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Governance as a foundation of country competitiveness: a cross-country study

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Abstract
A country's global competitiveness is shaped by its institutional and governance framework. This study examines how key governance dimensions—government effectiveness, political stability and absence of violence/terrorism, and voice and accountability— influence national competitiveness with infrastructure and economic performance as controlled variables. Using a cross-country quantitative approach, the study analyzes data from 69 countries in the World Competitiveness Ranking 2025 and the Worldwide Governance Indicators 2023. A multiple linear regression model shows strong explanatory power, with an R-squared of 0.9268. Results reveal that government effectiveness has the strongest positive and significant impact on competitiveness, followed by infrastructure and economic performance. Unexpectedly, both political stability and voice and accountability have significant negative relationships with competitiveness. This suggests that an extreme, possibly authoritarian stability and excessive accountability may hinder flexibility and efficient decision-making. Ultimately, enhancing competitiveness requires deep bureaucratic and institutional reforms to boost government effectiveness. It also calls for balancing political order, public participation, and agile, evidence-based policymaking.

Keywords: Competitiveness, Governance, Political Stability, Accountability, Institutional Reform

Introduction

Globalization and the digital revolution have transformed the world economy into an interdependent and competitive network. In this new landscape, national competitiveness is no longer solely determined by natural resource endowment or population size, but rather by a complex set of factors that shape a nation's productivity (Porter, 1990). Competitiveness is now understood as a reflection of a conducive business environment, innovation capacity, and, most importantly, the quality of institutions and good governance (Schwab, 2019). However, despite a growing theoretical consensus on the importance of governance, the reality in many developing countries demonstrates a stark gap between development discourse and priorities. Policy focus often remains on physical infrastructure development and the pursuit of macroeconomic growth targets, while strengthening governance dimensions such as bureaucratic effectiveness, political stability, and public accountability has been slow to progress or marginalized.

This gap is problematic because empirical evidence actually shows that investment in the real sector will not be optimal without an adequate governance foundation. The IMF's World Economic Outlook Report (2017) revealed a crucial fact: although infrastructure investment can boost economic growth by 1.5% on average, the impact varies widely. In countries with good governance, the same investment can generate growth of up to 2.3%, but only 0.7% in countries with poor governance. This data indicates a significant governance premium and highlights the potential ineffectiveness of capital spending in developing countries if not accompanied by institutional reforms. Furthermore, the World Economic Forum, in its 2019 Global Competitiveness Report, asserted that good governance accounts for approximately 30% of the variation in competitiveness scores between countries (Schwab, 2019), a proportion too large to ignore. In parallel, International Institute for Management Development (IMD) defines competitiveness as the ability of a country to create an environment that supports corporate competition and the improvement of individual well-being, with its measurement in terms of World Competitiveness Ranking which focuses on four factors, namely Economic Performance, Government Efficiency, Business Efficiency, and Infrastructure (IMD, 2025).

Table 1.World Competitiveness Ranking 2025

Country Name	Competitiveness	Ranking
Switzerland	100,0	1
Singapore	99,4	2
Hong Kong SAR, China	99,2	3
Denmark	97,5	4
United Arab Emirates	96,1	5
Taiwan, China	93,7	6
Ireland	91,3	7
Sweden	90,2	8
Qatar	89,9	9
Netherlands	89,8	10
Canada	88,7	11
Norway	86,2	12
United States	84,3	13
Finland	83,8	14
Iceland	83,5	15
China	82,1	16
Saudi Arabia	82,1	16
Australia	78,4	18
Germany	78,2	19
Luxembourg	78,2	19
Lithuania	77,7	21
Bahrain	76,6	22
Malaysia	74,8	23
Belgium	74,6	24
Czechia	73,7	25

