

The impacts of World Governance Index on Global Peace Index between 2008 and 2022

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Abstract

Purpose – While many factors contribute to peace, economic and governmental factors are considered essential litmus tests for determining peace levels. This study aims to examine the impacts of World Governance Index (WGI) variables on the Global Peace Index (GPI) which ranges from 0 (very high) to 5 (very low).

Design/methodology/approach – The GPI serves as a key indicator of peace levels. Valid data from two databases covering 161 countries from 2008 to 2022 were collected and analyzed by using a logarithmic panel data regression model. This approach ensures robust results, particularly when endogenous and exogenous variables have different measurement units.

Findings – According to the Feasible Generalized Least Squares (FGLS) estimators, five WGI components exhibit inverse relationships with the GPI (increasing WGI components leads to a decline in GPI, indicating an enhancement in peace quality). The most significant factor influencing peace is “Political Stability and Absence of Violence/Terrorism”, while the effects of “Voice and Accountability” and “Control of Corruption” are also noted.

Originality/value – Extant studies have largely overlooked the interaction between governance and peace, often relying on regional data (with neighboring countries) or case studies on local solutions. This paper, based on data from 161 countries, evaluates governance quality and its dimensions in relation to peace conditions on a global scale, providing more generalizable results for policymakers and scholars.

Keywords Governance, Governance indicators, Peace, Public policy, World Governance Index, Global Peace Index, Panel data analysis

Paper type Research paper

Introduction

At first glance, peace seems the opposite of conflict. However, they can coexist within a state. For instance, while conflicts occur in some regions, others may experience significant peace, as seen in Darfur/Sudan (2003-2006) and Burundi (2005-2014). Thus, peace cannot be defined solely as the absence of conflict or the presence of collaboration (Campbell *et al.*, 2017). The literature distinguishes these as negative and positive peace, concepts debated since the 1960s (Galtung, 1969). According to Galtung (1996), negative peace, the absence of conflict, is quantifiable, indicating whether there is conflict, and serves as a basis for understanding



positive peace, characterized by cooperation. The negative peace approach is more suitable for measuring peace systematically as it assesses the absence of violence and links it to cultural and organizational factors.

Peace, in general, spans various domains. [Kodila-Tedika \(2012\)](#) identified three key determinants: a sound business environment, effective governance, and equitable resource distribution. The term “governance” indicates the system by which an entity is directed and controlled. This definition is derived from a study by [McGrath and Whitty \(2015\)](#). They ignore the conventional approach and consider other theories to construct corporate and comprehensive deliberation. [Saito \(2021\)](#) argued that good governance addresses societal tensions and fosters peace. [Cutcu et al. \(2023\)](#) emphasized the need for research across disciplines, better management, and effective policies to create a peaceful world.

Most literature on governance and peace is cross-sectional, focusing on specific years, but governance impacts peace in the long-term. Many studies use regional data and local solutions, though global interconnections exist in financial and legal matters. Several factors influence peace, including political structures, functional governments, economic welfare, and sociological and psychological well-being.

Many phenomena can be attributed to the presence or absence of peace. One factor is the political structure of nations. Another is the presence of a well-functioning government. A country’s welfare indicates an effective economy and market. The sociological and psychological pulse, which can trigger feelings of safety and security amongst the people living in the country, should also be assessed accordingly.

Conventional peace evaluations often overlook good public governance and focus solely on the absence of conflict, which is considered a significant flaw ([Firchow and Ginty, 2017](#)). Another issue is the lack of longitudinal data for a comprehensive understanding ([Cortright et al., 2017](#)). This study addresses these gaps by analyzing global data from 2008 to 2022 to offer universal suggestions. The year of 2008 was chosen as the starting point because of the Global Financial Crisis (GFC), the most severe worldwide economic disruption since the Great Depression. Every financial crisis has consistently hampered the order of governance. The reason why 2022 was selected as the ending year is that the current WGI data covers the period until 2022. Thus, in this study, the authors intend to fill the gap and analyze worldwide data covering the period 2008-2022 to provide universal suggestions.

The first part of the study provides a theoretical framework for governance quality, examining WGI components and their relation to peace. It also briefly explains WGI and GPI. The next part covers the hypotheses of the study within this framework. The methodology is discussed in the subsequent section, followed by the findings, discussion and conclusion.

