimensional Poverty Index (MPI)

Table 2 presents significant contributions to the development of measures and analyses of multidimensional poverty made by Duclos et al. [22], Antony and Visweswara Rao [23], Ezzrari and Verme [24], Alkire and Santos [5], and Alkire et al. [25]. These experts have addressed the need for a Multidimensional Poverty Index for developing countries, proposing composite approaches that explain variations in poverty, health, nutritional status, and living standards.

Table 2. Multidimensional Poverty Index (MPI).

Code	Indicators	Description	The Supporting Literature
mpi_1	Poverty Rate	The poverty rate is the ratio of the number of people (in a given age group) whose income falls below the poverty line, which is taken as half the median household income of the total population. It is also available by broad age group: child poverty (0–17 years old), working-age poverty, and elderly poverty (66-year-olds or more).	[13,22,23,26–30]
mpi_2	Low Pay Incidence	Share of workers earning less than 2/3 of median earnings.	[31–35]
mpi_3	Family Policy	It is based on the assumption that an optimal system of family support should enable women to decide freely whether and when they want to take up or proceed with full- or part time employment.	[23–25,36,37]
mpi_4	Child Poverty Rate	Child poverty rate, children less than 18 years old, cutoff point 50 percent of median equivalized disposable income.	[22,25,26,37]
mpi_5	Senior Citizen Poverty	Senior citizen poverty rate, persons 65 years or older, cutoff point 50 percent of median equivalized disposable income.	[22,25,32,37]

Note. The indicators have been taken from the Sustainable Governance Indicators (SGIs), [3]. Retrieved from https://www.sgi-network.org/2022/Downloads, accessed 25 October 2023.

Experts have addressed multidimensional poverty from various perspectives over time. Ravallion [36] examined the relationship between globalization, poverty, and inequality, providing valuable insights into the factors influencing multidimensional poverty. Alkire and Foster [26] stood out in addressing the measurement of multidimensional poverty, significantly contributing to defining relevant dimensions and indicators. The UN Data Revolution report [27] highlights the importance of high-quality data for assessing poverty and designing effective policies. Alkire and Santos [5] introduced the MPI as an essential metric for measuring extreme poverty. Furthermore, Alkire and Santos [37] are crucial for understanding measurement and indicators across different dimensions. Whelan et al. [38] emphasized the EU's multidimensional poverty and social exclusion approach.

Alkire and Seth [28] underscored the need for multidimensional rather than monetary measures to understand India's poverty reduction. Liu and Xu [39] and Santos and Villatoro [40] advanced methods for identifying multifaceted poverty. Alkire et al. [29] detailed the MPI as being influential in the field. Angulo et al. [41] addressed methodological challenges in multidimensional measurements. Martinez and Perales [31] identified increased poverty despite economic growth. Alkire, Jindra et al. [32] tackled poverty reduction in terms of income and economic development. Alkire, Roche et al. [30] analyzed the temporal evolution of multidimensional poverty. Suppa [33] highlighted the importance of the multifaceted perspective of poverty. Saladini et al. [17] linked the SGI with the fight against poverty using the MPI. Padda and Hameed [42] emphasized the multidimensional nature of poverty. Becerra and Vélez [43] connected sustainable policies with equity and poverty reduction.

Alkire and Fang [44] contributed to the Multidimensional Poverty Index. Chen et al. [45] adopted a multifaceted perspective, identifying exclusion and inequality. Fransman and Yu [46] advocated for effective poverty reduction strategies. Anand and Sen [13] explored human development and sustainability. Salecker et al. [34] pointed out the scarcity of comparing monetary and multidimensional poverty measures in low-income countries. Mahadevan and Jayasinghe [35] emphasized the importance of examining multidimensional poverty in prolonged civil conflict contexts. Dong et al. [47] highlighted eradicating poverty as a crucial goal without specifying multifaceted dimensions. Tosun and Howlett [14] evaluate the dimensions of SGIs and the Transformation Index (BTI) to identify sustainable policies and their impact on poverty reduction.

The need to better understand the convergent validity of variables and complex interactions, as well as the total effect between critical indicators such as the Multidimensional Poverty Index (MPI), is postulated to support the hypotheses. The studies by Mahadevan and Jayasinghe [35] highlight the MPI's sensitivity to the choice of indicators and weights (related to mpi_1—Poverty Rate). On the other hand, Salecker et al. [34] emphasize gaps in the research, including the validity and reliability of the MPI (related to mpi_1—Poverty Rate and mpi_5—Senior Citizen Poverty). These studies emphasize the need to address methodological issues to measure multidimensional poverty accurately. Therefore, hypotheses are proposed regarding the reliability and validity of the MPI measurement:

H6a. *Indicators for the MPI latent variable exhibit convergent validity with loadings greater than 0.70, indicator reliability greater than 0.50, and Average Variance Extracted (AVE) greater than 0.50.*

H6b. *The MPI latent variable has good internal consistency, as indicated by Cronbach's Alpha values greater than 0.70.*

H6c. *The MPI latent variable has discriminant validity, with the squared correlation between MPI and other latent variables being significantly less than 0.85.*

Alkire et al. [30] point out the need to design more effective policies and advocate for additional research on the connection between multidimensional poverty and other development indicators (related to mpi_2—Low Pay Incidence and mpi_3—Family Policy).

Likewise, Martinez and Perales [31] identify a gap in understanding the Multidimensional Poverty Index changes over time and how vulnerable families are (related to mpi_3—Family Policy). Therefore, a hypothesis is proposed regarding the relationship between latent variables:

H7m. *It is expected that the Multidimensional Poverty Index (MPI) will positively and significantly impact the Worldwide Governance Indicators (WGIs); this indicates that higher multidimensional poverty is associated with worse global governance.*

H7n. *The interaction between the Multidimensional Poverty Index (MPI) and the Sustainable Governance Indicators (SGIs) is expected to affect the relationship between SGIs and WGIs negatively; this suggests that the level of multidimensional poverty moderates the impact of Sustainable Governance Indicators on global governance.*

Building on the literature, this highlights the persistent gap in understanding the relationship between multidimensional poverty and economic growth and how to achieve more significant reductions (Alkire et al. [32]; Alkire and Seth [28]). Additionally, Suppa [33] questions the ability of the MPI to capture the complexity of multidimensional poverty and advocates for a rigorous evaluation of interventions to determine their impact on reducing multidimensional poverty. Therefore, a hypothesis is proposed regarding the MPI's capacity to capture complexity (related to mpi_1—Poverty Rate and P11_4—Senior Citizen Poverty):

H8t. *A significant and negative relationship between MPI and WGIs indicates an overall positive effect between these variables.*

H8u. *The moderating interaction between MPI and SGIs has a significantly negative overall effect on the relationship between SGIs and WGIs; this suggests that high levels of multidimensional poverty may adversely moderate the connection between the quality of sustainable governance and its impact on global governance.*

3. Data and Method

The dataset to carry out this research, comprising 41 countries from the Organization for Economic Co-operation and Development (OECD), was compiled, including their corresponding Sustainable Governance Indicators (SGIs), Worldwide Governance Indicators (WGIs), and the Multidimensional Poverty Index (MPI) for the year 2022. The data source for SGIs is from 2022 and can be accessed at https://www.sgi-network.org/2022/Data. Additionally, information from the six indicators of the World Governance Indicators (WGIs) was used, available at https://www.govindicators.org/, along with the indicators of the Multidimensional Poverty Index (MPI) found at https://www.sgi-network.org/2022/Downloads. These resources have been made available to researchers to facilitate access and have been employed to assess the research model through the application of the Partial Least Squares Structural Equation Modeling (SEM-PLS) methodology. For more details, see Appendix A.