Country Name	Competitiveness	Ranking
Austria	73,6	26
Korea, Rep.	73,4	27
Oman	72,9	28
United Kingdom	71,9	29
Thailand	71,3	30
New Zealand	70,2	31
France	69,9	32
Estonia	69,7	33
Kazakhstan	69,0	34
Japan	68,7	35
Kuwait	68,7	35
Portugal	67,8	37
Latvia	67,0	38
Spain	65,8	39
Indonesia	64,3	40
India	64,2	41
Chile	62,5	42
Italy	62,5	42
Cyprus	61,8	44
Puerto Rico	61,0	45
Slovenia	59,1	46
Jordan	57,8	47
Hungary	56,7	48
Romania	56,6	49
Greece	55,3	50
Philippines	54,9	51
Poland	53,9	52
Croatia	51,2	53
Colombia	49,7	54
Mexico	48,8	55
Kenya	48,3	56
Bulgaria	48,0	57
Brazil	46,4	58
Botswana	46,1	59
Peru	45,9	60
Ghana	44,2	61
Argentina	42,8	62
Slovak Republic	42,8	62
South Africa	42,0	64
Mongolia	40,9	65
Turkiye	40,4	66
Nigeria	39,7	67

Country Name	Competitiveness	Ranking
Namibia	37,5	68
Venezuela, RB	25,5	69

Source: World Competitiveness Ranking (2025), data processed by the author

This phenomenon leads to a fundamental and relevant research question that deserves further study: whether the dimensions of governance have a significant influence on a country's competitiveness, especially when compared and controlled with conventional factors such as economic performance and infrastructure. The significance of this research lies in its attempt to empirically test the relative strength of three main governance dimensions according to the Worldwide Governance Indicators (WGI): government effectiveness, political stability and absence of violence/terrorism, and voice and accountability, on global competitiveness rankings. The selection of these three dimensions is based on their most direct relevance in shaping the climate of uncertainty and transaction costs faced by economic actors (Kaufmann, Kraay, & Mastruzzi, 2010).

Table 2. Scores of Three Governance Dimensions, Economic Performance, and Infrastructure

Country Name	GE*	PS**	VA***	EP****	INF*****
Argentina	-0,38	-0,13	0,53	33,90	32,20
Australia	1,59	0,92	1,51	62,50	69,70
Austria	1,33	0,73	1,41	52,10	77,20
Bahrain	0,70	-0,37	-1,38	61,10	53,40
Belgium	1,04	0,40	1,33	56,50	72,70
Botswana	0,43	1,04	0,50	12,50	28,30
Brazil	-0,55	-0,41	0,38	55,30	29,80
Bulgaria	0,05	0,34	0,39	46,90	33,40
Canada	1,52	0,82	1,48	63,60	81,40
Chile	0,72	0,14	1,02	49,20	42,20
China	0,68	-0,51	-1,50	73,20	74,90
Colombia	-0,08	-0,72	0,21	48,40	31,00
Croatia	0,71	0,60	0,57	54,50	39,40
Cyprus	0,74	0,41	0,97	54,20	43,40
Czechia	1,11	0,97	1,08	57,80	60,40
Denmark	2,02	0,85	1,66	62,70	88,30
Estonia	1,26	0,66	1,22	43,40	59,20
Finland	1,74	0,71	1,63	49,00	85,00
France	1,14	0,34	1,15	59,80	72,00
Germany	1,19	0,59	1,46	64,20	77,50
Ghana	-0,09	-0,02	0,41	27,40	13,50
Greece	0,15	0,24	1,01	45,60	47,90
Hong Kong SAR, China	1,55	0,67	-0,32	70,50	80,70
Hungary	0,37	0,73	0,36	51,80	53,20