Conceptual framework

Good governance is essential for sustainable development and improving citizens’ quality of life. [Keser et al. \(2022\)](#) argued that countries cannot achieve human development without good governance. Governance includes rules and regulations, responsibility, accountability, fairness, transparency, and effectiveness. Global challenges, such as epidemiological diseases, climate change, war, and population movements, strain governance systems worldwide ([Liu et al., 2022](#)). To address these issues, scholars and policymakers work to enhance various aspects of governance. [Bornemann and Christen \(2019\)](#) suggested that public administrations play a central role in sustainable governance, given their importance in policymaking and implementation.

At this point, the question arises: What are the main types of governance expected to adjust their mechanisms? [Kaufmann et al. \(2010\)](#) identified three main types: political, economic, and institutional governance. [Tusalem \(2015\)](#) added that governance comprises four components: regulation quality, political stability, corruption control, and the rule of law.

While defining the quality of governance is challenging, scholars often divide it into two main parts: the economy and the quality of governance. The first part emphasizes economic performance as the root of good governance (Acemoglu and Johnson, 2005). The second part highlights the social roles of states, viewing the quality of public services and effective bureaucracy as critical contributors to governance quality (Kurtz and Schrank, 2007).

Rodrik (1997) argued that conflicts, as latent frictions within communities, diminish economic and governance performance. Bolaji (2010) asserted that good governance ensures stability and discourages political instability, criminality, corruption, and other security threats. Similarly, Fayissa and Nsiah (2010) found that good governance positively impacts growth and peace. Norris (2012) stated that all governance dimensions are crucial for fostering peace. In "Why Nations Fail", Acemoglu and Robinson (2013) argued that regulation and governmental institutions are vital to promoting innovation, growth, and peace.

Adegbami and Adepoju (2017) revealed that Nigeria's governance deficiencies have led to poverty, crime, unemployment, insurgent activities, internal violence, disease, and loss of life and property, causing underdevelopment. They recommend good governance, peace, stability, and development to resolve these conflicts.

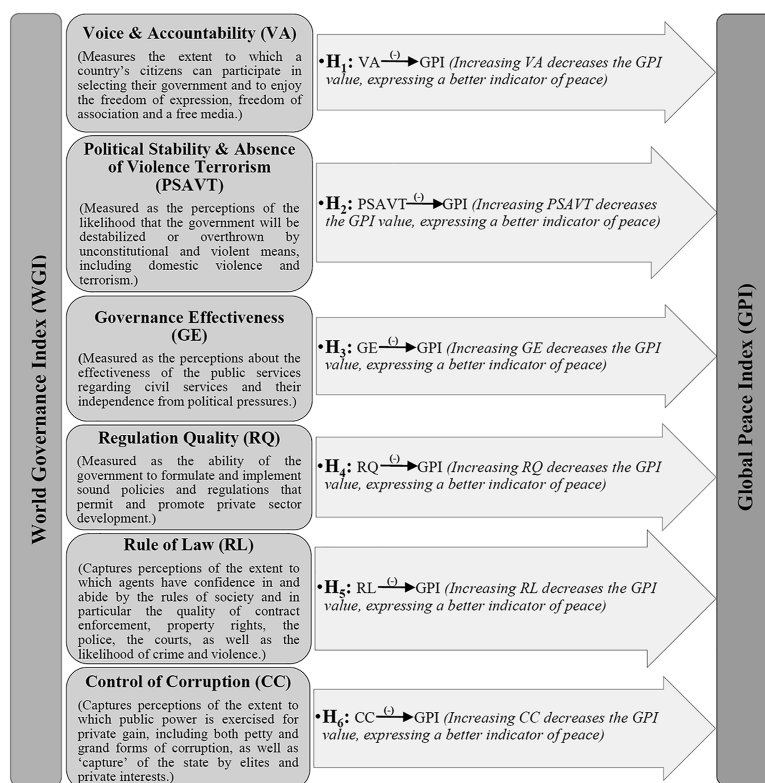
Researchers often use the Worldwide Governance Indicators (WGI) due to their broad applicability and measurability (Langbein and Knack, 2010). The WGI provides comprehensive and individual governance indicators for over 200 countries and territories from 1996 to 2022, covering six dimensions: voice and accountability, political stability and absence of violence/terrorism, government effectiveness, regulatory quality, rule of law, and control of corruption. The WGI compiles data from over 30 sources, reflecting the perspectives of citizens, business leaders, and experts from public, private, and NGO sectors globally (The World Bank, 2022). Figure 1 illustrates the WGI indicators, their definitions (Asongu *et al.*, 2019), and this study's research model.