4. Analysis of Data

To evaluate the relationships between reflective latent variables and formative driving latent variables, a Structural Equation Modeling (SEM) approach has been utilized. Specifically, the Partial Least Squares (PLS-SEM) method has been applied to analyze the research model. This method is suitable for addressing models that include reflective and formative latent variables, allowing for a precise assessment of the relationship between these variables in the research context.

In Figure 2, three steps are discerned. Two driving constructs (QD and GG) are highlighted as exogenous latent variables. These formative measurement constructs are evaluated using a total of seventeen formative indicators (see Figure 1): D1, D2, D3, D4,

EC1, EC2, EC3, EC4, EC5, EC6, EC7, EC8, EA1, EA2, EA3, EA4, and EA5. According to Croissant and Pelke [10], to enhance the Sustainable Governance Indicators (SGIs), it is crucial to strengthen governance capacity (GG) and democratic quality (QD), which are fundamental prerequisites for achieving sustainable governance. Secondly, the research model's structural analysis is addressed, identifying six latent variables referred to as reflective models (EPs, EnPs, SPs, SGIs, WGIs, and the MPI). These reflective models, also known as reflective constructs, require a precise estimation of the relationships between constructs and their indicators (external loadings) for measurement. Finally, in the third step, the moderating effect of the Multidimensional Poverty Index on the relationship between Sustainable Governance Indicators and Worldwide Governance Indicators is evaluated.

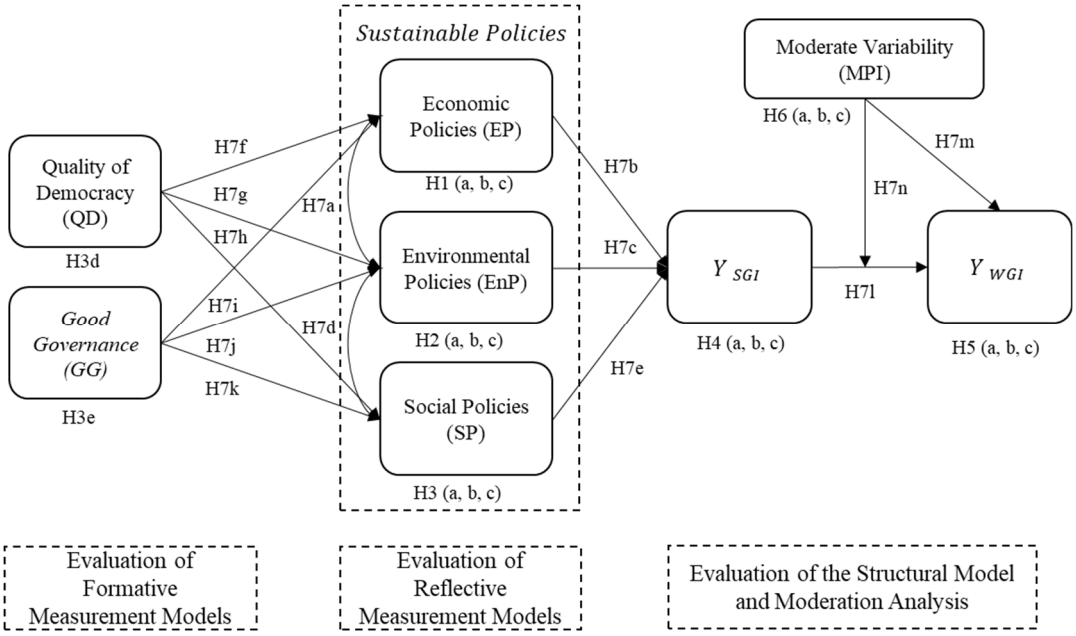

Figure 2. The hypothesis formulation based on Partial Least Squares Structural Equation Modelling (PLS-SEM) is based on the theory of Hair et al. [48].

5. Results

5.1. Reflective Measurement Model Analysis

In Table 3, EP and MPI variables exhibit an Average Variance Extracted (AVE) value below 0.50, specifically at 0.470 and 0.439, respectively; this could raise concerns about the convergence of indicators within the latent variable.

Table 3. Results summary for reflective measurement models.

Hypothesis	Latent Variable	Indicators	Convergent Validity			Internal Consistency Reliability		Discriminant Validity
			Loadings	Indicator Reliability	AVE	Cronbach's Alpha	Reliability ρA	HTMT
			>0.70	>0.50	>0.50	0.70–0.90	0.70–0.90	Significantly Lower than 0.85 (0.90)?
H1a–c	EP	P1	0.769	0.592	0.470	0.834	0.855	Yes
		P2	0.630	0.397				
		P3	0.808	0.653				
		P4	0.432	0.187				
		P5	0.673	0.453				
		P6	0.735	0.540				

Table 3. *Cont.*

Hypothesis	Latent Variable	Indicators	Convergent Validity			Internal Consistency Reliability		Discriminant Validity
			Loadings	Indicator Reliability	AVE	Cronbach's Alpha	Reliability ρA	HTMT
			>0.70	>0.50	>0.50	0.70–0.90	0.70–0.90	Significantly Lower than 0.85 (0.90)?
H2a–c	EnP	P15	0.951	0.904	0.726	0.826	0.863	Yes
		P16	0.740	0.548				
H3a–c	SP	P7	0.830	0.690	0.535	0.901	0.905	Yes
		P8	0.783	0.613				
		P9	0.730	0.533				
		P10	0.769	0.591				
		P11	0.679	0.462				
		P12	0.631	0.398				
		P13	0.651	0.424				
		P14	0.753	0.567				
H4a–c	SGI	sgi_1	0.865	0.748	0.792	0.957	0.961	Yes
		sgi_2	0.791	0.625				
		sgi_3	0.878	0.772				
		sgi_4	0.845	0.714				
		sgi_5	0.967	0.934				
		sgi_6	0.979	0.958				
H5a–c	WGI	wgi_1	0.978	0.956	0.874	0.976	0.979	Yes
		wgi_2	0.865	0.748				
		wgi_3	0.948	0.898				
		wgi_4	0.830	0.689				
		wgi_5	0.976	0.953				
		wgi_6	0.999	0.998				
H6a–c	MPI	mpi_1	0.758	0.574	0.439	0.783	0.823	Yes
		mpi_2	0.347	0.120				
		mpi_3	0.822	0.675				
		mpi_4	0.571	0.326				
		mpi_5	0.707	0.500				

Note: Reflective construct results were obtained using SmartPLS4 software, Ringle et al. [49].