Country Name	GE*	PS**	VA***	EP****	INF*****
Iceland	1,56	1,21	1,45	45,90	77,90
India	0,48	-0,64	0,09	58,20	36,40
Indonesia	0,58	-0,40	0,14	58,70	30,20
Ireland	1,59	0,90	1,48	67,70	72,00
Italy	0,61	0,58	1,12	55,10	56,60
Japan	1,63	0,95	1,11	58,70	71,10
Jordan	0,39	-0,20	-0,77	33,90	34,50
Kazakhstan	0,15	-0,27	-1,00	46,40	43,60
Kenya	-0,30	-0,94	-0,12	34,90	15,10
Korea, Rep.	1,40	0,61	0,86	66,20	69,70
Kuwait	0,01	0,41	-0,59	49,60	45,10
Latvia	0,70	0,59	0,99	42,50	58,30
Lithuania	1,05	0,74	1,07	53,50	64,00
Luxembourg	1,91	1,05	1,63	54,50	66,10
Malaysia	0,88	0,17	0,09	74,10	53,50
Mexico	-0,20	-0,63	-0,12	53,00	20,80
Mongolia	-0,47	0,59	0,25	44,90	13,80
Namibia	0,03	0,54	0,58	21,70	13,90
Netherlands	1,63	0,66	1,56	60,30	80,50
New Zealand	1,53	1,36	1,69	45,10	61,80
Nigeria	-0,85	-1,77	-0,55	36,00	6,00
Norway	1,80	0,89	1,78	58,30	80,60
Oman	0,27	0,59	-1,00	48,60	51,20
Peru	-0,49	-0,52	0,06	48,80	20,00
Philippines	0,15	-0,57	-0,02	54,90	25,00
Poland	0,42	0,56	0,63	58,60	46,80
Portugal	0,99	0,71	1,21	51,80	64,00
Puerto Rico	-0,39	0,51	0,45	42,60	46,20
Qatar	1,20	0,99	-0,97	69,50	86,00
Romania	-0,09	0,37	0,50	43,80	43,60
Saudi Arabia	0,80	-0,21	-1,42	62,30	59,50
Singapore	2,32	1,42	-0,07	82,20	81,00
Slovak Republic	0,23	0,57	0,91	41,50	38,30
Slovenia	1,04	0,82	1,08	53,80	50,90
South Africa	-0,26	-0,67	0,74	34,50	20,40
Spain	0,75	0,29	1,19	59,70	62,20
Sweden	1,60	0,76	1,57	59,90	86,00
Switzerland	2,13	1,07	1,67	63,90	94,80
Taiwan, China	1,48	0,76	1,10	66,40	79,10
Thailand	0,17	-0,28	-0,45	68,50	43,10
Turkiye	-0,25	-1,01	-0,86	49,20	31,30
United Arab Emirates	1,60	0,68	-1,09	79,60	69,00

Country Name	GE*	PS**	VA***	EP****	INF*****
United Kingdom	1,16	0,51	1,26	54,90	70,10
United States	1,22	0,03	0,88	79,20	78,60
Venezuela, RB	-1,60	-1,19	-1,53	20,00	4,60

*Government Effectiveness, **Political Stability and Absence of Violence/ Terrorism, ***Voice and Accountability, **** Economic Performance, ***** Infrastructure
Source: Worldwide Governance Indicators (2023) and World Competitiveness Ranking (2025), data processed by the author

Unlike previous studies that focused primarily on bivariate correlations or single case studies, this research offers novel value by constructing a more comprehensive analytical model. This model not only examines the influence of governance variables separately but also includes them simultaneously with economic performance variables (such as macroeconomic stability) and infrastructure. This approach is crucial to avoid omitted variable bias and to determine whether the influence of governance remains robust when other factors traditionally considered the main engines of growth are taken into account. In other words, this research seeks to determine whether governance is an independent determinant or merely a side effect of economic prosperity.