Global Peace Index (GPI), the dependent variable of the research, has been constructed from 23 indicators. The indicators are in three main categories: (1) continuing local, national, and international conflict, (2) welfare and security in society, and (3) militarization. Another categorization used in GPI is internal peace (a weight of 60 percent) versus external peace (a weight of 40 percent), which was agreed on by the decisive panel because a more considerable level of internal peace is probably to usher (IEP, 2011). So, GPI data is used to indicate peace.

Hypotheses

After briefly explaining WGI and GPI, we will examine each variable and define the hypotheses for the WGI variables in this section. Voice and accountability refer to citizens' freedom in choosing their government and expressing themselves freely, whether criticizing or praising governance quality. This also involves securing human rights and creating a political environment for a better future. According to IEP (2011), a statistically significant negative Pearson correlation coefficient (at the level $\alpha=0.05$), which is a statistical measure of the relationship between two variables and ranges from +1 for a high positive correlation to -1 for a high negative correlation, and 0 for no correlation between variables, exists between WGI and GPI indicators (VA, PSAVT, GE, EQ, RL, and CC) ranging from -0.645 to -0.843, covering 153 countries dataset of 2010 using the equation of $r_{xy} = \frac{cov(x,y)}{SD_x \times SD_y}$ (Schober *et al.*, 2018). In a nutshell, the "voice and accountability" dimension is expected to correlate with the peace index in a different direction, and it is thought to be one of the essential indicators for governance quality and peace. Thus, the first hypothesis for this paper is articulated as follows:

H₁: "Voice and Accountability" has a statistically negative impact on GPI (Increasing "Voice and Accountability" decreases the GPI value, expressing a better indicator of peace).



Source: By authors

Figure 1.
The Research Model

Political stability serves as a crucial factor in reducing conflicts stemming from terrorism, internal violence, war, insurgency, and riots. Governments utilize various tools to mitigate these hazards, and political stability enables effective use of these measures. [Stokke \(2009\)](#) analyzed the peace process in Sri Lanka, suggesting that a shift from political stability to instability can weaken state power and trigger conflicts. [Amavilah et al. \(2014\)](#) asserted that peace and political stability are positively correlated within governance frameworks. Therefore, political stability is expected to directly correlate with peace and have a lasting impact on stabilizing peace-related issues. As discussed earlier, the second hypothesis is as follows:

H₂: “Political Stability and Absence of Violence/Terrorism” has a statistically negative impact on GPI (Increasing “Political Stability and Absence of Violence/Terrorism” decreases the GPI value, expressing a better indicator of peace).

[Jorgensen \(2008\)](#) proposed that implementing political will, military enforcement, and economic integration effectively transformed a failed state into a peaceful and prosperous community. Another study ([IEP, 2011](#)) highlighted that the quality of civil and public services, policy information, and government commitments to these policies, indicators of government effectiveness, strongly correlate with peace. [Iheonu et al. \(2021\)](#) demonstrated that government effectiveness enhances peace even under challenging conditions. Therefore, the third hypothesis of the study is:

H₃: “Government Effectiveness” has a statistically negative impact on GPI (Increasing “Government Effectiveness” decreases the GPI value, expressing a better indicator of peace).

In a globalized world, the growth and success of businesses are pivotal factors impacting every sector, from military expenditures to the food supply chain. Government regulations significantly influence trade volume, economic strength, military capabilities, and political stability. [Brown et al. \(2009\)](#) demonstrated that regulation quality correlates with GPI. Similarly, [Iheonu et al. \(2021\)](#) found that regulatory quality enhances peace, especially in regions with minimal peace levels. Therefore, the fourth hypothesis of the study is:

H₄: “Regulation Quality” has a statistically negative impact on GPI (Increasing “Regulation Quality” decreases the GPI value, expressing a better indicator of peace).