According to Table 3, the Convergent Validity results for the hypothesis H1a are related to the latent variable (EP) and its indicators (P1, P3, and P6); H2a is associated with the latent variable (EnP) and its indicators (P15 and P16); H3a is related to the latent variable (SP) and its indicators (P7, P8, P9, P10, and P14); H4a is associated with the latent variable (SGIs) and its indicators (sgi_1 to sg1_6); H5a is associated with the latent variable (WGIs) and its indicators (wgi_1 to wgi_6); H6a is associated with the latent variable (MPI) and its indicators (mpi_1, mpi_3, and mpi_5) which showed factor loadings above 0.70, which were statistically significant, consistent with the guidelines of Hair et al. [19] and Ringle et al. [20]. These results also indicate that the reliability of each indicator is above 0.50, and the AVE is above 0.50 in all cases, except for the latent variable EP (0.470) and MPI (0.439), indicating low indicator convergence (Fornell and Larcker, [50]). Similarly, the results of the Internal Consistency Reliability for hypotheses H1b to H6b, measured through Cronbach's Alpha for all latent variables, are above 0.70. Discriminant Validity results (HTMT) for hypotheses H1c to H6c are significantly below 0.85 (0.90), as recommended by Hair et al. [19] and Henseler et al. [51].

5.2. Analysis of the Formative Measurement Model

According to the information presented in Table 4, we analyzed the formative models to evaluate critical points:

VIF (Variance Inflation Factor): This factor measures the collinearity or multicollinearity of the indicators based on the Variance Inflation Factor (VIF) values associated with these indicators. The results in Table 4 reveal that indicators D2, D4, EC1, EC4, EC6, EA1, and EA3 exhibit higher VIF values, exceeding the threshold of 5. Generally, a VIF higher than 5 or 10 indicates multicollinearity, which can be problematic.

The results of hypotheses H3d and H3e, focused on the formative constructs "Quality of Democracy" (QD) and "Good Governance" (GG), reveal a mixed situation regarding the contribution of indicators to these constructs. For QD, only the indicator D3 shows a significant contribution, raising questions about the coherence and validity of the associated indicators. In the case of GG, none of the indicators demonstrates a statistically significant contribution, questioning the selection of indicators to represent the construct effectively. Despite appreciable effect sizes, the lack of statistical significance suggests the need for a thorough review of the indicators to optimize the validity of the GG construct.

Table 4. Formative constructs for outer weights' significance testing results.

Hypothesis	Formative Constructs	Formative Indicators	VIF	Outer Weights	*t* Value	*p* Value	95% Confidence Interval (with Bias Correction)	Significance ($p < 0.05$)?
H3d	QD	D1	4.265	0.892	0.385	0.700	[−0.334; 0.539]	No
		D2	7.154	0.954	1.071	0.284	[−0.247; 0.881]	No
		D3	4.925	0.969	2.078	0.038	[0.015; 0.917]	Yes
		D4	5.936	0.930	0.788	0.431	[−0.203; 0.643]	No
H3e	GG	EA1	5.506	0.864	0.939	0.348	[−0.254; 0.464]	No
		EA2	2.717	0.622	0.026	0.979	[−0.215; 0.230]	No
		EA3	5.218	0.891	1.370	0.171	[−0.045; 0.742]	No
		EA4	3.919	0.720	0.709	0.478	[−0.459; 0.242]	No
		EA5	3.004	0.725	1.048	0.295	[−0.148; 0.347]	No
		EC1	5.823	0.655	1.684	0.092	[−0.795; 0.014]	No
		EC2	3.760	0.501	0.173	0.863	[−0.319; 0.253]	No
		EC3	3.064	0.563	0.013	0.989	[−0.258; 0.383]	No
		EC4	5.951	0.829	1.922	0.055	[0.036; 0.813]	No
		EC5	3.333	0.603	0.602	0.547	[−0.364; 0.234]	No
		EC6	5.572	0.874	2.205	0.027	[0.050; 0.854]	Yes
		EC7	3.406	0.808	2.045	0.041	[−0.032; 0.558]	Yes
		EC8	4.560	0.621	0.288	0.774	[−0.468; 0.329]	No

Note: Formative construct results were obtained using SmartPLS4 software, Ringle et al. [49].

5.3. Structural Model Analysis

By examining Table 5, you can see the path coefficients, also called regression coefficients, representing the relationships between the latent variables in the model. A detailed interpretation and some key points are made:

The results from Table 5, which present the path coefficients of the structural model, offer valuable insights into the validity of the proposed hypotheses. In terms of the proposed relationships, it is noteworthy that the positive significance of H7b, H7c, H7e, H7i, H7j, H7k, H7l, H7m, and H7n is maintained. These findings indicate that the connections between Economic Policies (PEs), Environmental Policies (EnPs), Social Policies (SPs), the Quality of Democracy (QD), Good Governance (GG), Sustainable Governance Indicators (SGIs), the Multidimensional Poverty Index (MPI), and Worldwide Governance Indicators (WGIs) are statistically significant. These findings support the validity of these relationships within the context of the structural model.

On the other hand, relationships H7a, H7d, H7f, H7g, and H7h do not reach statistical significance, suggesting that the connections between Economic Policies (PEs), Environmental Policies (EnPs), Social Policies (SPs), the Quality of Democracy (QD), and the associated variables may not be statistically robust within the proposed model's context.

Table 5. Significance testing results of the structural model path coefficients.

Hypothesis	Relationship	Path Coefficients	*t* Value	*p* Value	95% Confidence Interval (with Bias Correction)	Significance ($p < 0.05$)?
H7a	EP → EnP	0.074	0.297	0.766	[−0.189; 0.664]	No
H7b	EP → SGI	0.350	5.375	0.000	[0.224; 0.472]	Yes
H7c	EnP → SGI	0.349	8.429	0.000	[0.286; 0.450]	Yes
H7d	SP → EnP	−0.276	1.191	0.234	[−0.610; 0.291]	No
H7e	SP → SGI	0.399	6.637	0.000	[0.282; 0.515]	Yes
H7f	QD → EP	0.032	0.165	0.869	[−0.263; 0.442]	No
H7g	QD → EnP	0.060	0.3	0.764	[−0.355; 0.457]	No
H7h	QD → SP	0.003	0.015	0.988	[−0.494; 0.270]	No
H7i	GG → EP	0.837	4.775	0.000	[0.406; 1.091]	Yes
H7j	GG → EnP	0.922	2.432	0.015	[−0.588; 1.343]	Yes
H7k	GG → SP	0.866	5.111	0.000	[0.578; 1.264]	Yes
H7l	SGI → WGI	0.474	2.82	0.005	[0.177; 0.819]	Yes
H7m	MPI → WGI	0.371	2.579	0.010	[0.072; 0.627]	Yes
H7n	MPI x SGI → WGI	−0.184	2.091	0.037	[−0.369; −0.020]	Yes

Note: The results for the structural model were obtained using the SmartPLS4 software, Ringle et al. [49].