Theoretical studies support the argument that quality institutions are the foundation of competitiveness. North (1990) in his institutional theory explains that institutions, both formal and informal, function to reduce uncertainty by providing stable rules of the game. When government effectiveness is high, the bureaucracy operates efficiently and professionally, thereby reducing transaction costs. When political stability is assured, long-term investment risks are reduced. When there is room for public voice and accountability, the resulting policies tend to favor the interests of the wider community and reduce rent-seeking behavior (Acemoglu & Robinson, 2012). These three factors collectively create an environment that enables companies to produce more productively and innovatively, ultimately enhancing national competitiveness.

Meanwhile, economic performance, characterized by stable growth, controlled inflation, and a healthy fiscal balance, remains a crucial prerequisite because it ensures macroeconomic stability, which reduces risk for investors (International Monetary Fund, 2014). Similarly, infrastructure serves as the backbone of economic activity. The World Bank (2017) notes that quality infrastructure can lower logistics costs and expand market access, while the OECD (2019) estimates its potential to increase national productivity by up to 20%. However, the effectiveness of this infrastructure, as previously mentioned, depends heavily on the quality of governance that manages and oversees it.

Therefore, this research is important not only to fill the academic gap in the literature on competitiveness in developing countries but also to provide sharper policy implications. By simultaneously examining the influence of governance, economics, and infrastructure, the results of this study are expected to provide empirical evidence that can encourage governments in developing countries to balance their budgets and concerns. The practical benefit of this research is providing data-based justification that strengthening institutions (governance) is not a side

project, but rather a fundamental investment that will determine the return on investment in infrastructure and economic stability itself. The innovative effort in this research is to present an analytical framework that allows stakeholders to more precisely identify which dimensions of governance are most impactful, so that policy interventions can be implemented more effectively and effectively.

Hypotheses

In this study, the researcher proposed the main hypothesis and several partial hypotheses as follows:

Main Hypothesis:

- **H0:** There is no significant influence from the governance dimensions (government effectiveness, political stability and absence of violence/terrorism, and voice and accountability), economic performance, and infrastructure on a country's competitiveness.
- **HI**: There is a significant influence of the governance dimension (government effectiveness, political stability and absence of violence/terrorism, and voice and accountability), economic performance, and infrastructure on a country's competitiveness.

Partial Hypothesis:

- **HIa**: Government effectiveness has a positive and significant influence on a country's competitiveness. An effective government is expected to create sound policies, efficient public services, and a secure regulatory environment, all of which support business activities.
- **HIb**: Political stability and absence of violence/terrorism has a positive and significant influence on a country's competitiveness. Political stability reduces uncertainty and risk, making the environment more attractive for long-term investment.
- **HIc**: Voice and accountability has a positive and significant influence on a country's competitiveness. Public accountability and participation are expected to encourage more responsive policies, reduce corruption, and increase government legitimacy, all of which are beneficial for the business climate.
- **HId**: Economic performance has a positive and significant impact on a country's competitiveness. A healthy economy creates strong demand and macroeconomic stability that support business.
- **HIe**: Infrastructure has a positive and significant impact on a country's competitiveness. Adequate infrastructure increases efficiency and connectivity, which are vital for productivity.

However, this research is also open to finding relationships that may be more complex or even contradictory to conventional hypotheses, particularly regarding political stability dan voice and accountability, as will be explained in the discussion of the results.

Methods

Data Types and Sources

This research uses secondary data from trusted and internationally recognized sources. The research design used is a cross-country study with a quantitative approach. The data used is pooled cross-sectional for the same point in time (for governance variables) and the most recent year (for competitiveness, economy, and infrastructure), because the focus of the research is on

between-country variation in one period.

The data used in this study are:

a. Competitiveness, taken from the World Competitiveness Ranking 2025 published by the World Competitiveness Center (IMD), a composite index assessed on a scale of 0-100.
b. Governance Dimension, data for three governance variables taken from Worldwide Governance Indicators (WGI) 2023, published by the World Bank. The WGI provides estimates for each country on a scale of -2.5 (very poor) to +2.5 (very good).
c. Economic Performance, in the form of sub-factor scores of Economic Performance, which is part of the World Competitiveness Ranking 2025. This score is also assessed on a scale of 0-100 and reflects a country's macroeconomic performance.
d. Infrastructure, in the form of sub-factor scores of Infrastructure which is also part of the World Competitiveness Ranking 2025, with a rating scale of 0-100.