The rule of law is crucial in upholding human rights and governance quality, essential for human dignity. It ensures accountability across public and private sectors and enhances government credibility. [Brown et al. \(2009\)](#) demonstrated a correlation between the rule of law and GPI. Despite its complex nature, [Haggard and Tiede \(2011\)](#) found that this indicator correlates with other WGI indicators, consistent across highly industrialized and developing countries. [Baris et al. \(2021\)](#) concluded that the rule of law, as a governance indicator, fosters business confidence and prosperity, indicating an indirect relationship with peace. [Day and Caus \(2021\)](#) noted that a strong rule of law reduces corruption and increases impartiality in governance and courts. Protecting all individuals within a country underscores the importance of the rule of law. This leads to the fifth hypothesis of this study:

H₅: “Rule of Law” has a statistically negative impact on GPI (Increasing “Rule of Law” decreases the GPI value, expressing a better indicator of peace).

Economic disruptions can swiftly permeate through other public and private sectors. In an organic ontological analogy, like removing a diseased cell to prevent its spread, corruption can be likened to a disease within a body. Left unchecked, it can severely undermine governance quality. [Cammett and Malesky \(2012\)](#) argued that good governance effectively reduces corruption, increases citizen satisfaction, reduces conflicts, and fosters a peaceful environment within the country. [Iheonu et al. \(2021\)](#) also found that controlling corruption enhances peace, particularly in regions where peace levels are at their lowest.

Reducing corruption enhances governance credibility, instills greater confidence in the future among people, prevents financial leakage, and creates more secure and livable environments. The final hypothesis is based on the outcomes derived from the theoretical framework discussed earlier and stated as follows:

H₆: “Control of Corruption” has a statistically negative impact on GPI (Increasing “Rule of Law” decreases the GPI value, expressing a better indicator of peace).

Methods and materials

In this study, the authors collected data from two databases available on official websites: Global Peace Index (Institute for Economics & Peace - <https://www.economicsandpeace.org/>) and World Governance Index (The World Bank - <https://www.worldbank.org/en/publication/worldwide-governance-indicators>), to test the hypotheses. Due to data limitations for some countries, valid data intersecting between 2008 and 2022 were gathered for 161 countries.

As previously mentioned, the Global Peace Index (GPI) comprises 23 indicators initially selected by experts and reviewed annually by an expert panel. Each indicator's scores are normalized on a scale of 1-5. GPI data were obtained from the official website of the Institute for Economics & Peace ([IEP, 2022](#)).

On the other hand, the Worldwide Governance Indicators (WGI), supported financially by the Knowledge for Change Program of the World Bank, provide aggregate and individual governance indicators (percentile ranks from 0 to 100) for over 200 countries/territories spanning from 1996 to 2022. The WGI covers six dimensions of governance: voice and accountability, political stability and absence of violence/terrorism, government effectiveness, regulatory quality, rule of law, and control of corruption. Data for these six components are sourced from over 30 different institutions and organizations. WGI data can be accessed from its official website ([The World Bank, 2022](#)).

For a detailed examination of our dataset structure, definitions, and summary statistics, refer to [Table 1](#).

In the investigation, to test our hypotheses and explore the explanatory power and impact of exogenous variables on the endogenous variable (GPI), we conducted panel data regression analysis for 161 countries from 2008 to 2022. Our approach follows explanatory modeling principles ([Shmueli, 2010](#)), focusing on minimizing deviations to present the underlying theory accurately. We proposed a logarithmic panel data regression model to achieve our objectives, ensuring robust results. It is mainly recommended when endogenous and exogenous variables have different measurement units, as suggested by [Wooldridge \(2013:192\)](#). The logarithmic panel data regression model is represented as [Equation 1](#).

$$\ln GPI_{it} = \beta_0 + \beta_1 \ln VA_{it} + \beta_2 \ln PSAVT_{it} + \beta_3 \ln GE_{it} + \beta_4 \ln RQ_{it} + \beta_5 \ln RL_{it} + \beta_6 \ln CC_{it} + u_{it} \quad (1)$$

$\ln GPI_{it}$: The natural logarithm GPI score of i^{th} country relevant to t^{th} year related to 2008-2022.

$\ln VA_{it}$: The natural logarithm VA score of i^{th} country relevant to t^{th} year related to 2008-2022.