The results from Table 6 provide a detailed view of the structural model's total effects, revealing the proposed relationships' magnitude and significance. Several significant relationships (H8b, H8c, H8d, H8e, H8g, H8h, H8i, H8n, H8o, H8p, H8q, H8r, H8s, H8t, and H8u) stand out, indicating the importance of these variables in influencing others in the model. These results support the robustness of the proposed relationships and suggest a substantial influence of certain variables on others. However, some relationships do not reach statistical significance (H8a, H8f, H8j, H8k, H8l, and H8m), raising questions about the strength of the total effects between these variables in the context of the proposed model. Influential authors like Henseler [51] and Chin [52] emphasize the relevance of interpreting total effects to understand the impact of variables in the structural model. In this finding, the moderator variable "MPI x SGI" is highlighted with a significant and negative total effect, indicating a moderated relationship that deserves further attention to understand its role in the model.

Table 6. Significance testing results of the total effects.

Hypothesis	Relationship	Total Effect	*t* Value	*p* Value	95% Confidence Interval (with Bias Correction)	Significance ($p < 0.05$)?
H8a	EP → EnP	0.074	0.297	0.766	[−0.189; 0.664]	No
H8b	EP → SGI	0.376	3.597	0.000	[0.243; 0.655]	Yes
H8c	EP → WGI	0.178	2.334	0.020	[0.075; 0.428]	Yes
H8d	EnP → SGI	0.349	8.429	0.000	[0.286; 0.450]	Yes
H8e	EnP → WGI	0.165	2.891	0.004	[0.070; 0.293]	Yes
H8f	SP → EnP	−0.276	1.191	0.234	[−0.610; 0.291]	No
H8g	SP → SGI	0.302	3.052	0.002	[0.144; 0.534]	Yes
H8h	SP → WGI	0.143	2.094	0.036	[0.054; 0.385]	Yes
H8i	QD → EP	0.032	0.165	0.869	[−0.263; 0.442]	No
H8j	QD → EnP	0.062	0.305	0.761	[−0.324; 0.483]	No
H8k	QD → SP	0.003	0.015	0.988	[−0.494; 0.270]	No
H8l	QD → SGI	0.034	0.34	0.734	[−0.161; 0.189]	No
H8m	QD → WGI	0.016	0.322	0.747	[−0.084; 0.099]	No
H8n	GG → EP	0.837	4.775	0.000	[0.406; 1.091]	Yes
H8o	GG → EnP	0.745	3.768	0.000	[0.237; 1.063]	Yes
H8p	GG → SP	0.866	5.111	0.000	[0.578; 1.264]	Yes
H8q	GG → SGI	0.898	9.397	0.000	[0.681; 1.040]	Yes
H8r	GG → WGI	0.426	2.677	0.007	[0.169; 0.784]	Yes
H8s	SGI → WGI	0.474	2.820	0.005	[0.177; 0.819]	Yes
H8t	MPI → WGI	0.371	2.579	0.010	[0.072; 0.627]	Yes
H8u	MPI x SGI → WGI	−0.184	2.091	0.037	[−0.369; −0.020]	Yes

Note: Total effect results were obtained using SmartPLS4 software, Ringle et al. [49].

5.4. Analysis of the Moderating Variable

In Figure 3, three lines illustrate the relationship between the Sustainable Governance Index (SGI). on the *x*-axis and the Worldwide Governance Indicators (WGIs) on the *y*-axis. The central line reflects the ties for a moderate level of the moderating variable, the Multidimensional Poverty Index (MPI). The upper line corresponds to the mean MPI plus one standard deviation, while the lower line refers to the mean MPI minus one standard deviation. What is observed in these lines is that the relationship between SGI and WGIs shows a consistently positive slope in all three cases. In other words, as SGI levels increase, WGI levels also increase; this indicates that a higher Government Sustainability Index (SGI) is consistently associated with higher levels of Worldwide Governance Indicators (WGIs). This finding suggests that a more sustainable government is consistently linked to better global governance.

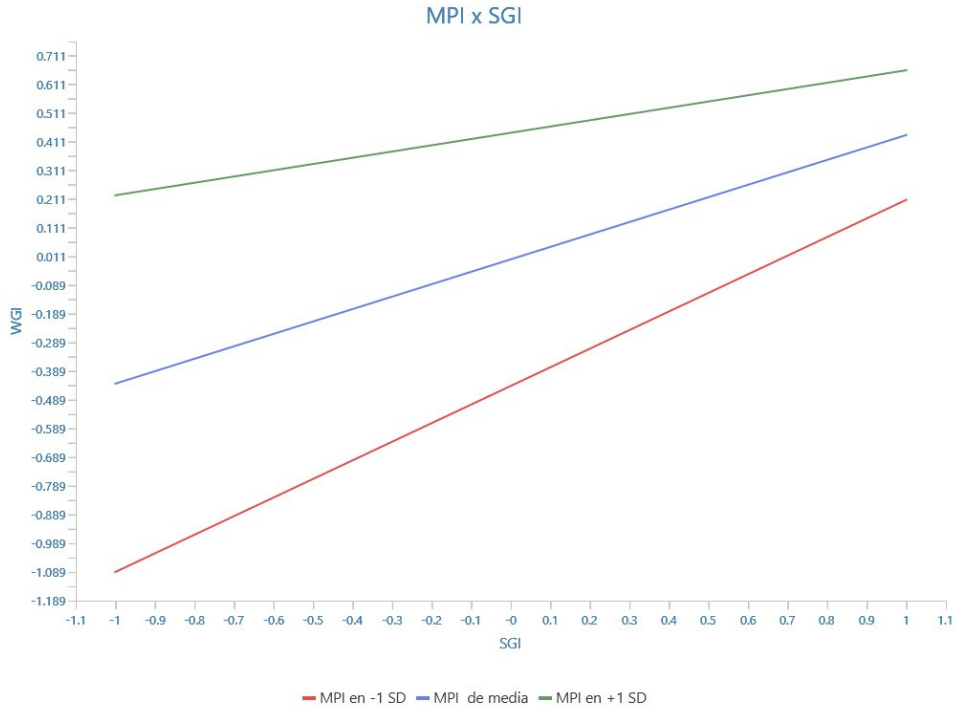

Figure 3. Simple slope graph of the multidimensional poverty index as a moderating variable. The graph of the slope was generated using SmartPLS4, Ringle et al. [49].