Population and Sample

The research population is all countries assessed in World Competitiveness Ranking 2025, which totaled 69 countries. From this population, a sample of 69 countries was taken after conducting matching data with Worldwide Governance Indicators 2023 to ensure the availability of complete data for all variables. These 69 countries are spread across various continents (Europe, Asia, America, Oceania, Africa) and include developed countries, developing countries, and emerging market countries, thus providing sufficient variation for analysis.

Table 3. Operational Definition of Variables

No.	Variable	Category	Description	Unit	Data Source
1	Competitiveness	Dependent	The overall competitiveness score of a country.	Index (0 - 100), the higher the better.	IMD World Competitiveness Ranking 2025
2	Government Effectiveness	Independent	Perception of the quality of public services, the quality of bureaucracy, civil servant competency, and credibility of government commitment.	Index (-2.5 to +2.5), the higher the better.	Worldwide Governance Indicators (WGI) 2023
3	Political Stability & Absence of Violence/ Terrorism	Independent	Perception of the possibility of political instability and/or motivated violence politics, including terrorism.	Index (-2.5 to +2.5), the higher the better.	Worldwide Governance Indicators (WGI) 2023
4	Voice and Accountability	Independent	Perceptions about the extent to which citizens can participate in choosing the government, as well as freedom of expression, freedom of association, and freedom of the media.	Index (-2.5 to +2.5), the higher the better.	Worldwide Governance Indicators (WGI) 2023
5	Economic Performance	Control	A country's macroeconomic performance score (e.g., GDP, trade, employment, prices).	Index (0 - 100), the higher the better.	IMD World Competitiveness Ranking 2025 (Sub-factor)
6	Infrastructure	Control	A country's score of the quality	Index (0 - 100),	IMD World

	and availability of basic infrastructure and technology.	the higher the better.	Competitiveness Ranking 2025 (Sub-factor)

Technical Analysis and Estimation Models

To test the research hypothesis, multiple linear regression analysis was used. The regression model is formulated as follows:

$$\text{Competitiveness\_i} = \beta 0 + \beta 1(\text{GE\_i}) + \beta 2(\text{PS\_i}) + \beta 3(\text{VA\_i}) + \beta 4(\text{EP\_i}) + \beta 5(\text{INF\_i}) + \varepsilon \text{\_i}$$

Competitiveness_i	: Competitiveness score of country i.
β0	: Constant (intercept).
GE_i	: Score of Government Effectiveness country i.
PS_i	: Score of Political Stability and Absence of Violence/Terrorism country i.
VA_i	: Score of Voice and Accountability country i.
EP_i	: Score of Economic Performance country i.
INF_i	: Score of Infrastructure country i.
β1 to β5	: Regression coefficients that measure the magnitude of the influence of each independent/control variable on the dependent variable.
e_i	: Error term or residual for country i, which includes other factors not included in the model.

Data analysis was carried out using STATA 18 software with analysis procedures including:

a. Descriptive Statistics, to describe the basic characteristics of the data (mean, standard deviation, minimum, maximum) and its distribution through a histogram.
b. Classical Linear Regression Assumption Test, to ensure the estimation results Best Linear Unbiased Estimator (BLUE).
c. Normality Test (Shapiro-Wilk), to test whether residual model is normally distributed.
d. Multicollinearity Test (Variance Inflation Factor-VIF), to test for the presence of high correlation between independent variables that can confound coefficient estimates.
e. Heteroscedasticity Test (White Test and Cameron & Trivedi's Decomposition), to test whether variance residual constant between observations.
f. Regression Model Estimation, to calculate the regression coefficient, significance level (p-value), and the explanatory power of the model (R-squared and Adjusted R-squared).
g. Analysis Robustness, to make an estimate with robust standard errors to mitigate potential mild heteroscedasticity problems or other assumption violations, to ensure the stability of the results.