$\ln PSAVT_{it}$: The natural logarithm PSAVT score of i^{th} country relevant to t^{th} year related to 2008-2022.

$\ln GE_{it}$: The natural logarithm GE score of i^{th} country relevant to t^{th} year related to 2008-2022.

Variable	Abbr.	Source	Unit of Measurement	Min.	Max.	Mean	SD
Global Peace Index	GPI	The Institute for Economics & Peace (IEP, 2022)	Index Value (0-5)	1.093	3.648	2.061	0.462
Voice and Accountability	VA	World Bank (WB, 2022)	Index Rank Value (0-100)	0.000	100.000	44.374	28.662
Political Stability and Absence of Violence/Terrorism	PSAVT			0.000	99.528	41.887	26.298
Government Effectiveness	GE			0.000	100.000	46.493	28.968
Regulatory Quality	RQ			0.000	100.000	47.445	29.104
Rule of Law	RL			0.000	100.000	44.667	29.003
Control of Corruption	CC			0.000	100.000	44.284	29.051
Period						2008-2022	
Number of Years (T)				15			
Countries (N)				161			
Total Observation				16,905			

Sources: By authors

Table 1.
Data definition and
summary statistics

- $\ln RQ_{it}$: The natural logarithm RQ score of i^{th} country relevant to t^{th} year related to 2008-2022.
- $\ln RL_{it}$: The natural logarithm RL score of i^{th} country relevant to t^{th} year related to 2008-2022.
- $\ln CC_{it}$: The natural logarithm CC score of i^{th} country relevant to t^{th} year related to 2008-2022.
- u_{it} : is the error term of the models.

Econometric analysis

Researchers have commonly utilized panel data analysis for the last two decades. The main form of panel data regression diverges from a standard cross-section/ time-series regression with a dual subscript, as expressed in Equation 2 (Baltagi, 2005).

$$y_{it} = \alpha + X'_{it}\beta + u_{it} \quad i = 1, \dots, N; t = 1, \dots, T \quad (2)$$

In this equation, i denotes firms, countries, families, etc., and t expresses time. Here i sub-index indicates the dimension of the cross-section, while t demonstrates the dimension of the time series. α is a scalar, β is $K \times 1$, X_{it} is the i^{th} observation of K exogenous variables, and u_{it} is an error term. Before applying panel data regression, all series in the panel regression model should be checked by performing a unit root test for the panel regression model. Thus, we employ panel unit root tests for all series in the next section.

Panel Unit Root Test

As a rule of thumb for panel data models, the unit root test of the panel data models should first be employed to detect whether the variables concerning them are stable. If variables in the models are non-stationary, spurious regressions relevant to the analysis may be induced (Baltagi, 2005). Two kinds of panel unit root tests have been extensively used in the literature. If the permanent parameters of the model are widespread over the cross-section, then this process is designated as a common unit root test. A common unit root process (LLC) improved by Levin *et al.* (2002) utilized this assumption. Conversely, if the permanent parameters freely act over the cross-section, the kind of process is denominated as a process of the individual unit root. IPS, Fisher-ADF, and Fisher-PP tests are designed depending on this form (Im *et al.*, 2003). Scrutiny of the results of these unit root tests [Common Unit Root Test (LLC) and Individual Unit Root Tests (IPS, Fisher-ADF, and Fisher-PP) with automatic lag length selection-based Schwarz information criterion (SIC), Newey-West automatic bandwidth selection, and Quadratic Spectral kernel] reveals that whole variables in the models are stable (stationary) in the level form at the significance level of $\alpha=0.05$. Thus, we may perform panel data regression analysis for the model stated in Equation 1.

Model estimation and results

To find the proper model, it is advised to fit the model for the panel data after controlling whether multicollinearity makes the regression coefficients more unstable by increasing their variance. This creates problems in interpreting the coefficients (Keith, 2015). As checking the VIF scores ($\ln RL=10.444$, $\ln CC=6.990$, $\ln GE=6.878$, $\ln RQ=6.794$, $\ln VA=2.857$, and $\ln PSAVT=2.126$) of the independent variables, the VIF score of $\ln RL$ is higher than threshold value ($VIF < 10$) suggested by Marquardt (1980), Belsley (1991), Weisberg (2005), Shrestha (2020). It means that the model contains a multicollinearity problem. Hence, we omitted the independent variable ($\ln RL$) with the highest VIF value from the model recommended in the first phase by Hair *et al.* (2014) to remedy the multicollinearity. The final version of the model is expressed in Equation 3.