Through a more detailed analysis, the interaction term has a negative effect on the Multidimensional Poverty Index (MPI) (−0.184), while the simple effect of the Sustainable Governance Index (SGI) on Worldwide Governance Indicators (WGIs) is 0.474. These results suggest that the relationship between the SGI and WGIs is 0.474 for an average MPI. For instance, if the MPI increases by one standard deviation, the relationship between the SGI and WGIs will decrease due to the moderator's effect size (i.e., 0.474 + (−0.184) = 0.290). On the other hand, if the MPI decreases by one standard deviation, the relationship between the SGI and WGIs will increase by 0.658 (0.474 − (−0.184) = 0.658). In summary, the simple slope graph (as shown in Figure 3) supports our hypothesis about the negative interaction term: a higher MPI is associated with a weaker relationship between the Sustainable Governance Index (SGI) and the Worldwide Governance Indicators (WGIs). This finding implies that the moderating variable MPI influences the strength of the relationship between the SGI and WGIs, showing significant interaction in the model.

5.5. Bootstraping PLS SEM Método Básico SMARTPLS

The bootstrapping method has been applied in the context of Structural Equation analysis using the SMARTPLS4 software to assess the significance of relationships within the model. Bootstrapping is a resampling technique used to obtain robust estimates of

model parameters and *p*-values, as seen in Figure 4. This technique is essential to ensure the robustness and reliability of the analysis results and contributes to enhancing the model's accuracy.

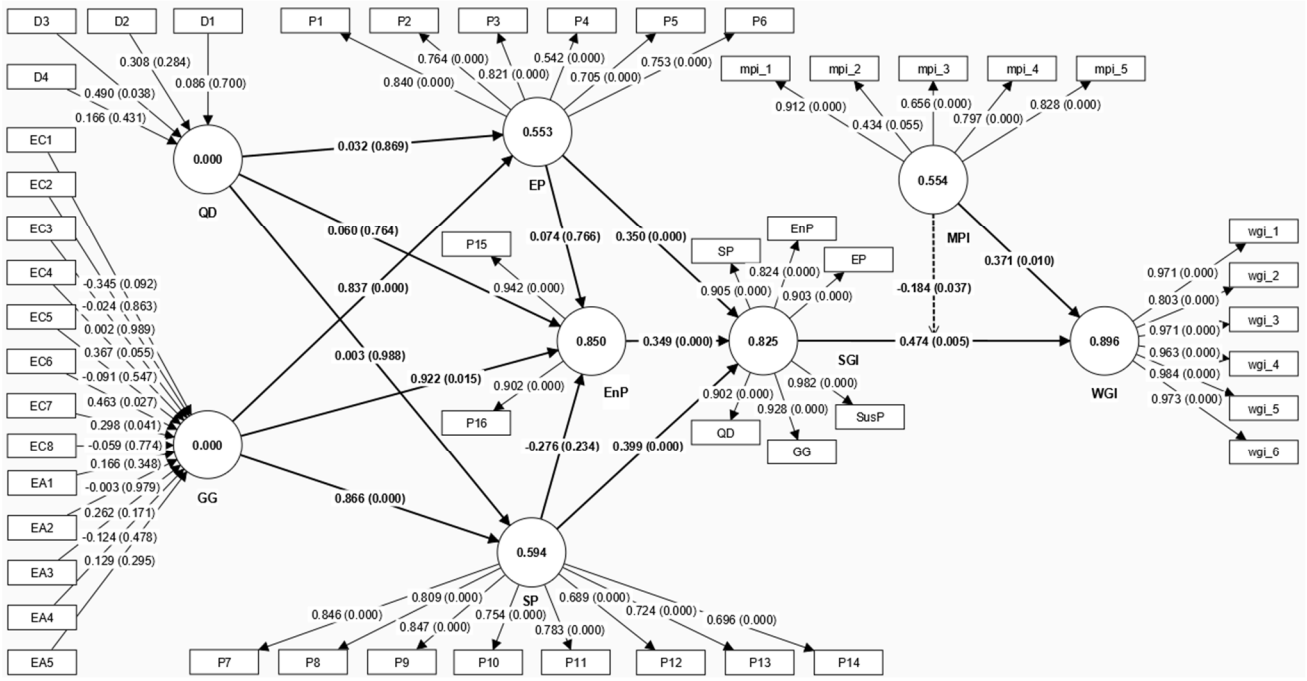

Figure 4. Bootstrapping *p* values in the Modeling Window. The results of "Bootstrapping *p* values in the Modeling Window" were obtained using SmartPLS4, Ringle et al. [49].

In this bootstrapping process, specific important parameters have been configured, such as complexity (complete, although slower), the number of samples (10,000), the confidence interval method (percentile bootstrap), significance level (0.05), and test type (two-tailed). These settings are crucial to ensuring that the conclusions drawn from the analysis are robust and statistically reliable.

In the present analysis, it is noted that there is no statistically significant relationship between the variable Quality of Democracy (QD) and the variables Economic Policy (EP), Environmental Policy (EnP), and Social Policy (SP). Similarly, no evidence of a significant association has been found between EP and EnP, nor between SP and EnP.

6. Discussion

The comprehensive analysis of reflective models, considering convergent validity, internal consistency, and discrimination, supports the robustness of the proposed model (Hair et al. [19]; Ringle et al. [20]). However, low convergence is observed in specific indicators such as Economic Policy—EP—(0.470) and MPI (0.439), signaling potential limitations in their measurement. Croissant and Pelke [10] criticize SGIs for addressing these limitations, highlighting deficiencies in measuring multidimensional poverty in governance. General reliability and discriminant validity support the credibility of the measurements (Fornell and Larcker [50]; Henseler et al. [51]).

The analysis of formative models, focusing on the Variance Inflation Factor (VIF) according to Table 4, highlights significant concerns, especially in indicators such as D2, D4, EC1, EC4, EC6, EA1, and EA3, whose VIF values exceed the threshold of 5, indicating possible issues of multicollinearity. In this situation, Jahn and Suda [6] and Tosun and Howlett [14] offer detailed perspectives on the influence of executive efficiency and national policy styles, challenging broader approaches like SGIs and WGIs to strengthen sustainable policies.

The results of Table 5 validate the positive significance of various relationships, supporting critical connections. However, the relationships of hypotheses regarding Economic Policy and Environmental Policy (H7a), Social Policy and Environmental Policy (H7d), Quality of Democracy and Economic Policy (H7f), Quality of Democracy and Environmental Policy (H7g), and Quality of Democracy and Social Policy (H7h) are not statistically significant, indicating potential weaknesses in the connections between certain variables. In comparison, the UN Data Revolution [27] suggests the utility of SGIs and WGIs. However, Lameira and Ness [12] support the positive relationship between governance levels and economic development while highlighting the criticisms of evaluation tools. Ward and Dorussen [16] examine competition for foreign investment in African governance.