Interpretation of the results will focus on the magnitude, direction, and statistical significance of the regression coefficient (β). Significance is tested at the alpha level 5% (p-value ‹ 0.05). Value of R-squared will show how well the explanatory variables together are able to explain the variation in competitiveness scores between countries.

Findings And Discussion

Findings

Descriptive statistical analysis was performed before conducting causality analysis to understand the basic characteristics of the data used. Descriptive statistics for all variables are presented in Table 4.

Table 4. Descriptive Statistics of Research Variables

Variable	n	Mean	Std. Dev	Min	Max
Competitiveness	69	65.98571	17.69231	25.5	100
Government effectiveness (GE)	69	0.7200818	0.8164789	-1.599201	2.317472
Political stability and absence of violence/terrorism (PS)	69	0.2808382	0.6793456	-1.768438	1.424204
Voice and accountability (VA)	69	0.5873442	0.8981347	-1.531321	1.777254
Economic performance (EP)	69	52.73333	13.73405	12.5	82.2
Infrastructure (INF)	69	52.08889	23.41676	4.6	94.8

Source: Data processed by the author using STATA 18 (2025)

Competitiveness, the average competitiveness of the 69 sample countries is 65.99 with a relatively large standard deviation (17.69), indicating quite wide variations between countries. The minimum value of 25.5 (representing countries with very low competitiveness such as Nigeria, Namibia, and Venezuela) and the maximum value of 100 (representing top countries such as Switzerland, Singapore, and Hong Kong) confirm this disparity.

Government Effectiveness, the average score of 0.72 is in positive territory, indicating that in general the sample countries have government effectiveness above the global average, but the standard deviation of 0.82 and the range from -1.60 to 2.32 indicate a significant difference between countries with very effective bureaucracies (e.g., Singapore, Switzerland, and Denmark) and those with very ineffective bureaucracies (e.g., Brazil, Nigeria, and Venezuela).

Political Stability and Absence of Violence/ Terrorism, has the lowest average (0.28) among the three governance variables, with a fairly large variation (Std. Dev. 0.68). This reflects that in the sample, there are countries with very fragile political stability (negative scores) such as Turkey, Venezuela, and Nigeria alongside very stable countries such as Singapore, New Zealand, and Iceland.

Voice and Accountability, the average is 0.59 with the highest dispersion (Std. Dev. 0.90), indicating a very large variation in the level of civil liberties and political participation between sample countries. There are countries with high civil liberties including freedom of speech, political participation, and media freedom such as Norway, New Zealand, and Switzerland. On the other hand, there are also countries that still need to improve in freedom of speech and public

participation such as Saudi Arabia, China, and Venezuela.

Economic Performance, as the first control variable shows an average result of 52.73 with a standard deviation of 13.73. This occurs because there are countries with very low economic performance (12.5) such as Namibia, Venezuela, and Botswana, but on the other hand there are also countries with very high economic performance (82.2) such as Singapore, the United Arab Emirates, and the United States.

Infrastructure, as the next control variable, has an average of 52.09 with a standard deviation of 23.42. Data in the infrastructure variable has the highest variability when compared to other variables because its values are spread very widely from 4.6 to 94.8. This shows that there is a very large inequality in terms of infrastructure because there are countries that have very poor infrastructure with a value of 4.6, namely Venezuela, and there are also countries that have a very high level of infrastructure support with a value of 82.2, namely Switzerland.