$$\ln GPI_{it} = \beta_0 + \beta_1 \ln VA_{it} + \beta_2 \ln PSAVT_{it} + \beta_3 \ln GE_{it} + \beta_4 \ln RQ_{it} + \beta_5 \ln CC_{it} + u_{it} \quad (3)$$

For determining the most suitable technique, the assumption of residuals (autocorrelation, normality, homoscedasticity, etc.) should be checked by suitable statistic tests for the panel regression model expressed in [Equations 3](#). The EViews 10.0 and Stata 16.0 statistical package is used to compute these statistic tests. When controlling the assumption of residuals in the panel regression model, it is found that there are violations concerning the assumption of autocorrelation ($LBI\ Test = 0.780 / p = 0.000 < \alpha = 0.05$) ([Baltagi and Wu, 1999](#)), cross-sectional dependence ($CD = 8.490 / p = 0.000 < \alpha = 0.05$) ([Pesaran, 2004](#)), and heteroscedasticity ($Modified\ Wald\ Statistic (\chi^2) = 6505.24 / p = 0.000 < 0.05$) ([Baum, 2001](#)) in the regression model. Thus, we compute the Feasible Generalized Least Squares (FGLS) estimators, which estimate the covariance matrix and coefficients of a multiple linear regression model when nonspherical innovations are present but the covariance matrix is unknown, as recommended by [Hansen \(2007\)](#) and [Bai et al. \(2021\)](#) as more effective than the Ordinary Least Squares (OLS) in case of the problems of serial and cross-sectional correlations (cross-sectional dependence), and heteroskedasticity problems. The panel regression model (FGLS) results are indicated extensively in [Table 2](#).

In [Table 2](#), all coefficients of the independent variables in the model are significant in the reverse direction according to the estimation results of FGLS with a significance level of 5 percent. It can be inferred that all the specifications for the model are appropriate, and the signs of all coefficients comply with our theory. According to the literature in the previous sections, our prospect for endogenous/exogenous variables is that the greater the increase in exogenous variables, the more significant the decline in endogenous variables in the proposed model. Looking at the magnitude of the significant coefficients in the FGLS model, it can be easily expressed that the three most effective exogenous variables are $\ln PSAVT$ ($b_1 = -0.0500$), $\ln VA$ ($b_1 = -0.0258$), and $\ln CC$ ($b_1 = -0.0189$) respectively, since the model is a logarithmic panel data regression. The results of the association between endogenous and exogenous variables related to our hypotheses are illustrated in [Table 3](#).

Findings and discussion

Significantly, good governance can be viewed as the foundation for peace-building and maintenance. The detrimental effects of poor governance quality represent a primary threat to peace. Indeed, at the conclusion of the statistical analysis presented in this study (as shown in [Table 2](#)), correlations between WGI and GPI are observed in a reverse direction. These results are consistent with those found in [Table 4](#). Therefore, the findings of this study align with previous research.

As stated in the first hypothesis of the theoretical framework, voice and accountability enable people to express themselves and engage freely through various media platforms. The analysis confirms that these findings align with the theory: individuals who believe they have a role in selecting their government tend to experience greater societal peace. Conversely, lack of involvement can lead to feelings of exclusion, contributing to societal structural challenges. As emphasized in sociology's structure-agency dichotomy ([Jessop, 1996](#)), societal structures and individual agency influence each other reciprocally; neither can be fully understood in isolation. Achieving a peaceful governance environment requires converging societal structure and personal agency in common goals.