The results of Table 6 reveal the importance of the proposed relationships in the structural model. While several relationships are robust and significant, some do not reach statistical significance, raising questions about the strength of the specific total effects. The moderating variable "MPI x SGI" stands out with a significant and negative total effect, indicating a moderate relationship that requires deeper exploration. Influential authors such as Henseler [51] and Chin [52] support the importance of interpreting total effects. In contrast, Bandelow and Hornung [8] highlight limitations in governance measures, while Brusis and Siegmund [1] suggest more comprehensive approaches. Wagschal [18] advocates for complementary approaches, recognizing the limitations of existing indicators. These studies underscore the complexity and need for more detailed and holistic approaches in evaluating governance and multidimensional poverty. Saladini et al. [17] emphasize the importance of an integrated perspective for measuring sustainable governance. Anand and Sen [13] underscore the usefulness of governance and multidimensional poverty indices, highlighting the need to integrate these measures into public policies. Subsequent studies by Antoniades et al. [15] and Jindra and Vaz [11] emphasize understanding the implications of financial crises on multidimensional poverty and the relationship between good governance and reducing inequalities in middle-income countries for better sustainable governance. Subsequent studies by Tosun and Howlett [14], Bazzan et al. [7], Jahn and Suda [6], and Wagschal [18] enrich this foundation with diverse perspectives on the use of SGIs in different contexts. Tosun and Howlett [14] highlight differences in national policy styles, while Bandelow and Hornung [8] warn about incomplete SGI data validity, advocating for overcoming limitations with theoretical contributions and empirical analyses. Bazzan et al. [7] use SGIs in a Qualitative Comparative Analysis (QCA) to find relationships between economic performance and Social Policy. Jahn and Suda [6] challenge the common notion of a trade-off between efficiency and consensus, suggesting complementarity for better Sustainable Policy performance. Wagschal [18], using SGI data, identifies surprisingly higher mortality in democratic countries during the COVID-19 pandemic.

7. Conclusions

In the analysis of the reflective measurement model, the strength of the Economic Policies (EPs) variable stands out, with indicators like Economy (P1) showing solid loadings and acceptable internal reliability. However, concerns are raised about the convergence of indicators in the latent variable, as the Average Variance Extracted (AVE) of EP is below the desired threshold of 0.50; this suggests the need to enhance measurement accuracy in areas such as Labor Markets (P2), Budgets (P4), and Research and Innovation (P5). Internal consistency, measured using Cronbach's Alpha, is satisfactory, but the importance of improving the reliability of the indicator and AVE to ensure more precise measurement is emphasized.

In the analysis of the MPI, the significant contribution of specific indicators such as Poverty Rate (mpi_1), Family Policy (mpi_3), and Senior Citizen Poverty (mpi_5) to the convergent validity of the construct is highlighted. Although concerns are evident in indicators such as Low Pay Incidence (mpi_2) and Child Poverty Rate (mpi_4), where indicator reliability is below the desired threshold, and the Average Variance Extracted (AVE) of MPI is below the desired threshold of 0.50, these findings underscore the need to

improve accuracy in measuring multidimensional poverty, especially in crucial dimensions such as for low income and child poverty.

In the structural analysis, non-significant relationships that deserve attention are observed. The connection between Economic Policies (EPs) and Environmental Policies (EnPs) (H7a) does not reach statistical significance (p = 0.766), indicating a lack of an evident influence of Economic Policies on Environmental Policies. Similarly, the relationship between the Quality of Democracy (QD) and Economic Policies (EPs) (H7f) is not significant (p = 0.869), suggesting that the quality of democracy does not have a clear impact on Economic Policies. Furthermore, Social Policies (SP) do not exhibit a significant connection with Economic Policies (EP) (H7d), signaling a lack of direct influence.

The significant connection between MPI and Sustainable Governance Indicators (SGIs) underscores the intricate relationship between multidimensional poverty and sustainable governance. However, the negative path coefficient in the relationship of the MPI x SGIs → WGIs raises questions about the precise dynamics between these elements. Further exploration of this relationship is suggested to fully understand its nature and relevance in the overall context of the model.

8. Recommendations

The study on the relationship between Sustainable Governance Indicators (SGIs) and Worldwide Governance Indicators (WGIs) needs a more thorough investigation, urging further research. SGI data up to the 2022 period, available on their website, were utilized. We recommend investigating the potential influence of the upcoming indicator modifications in SGIs for 2024 on the dynamics of the SGI–WGI relationship.

It is important to note that to strengthen the theoretical foundation of SGIs, WGIs, and the MPI, concerns about the reliability of specific indicators must be addressed, and new dimensions should be explored. The negative relationship of the MPI–SGIs → WGIs requires further investigation to thoroughly understand its nature and relevance in the overall context of the model.

In addition, it is recommended to improve measurement accuracy, address multicollinearity in the models, validate results across different contexts, explore additional moderators, and use advanced sampling techniques. These measures can improve our understanding of the relationships between Economic, Environmental, and Social Policies and their impact on global governance. This can make a significant contribution to formulating more effective policies to address multidimensional poverty and promote equitable and sustainable global development.

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Appendix A

Table A1. SGIs and WGIs in 41 OECD Nations.