As a result of the analysis of the second hypothesis, it is evident that political stability and the absence of violence/terrorism are paramount for peace. [Giddens \(1984\)](#) emphasizes "ontological security", a stable sense of existence derived from predictability in life events, which individuals and states seek. [Mitzen \(2006\)](#) expands this to include states' pursuit of ontological security alongside physical security, preferring manageable conflicts over

Table 2.
The Results of Panel
Regression
Model (FGLS)

DV	T	N	TO	Wald Test		IDV	Unstandardized Coefficients (b _i)			Collinearity Statistics	
				χ^2	p		z	p	Tol.	VIF	
lnGPI	15	161	16,905	2557.98	0.000*	Constant	1.5429	165.12	0.000*	0.351*	2.847*
						lnVA	-0.0258	-9.51	0.000*		
						lnPSAVT	-0.0500	-20.59	0.000*		
						lnGE	-0.0189	-5.95	0.000*		
						lnRQ	-0.0131	-4.55	0.000*		
						lnCC	-0.0186	-6.91	0.000*		

Source: By authors

DV: Dependent Variable, T: Number of years, N: Number of countries, TO: Total observations, and IDV: Independent Variable.

(*) : The test values are significant at $\alpha=0.05$.

(♣) : Since the tolerance value >0.1 and VIF<10, it can be deduced that the model does not contain a multicollinearity problem (Hair *et al.*, 2014).

Hyp. ID	Hypothesis	Accepted /Rejected	Statement
H_1	$VA \xrightarrow{(-)} GPI$ (Increasing VA decreases the GPI value, expressing a better indicator of peace)	Accepted	
H_2	$PSAVT \xrightarrow{(-)} GPI$ (Increasing PSAVT decreases the GPI value, expressing a better indicator of peace)	Accepted	The signs of coefficients of independent variables (lnVA, lnPSAVT, lnGE, and lnRQ) are negative and significant in the FGLS model.
H_3	$GE \xrightarrow{(-)} GPI$ (Increasing GE decreases the GPI value, expressing a better indicator of peace)	Accepted	
H_4	$RQ \xrightarrow{(-)} GPI$ (Increasing RQ decreases the GPI value, expressing a better indicator of peace)	Accepted	
H_5	$RL \xrightarrow{(-)} GPI$ (Increasing RL decreases the GPI value, expressing a better indicator of peace)	Rejected	Since the VIF score of lnRL is higher than the threshold value (VIF<10), we omitted the lnRL variable from the model.
H_6	$CC \xrightarrow{(-)} GPI$ (Increasing CC decreases the GPI value, expressing a better indicator of peace)	Accepted	The sign of the coefficient of lnCC is negative and significant in the FGLS model.

Source: By authors

Table 3.
The Results of Hypotheses

Reference of the Study	Method	Findings
IEP (2011)	Correlation Analysis	The authors found a statistically significant and negative correlation between GPI and all WGI (VA, PSAVT, GE, RQ, RL, and CC).
Nadeem <i>et al.</i> (2020)	Unit Root Tests & ARDL Approach	The authors found that VA correlate negatively with terrorism and positively with peace.
Iheonu <i>et al.</i> (2021)	The Ordinary Least Square (OLS), the Tobit regression, and the Quantile Regression (QR)	The authors found that GE increases peace, where the preliminary level of peace is at its lowest level.
Fisher <i>et al.</i> (2021)	Linear Regression	The authors found that RG is highly correlated with sustainability rather than peace.
Deyshappriya (2015)	Linear Regression	The author found that the lack of CC negatively affects the per capita economic growth, while peace stimulates the economic growth of the tested countries.
Nguyen <i>et al.</i> (2021)	Fixed-Effects Regression	The authors found that better GE and public administration benefit peace and prosperity.
Our Study	Feasible Generalized Least Squares (FGLS)	We found that the effects of independent variables [five WGI (VA, PSAVT, GE, RQ, and CC)] on the dependent variable (GPI) are statistically negative and significant, with a significance level of 5%.

Source: By authors

Table 4.
The Comparative Analysis

intractable ones, akin to the adage “The wise warrior avoids the battle” (Tzu, 2012). Nadeem *et al.* (2020) corroborate these findings, highlighting three negative impacts of terrorism on peace: economic inequality, social division, and institutional inefficacy.

The third hypothesis analyzes the impact of government effectiveness (GE) on the peace index, and the findings support the theoretical framework. For example, Iheonu *et al.* (2021)

worked in 43 African countries and found that government effectiveness increases peace where the preliminary level is at its lowest level. GE was considered the penultimate least effective compared to the other five components. In today's world, governments generally prefer civil services over public services. By doing this, the possible political pressures on the civil services have decreased. There might be two reasons why this indicator is less effective. First, this effect is felt more strongly in establishments, firms, and facilities than in people. Second, the globalization of the world mitigates the impact of this indicator. [Amavilah et al. \(2017\)](#) also articulated that globalization has positive and negative effects on peace and stability. As a result, even though government effectiveness is one of the components of WGI, its impact on peace seems to have minor significance. Therefore, we assume that governance effectiveness's impact on peace is indirect, and this mediate relation probably lessens the correlation.