N°	OECD Countries	Sustainable Governance Indicators (SGIs)						World Governance Indicators (WGIs)					
		Susp	**EP**	**SP**	**EnP**	**QD**	**GG**	**wgi_1**	**wgi_2**	**wgi_3**	**wgi_4**	**wgi_5**	**wgi_6**
1	Australia	5.73	6.02	6.4	4.7	7.30	7.09	93.24	81.60	92.92	99.53	91.04	95.28
2	Austria	6.34	6.40	6.3	6.3	7.27	6.73	94.20	68.87	91.51	87.26	95.75	84.91
3	Belgium	6.02	6.15	6.5	5.4	7.34	6.43	92.75	65.57	84.91	86.79	88.21	89.62
4	Bulgaria	5.27	5.57	4.4	5.8	5.39	5.29	57.00	52.36	42.92	61.79	49.53	50.00
5	Canada	6.53	6.57	7.3	5.8	8.04	8.05	95.65	73.58	94.34	95.75	92.92	93.40
6	Chile	5.64	5.76	5.1	6.0	6.59	6.05	78.26	51.42	69.34	81.13	72.64	80.66
7	Croatia	5.54	5.32	5.1	6.3	5.63	5.15	66.18	66.98	70.28	68.40	61.32	59.91
8	Cyprus	5.04	5.03	5.5	4.6	5.65	4.57	73.91	58.96	75.47	75.47	68.87	66.04
9	Czechia	5.78	6.04	6.1	5.2	7.04	6.26	80.68	75.00	81.13	88.68	83.49	74.53
10	Denmark	7.87	7.84	7.7	8.1	8.90	8.58	98.07	77.36	98.58	98.58	99.53	100.00
11	Estonia	6.96	7.12	6.9	6.9	8.86	7.37	87.92	71.70	89.62	92.92	89.62	91.04
12	Finland	7.41	7.22	7.3	7.8	9.15	8.73	98.55	79.72	96.70	97.17	100.00	99.53
13	France	6.91	6.42	6.8	7.5	7.27	6.92	85.99	56.13	83.02	85.38	85.38	85.38
14	Germany	7.30	7.29	7.1	7.5	8.73	7.78	94.69	67.45	88.21	92.45	91.98	95.75
15	Greece	4.70	4.26	5.1	4.7	7.02	6.40	76.81	49.06	66.51	67.45	59.91	56.60
16	Hungary	5.11	5.12	5.0	5.3	3.22	4.24	59.90	67.92	68.87	64.62	63.21	51.42
17	Iceland	6.09	6.02	7.1	5.2	6.17	6.67	95.17	95.28	93.87	88.21	95.28	91.51
18	Ireland	6.74	7.00	6.8	6.4	8.27	7.41	96.14	78.77	93.40	95.28	91.51	93.87
19	Israel	5.84	6.96	6.0	4.6	6.50	6.67	67.63	11.79	85.38	86.32	81.13	78.77
20	Italy	6.09	5.66	6.0	6.6	7.23	6.61	82.61	58.49	66.98	68.87	58.49	68.87
21	Japan	5.89	5.55	6.0	6.2	5.54	6.53	80.19	86.79	96.23	91.51	92.45	90.57
22	Latvia	6.20	6.45	5.2	6.9	8.00	6.60	43.48	37.26	44.34	38.21	39.62	47.17
23	Lithuania	6.49	6.59	6.1	6.8	8.04	7.16	81.16	69.34	79.72	87.74	83.02	76.42
24	Luxembourg	7.42	7.07	7.7	7.5	7.62	7.57	97.10	86.32	97.64	98.11	98.58	96.23
25	Malta	5.71	6.37	5.7	5.1	5.80	6.09	83.57	80.66	76.89	73.11	76.42	61.79
26	Mexico	4.65	4.94	3.8	5.2	5.13	5.74	42.03	21.70	42.45	46.70	20.75	17.45
27	The Netherlands	6.52	6.94	6.6	6.0	6.63	6.15	97.58	71.23	95.28	96.70	93.40	96.70
28	New Zealand	6.55	6.60	7.0	6.1	8.24	7.67	99.52	96.23	89.15	99.06	96.70	99.06
29	Norway	7.65	7.04	7.9	8.0	8.91	8.63	100.00	76.42	98.11	91.98	98.11	98.11
30	Poland	5.17	5.76	5.1	4.6	4.61	5.44	65.22	61.79	61.79	74.53	64.15	68.40
31	Portugal	6.17	5.99	6.2	6.3	7.56	6.25	89.86	75.94	80.19	75.00	83.96	75.94
32	Romania	5.10	4.91	4.5	5.9	4.88	4.68	63.77	60.85	53.30	63.68	62.26	55.66
33	Slovakia	5.64	5.56	5.4	6.0	6.68	5.27	75.36	59.91	63.68	76.89	70.28	60.38
34	Slovenia	6.39	5.97	6.6	6.6	6.74	6.29	77.78	70.75	80.66	73.58	82.55	78.30
35	Republic of Korea	6.03	6.79	6.1	5.2	6.76	6.57	0.00	30.19	7.08	0.00	4.72	2.36
36	Spain	6.51	5.80	6.7	7.0	7.25	7.03	79.71	53.30	77.83	75.94	77.36	75.00
37	Sweden	7.98	7.66	7.5	8.8	9.29	8.90	96.62	80.19	94.81	96.23	93.87	97.64
38	Switzerland	7.32	7.47	7.0	7.5	8.81	7.57	99.03	92.45	99.53	94.34	97.64	97.17
39	Turkey	4.78	5.04	5.2	4.1	2.79	4.12	23.19	13.68	43.87	43.40	36.79	34.91
40	United Kingdom	6.97	6.47	6.8	7.6	7.33	7.88	89.37	62.26	85.85	93.40	89.15	92.92
41	United States	5.44	5.97	5.9	4.5	7.38	7.38	72.95	45.28	86.79	91.04	88.68	82.55

Note. The indicators have been taken from the Sustainable Governance Indicators (SGIs) [3]. Retrieved from https://www.sgi-network.org/2022/Data. WGI indicators taken from website www.govindicators.org. Kaufmann et al. [4], *World Bank Policy Research Working Paper*, *3106*, 1–116. Sustainable Policies (SusPs), Economic Policies (EPs), Social Policies (SPs), Environmental Policies (EnPs), Quality of Democracy (QD), Good Governance (GG), Voice and Accountability (wgi_1), Political Stability and Absence of Violence/Terrorism (wgi_2), Government Effectiveness (wgi_3), Regulatory Quality (wgi_4), Rule of Law (wgi_5), Control of Corruption (wgi_6).

Table A2. MPI across 41 OECD nations.

N°	OECD Countries	Multidimensional Poverty Index (MPI)				
		mpi_1	**mpi_2**	**mpi_3**	**mpi_4**	**mpi_5**
1	Australia	5.0	5.9	7	5.8	2.5
2	Austria	6.3	6.1	7	6.1	7.4
3	Belgium	7.5	7.0	8	7.9	7.5
4	Bulgaria	4.1	4.6	6	4.3	3.5
5	Canada	5.3	4.6	8	6.4	6.1
6	Chile	3.4	6.9	5	3.2	4.4
7	Croatia	5.0	5.2	5	6.4	3.4
8	Cyprus	7.1	5.7	4	7.2	7.1
9	Czechia	8.2	5.3	6	8.0	8.5
10	Denmark	7.2	7.7	9	8.1	9.2
11	Estonia	5.1	4.2	10	6.6	4.7
12	Finland	7.9	7.7	8	9.0	8.5
13	France	6.7	8.0	10	6.8	8.1
14	Germany	5.9	5.4	8	6.9	6.3
15	Greece	5.3	5.7	5	5.3	8.2
16	Hungary	7.1	4.7	5	7.4	8.0
17	Iceland	8.2	8.0	10	8.4	8.9
18	Ireland	7.3	6.1	7	7.8	8.5
19	Israel	3.0	4.1	7	3.0	4.0
20	Italy	4.6	9.0	5	4.7	6.8
21	Japan	3.7	7.1	5	5.6	3.7
22	Latvia	3.5	4.2	7	6.6	1.0
23	Lithuania	4.8	4.3	7	6.0	3.4
24	Luxembourg	6.3	7.1	9	6.2	8.8
25	Malta	6.7	5.7	7	6.4	7.1
26	Mexico	3.3	5.6	4	3.7	3.7
27	The Netherlands	7.2	8.3	6	7.6	8.5
28	New Zealand	5.0	7.8	8	5.3	4.7
29	Norway	7.1	7.7	9	7.5	9.5
30	Poland	6.5	5.1	5	7.5	7.0
31	Portugal	5.9	8.9	7	5.9	7.1
32	Romania	3.4	4.5	5	3.1	5.2
33	Slovakia	7.1	5.8	4	6.2	8.8
34	Slovenia	7.5	5.5	9	8.4	7.1
35	Republic of Korea	3.8	5.8	5	6.9	1.0
36	Spain	4.1	7.2	7	3.5	6.6
37	Sweden	6.4	9.1	10	6.5	8.4
38	Switzerland	6.1	7.5	4	6.3	4.9
39	Turkey	3.6	9.7	4	2.6	6.0
40	United Kingdom	5.0	5.2	7	5.5	5.1
41	United States	2.8	3.7	7	3.4	2.7