In this research, regulation quality was detected as *the least significant indicator* of WGI on GPI. People do not consider the permission and promotion of private sector development in a state to be peace suppliers. The community's real idea about peace is to feel secure. From this perspective, a country's economic regulations, whether directed in a liberal or non-liberal way, have little importance in peace. Peace is enthusiasm and feeling; quantitative rather than qualitative measures will give additional value to actualize an unconflicted environment. In a nutshell, money is not the needed tool for peace. [Fisher et al. \(2021\)](#) found the same results. According to them, regulation quality is highly correlated with sustainability rather than peace.

The hypothesis regarding the Rule of Law was rejected because we omitted the RL variable to remedy the multicollinearity issue. In the long run, relatively well-ordered societies should aim to integrate outlaw states and burdened societies into the culture of well-ordered peoples. It generally allows them to sustain national stability and legal order. However, the intertwined relations of RL with the other variables are the primary catalyst that leverages the interdependence. Therefore, claiming that RL does not impact peace should not be an accurate assumption.

In another study, [Keser and Gökmen \(2017\)](#) assessed that an improved governance mechanism with all its prerequisites, including control of corruption, is a *sin qua non*-necessity for any nation-state's prospective high human development level. Even though economic variables seem less effective in ensuring peace, people are still against corruption and favor governmental action on this issue. Corruption is not only a leakage in the monetary system but is also regarded as an attack on the community's property rights. [Deyshappriya \(2015\)](#) studied the Corruption Perception Index and Global Peace Index introduced by Transparency International and the Institute for Economics and Peace and found that while good governance prevents corruption, it secures peace. These results also coincide with the findings of the research conducted by [Nguyen et al. \(2021\)](#), which concluded that poverty decreases significantly due to the inequality-reducing effect and income-increasing effect of better governance. So, the research results indicate that "poverty is highly sensitive to governance and public administration". Similarly, [Cutcu and Keser \(2024\)](#) argued that a good level of democracy supports the level of governance and the accumulation of foreign capital and economic performance. Consequently, these favorable conditions might pave the way for sustainable development.

In a nutshell, this study contributes to three main areas of literature. First, the findings support the studies of [Nadeem et al. \(2020\)](#) and [Fisher et al. \(2021\)](#). Secondly, it has investigated the relationship between all components of WGI and GPI in a relatively broad scope. This study is also one of the few examining the impacts of all WGI components on peace. Finally, the findings indicate that all WGI variables correlate with GPI in the context of peace. The data sets have some limitations. As explained before, there are 161 common countries in the WGI and the GPI covering 2008-2022 due to the lack of valid data for some nations. The sample size is statistically adequate. In the future, the number of countries can be increased in further studies.

Conclusion

To conclude, while the disputes between international humanitarian law scholars and military thinkers regarding the reasons for fighting and the rules that govern conflicts are ongoing, the findings of this study indicate that if the states desire peace, they must be prepared to use military and police instruments to secure it. The results concerning the association between endogenous and exogenous variables related to the Rule of Law and GPI support this notion. However, other governmental agencies, such as courts, are also effective instruments for maintaining peace. It is essential to address the wounds caused by being outside the law; therefore, every state must construct its governmental and legal regulations to prevent unlawful formations that can distort its governance system.

In essence, all variables in WGI impact peace at different levels. Policymakers should enhance community contributions to decision-making to stimulate cooperation, avoid escalating political tensions, provide a safe and secure environment, establish the rule of law across all administrative institutions, create and strengthen balanced order, and implement transparent policies against corruption. The foundation for achieving peace in any country relies on avoiding conflicts and ensuring well-functioning governance, which serves as a leverage for prosperity and reconciliation.

Lastly, the authors recommend shifting the focus from WGI to other aspects to further elaborate on peace in various domains. Additionally, political stability and the absence of violence/terrorism – the two significant peace indicators – should be scrutinized to support the findings of this study.

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