Note. The indicators have been taken from the Sustainable Governance Indicators (SGIs), [3]. Retrieved from https://www.sgi-network.org/2022/Data. Poverty Rate (mpi_1), Low Pay Incidence (mpi_2), Family Policy (mpi_3), Child Poverty Rate (mpi_4), Senior Citizen Poverty (mpi_5).

Table A3. Outer model descriptives.

Code	Median	Observed Min	Observed Max	Standard Deviation	Excess Kurtosis	Skewness	Number of Observations Used	Cramér-von Mises Test Statistic	Cramér-Von Mises *p* Value
D1	0.025	−0.960	1.241	0.452	0.346	0.160	41.000	0.065	0.318
D2	−0.004	−0.649	0.760	0.300	0.451	0.198	41.000	0.046	0.555
D3	0.003	−0.750	0.343	0.247	1.876	−1.164	41.000	0.100	0.107
D4	−0.030	−0.665	0.696	0.367	−0.585	0.276	41.000	0.075	0.231
EA1	0.066	−1.347	0.803	0.503	−0.031	−0.619	41.000	0.071	0.262
EA2	−0.014	−1.641	1.800	0.783	−0.429	−0.034	41.000	0.069	0.285
EA3	0.039	−1.053	0.963	0.455	0.019	−0.220	41.000	0.031	0.821
EA4	0.196	−1.386	1.541	0.694	−0.460	−0.043	41.000	0.078	0.215
EA5	0.011	−1.726	1.509	0.689	0.201	−0.271	41.000	0.036	0.753
EC1	0.080	−1.367	1.688	0.755	−0.756	0.046	41.000	0.053	0.453
EC2	0.127	−1.770	1.471	0.866	−1.074	−0.108	41.000	0.084	0.179
EC3	0.015	−1.930	1.442	0.826	−0.090	−0.444	41.000	0.046	0.564
EC4	−0.048	−0.970	1.031	0.559	−1.170	0.003	41.000	0.102	0.103
EC5	−0.003	−1.860	1.271	0.798	−0.288	−0.323	41.000	0.031	0.826
EC6	0.034	−1.038	0.905	0.485	−0.507	−0.104	41.000	0.028	0.872
EC7	0.022	−1.896	0.892	0.590	0.840	−0.750	41.000	0.105	0.092
EC8	−0.144	−2.121	1.723	0.784	0.270	0.078	41.000	0.068	0.293
EP	−0.005	−1.312	1.110	0.432	1.593	−0.126	41.000	0.052	0.471
EnP	0.195	−1.189	0.896	0.568	−0.732	−0.502	41.000	0.146	0.026
GG	0.010	−0.591	0.941	0.375	0.083	0.573	41.000	0.061	0.359
P1	−0.034	−1.176	1.522	0.547	0.643	0.467	41.000	0.122	0.053
P10	−0.073	−1.844	1.292	0.657	0.472	−0.143	41.000	0.090	0.147
P11	−0.019	−1.396	1.742	0.631	0.323	0.131	41.000	0.016	0.990
P12	−0.105	−1.430	1.432	0.727	−0.697	−0.010	41.000	0.035	0.770
P13	0.060	−2.239	1.491	0.694	1.554	−0.756	41.000	0.067	0.296
P14	−0.021	−1.162	2.589	0.720	3.015	1.283	41.000	0.149	0.024
P15	−0.051	−0.602	0.917	0.336	0.267	0.618	41.000	0.079	0.204
P16	0.039	−1.269	0.781	0.461	0.307	−0.698	41.000	0.067	0.299
P2	0.099	−1.587	1.279	0.658	−0.328	−0.214	41.000	0.032	0.817
P3	0.070	−1.201	1.670	0.572	1.362	0.240	41.000	0.193	0.006
P4	−0.054	−2.158	1.571	0.847	0.456	−0.548	41.000	0.041	0.648
P5	−0.020	−1.210	1.532	0.710	−0.584	0.336	41.000	0.051	0.495
P6	0.044	−2.102	1.193	0.659	1.211	−0.611	41.000	0.048	0.528
P7	−0.025	−1.346	1.116	0.533	0.081	0.088	41.000	0.025	0.904
P8	0.052	−1.413	1.337	0.589	0.622	−0.304	41.000	0.095	0.126
P9	0.006	−1.033	1.080	0.545	−0.884	0.006	41.000	0.034	0.778
QD	0.055	−1.148	1.072	0.436	0.862	−0.453	41.000	0.062	0.345
SP	0.022	−1.083	1.021	0.429	0.519	−0.155	41.000	0.027	0.881
SusP	0.008	−0.511	0.405	0.187	1.185	−0.683	41.000	0.066	0.305
mpi_1	−0.092	−0.619	1.010	0.439	−0.428	0.637	41.000	0.112	0.075
mpi_2	−0.221	−1.387	2.598	0.905	0.237	0.753	41.000	0.094	0.132
mpi_3	0.029	−1.556	1.613	0.773	−0.463	−0.114	41.000	0.049	0.518
mpi_4	0.146	−1.490	1.203	0.645	−0.455	−0.398	41.000	0.058	0.393
mpi_5	0.040	−1.426	1.086	0.574	0.330	−0.562	41.000	0.056	0.424
wgi_1	0.007	−0.627	0.582	0.238	1.051	0.038	41.000	0.063	0.335
wgi_2	0.032	−2.348	1.259	0.599	4.630	−1.261	41.000	0.061	0.354
wgi_3	0.028	−0.628	0.717	0.239	1.743	−0.058	41.000	0.147	0.025
wgi_4	0.091	−1.135	0.631	0.300	4.189	−1.376	41.000	0.179	0.009
wgi_5	−0.004	−0.455	0.518	0.178	2.087	0.227	41.000	0.132	0.039
wgi_6	0.021	−0.613	0.479	0.232	0.235	−0.209	41.000	0.033	0.795

Note: Code names are described in Figure 1, Tables 1 and 2.

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