Testing Classical Assumptions and Model Quality

1. **Normality Test (Shapiro-Wilk)**

   Normality test for residual the full regression model (after all variables are entered) produces p-value which is greater than 0.05, which indicates that residual normally distributed, but tests on each independent variable show that Political Stability (p=0.00406) and Voice and Accountability
   (p=0.00036) is not normally distributed individually. This abnormality may be caused by the presence of outlier or asymmetric distribution in the data governance. In linear regression with a large enough sample (n=69), the critical assumption of normality is that residual, not on each predictor variable. Therefore, this partial non-normality does not necessarily invalidate the model, but is a consideration for careful interpretation and use of robust standard errors.

2. **Multicollinearity Test (VIF)**

   Mark Variance Inflation Factor (VIF) for each variable was examined with an average VIF of 4.72 indicating a tolerable level of multicollinearity. However, there were two variables that stood out, namely Government Effectiveness (VIF=8.57) and Infrastructure (VIF=6.90) indicates moderate collinearity. This is understandable because countries with effective governance tend to be able to build and maintain good infrastructure. A VIF value below 10 is generally considered manageable, especially with an adequate sample size. The other three variables (Political Stability, Voice and Accountability, and Economic Performance) have a low VIF (<3.5), indicating good independence.

3. **Heteroscedasticity Test (White Test and Cameron & Trivedi)**

   The two tests, namely White Test (chi^2=24.62, p=0.2162) and Cameron & Trivedi's IM-Test (chi^2=31.2, p=0.2059), resulting in p-value which is well above 0.05. This provides strong evidence that there is no heteroscedasticity problem in the model. In other words, variance residual is homoscedastic (constant) across all observations, so that standard errors of the regression coefficients can be relied upon for statistical inference.

4. **Explanatory Power of the Model (Goodness-of-fit)**

The regression model shows very high explanatory power. The resulting R-squared is 0.9268, which means that the combination of the five independent and control variables in the model is able to explain 92.68% of the variation in competitiveness scores among 69 countries. Adjusted R-squared (0.9204) which remains very high confirms that the high R-squared is not due to the large number of variables, but because of the strength of the predictive relationship. The F statistic (144.35) with p-value 0.0000 rejects the null hypothesis that all regression coefficients are equal to zero, confirming that the overall model is significant.

Regression Estimation Results and Interpretation

After the classical assumptions are met, the estimation results of the multiple linear regression model are presented in Table 5. For caution, the estimation results are also presented with robust standard errors which provides consistent results, strengthening the validity of the findings.

Table 5. Regression Estimation Results (The Effect of Governance, Economic Performance, and Infrastructure on Competitiveness)

Variable	Coefisien (β)	Std. Dev	t-stat	p-value	Interpretation
Constant	-0.218	0.454	-0.48	0.633	Not significant
Government effectiveness (GE)	13.263***	1.359	9.76	0.000	Very positive influence significant
Political stability and absence of violence/terrorism (PS)	-3.683**	1.761	-2.09	0.041	Significant negative effect
Voice and accountability (VA)	-3.350**	1.044	-3.21	0.002	Very negative influence significant
Economic performance (EP)	0.150**	0.072	2.08	0.042	Significant positive effect
Infrastructure (INF)	0.353***	0.042	8.42	0.000	Very positive influence significant
R-squared	0.9268				
Adj. R-squared	0.9204				
F-statistic	144.35 (p=0.0000)				
n	69				

*p<0.10, **p<0.05, ***p<0.01

Source: data processed by the author using STATA 18 (2025)

Government Effectiveness (H1a SUPPORTED), with a positive coefficient of 13.263 being the largest among all variables and significant at the 1% level. Assuming all other variables are constant, a 1-unit increase in the score Government Effectiveness score (e.g., from 0.5 to 1.5 on a scale of -2.5 to 2.5) is associated with a 13.26-point increase in the competitiveness score (0-100).

This very large impact confirms the hypothesis and places bureaucratic effectiveness, policy quality, and government policy implementation as the most critical driver of national competitiveness. This finding is consistent with the WEF (2020) statement and North's (1990) institutional economic logic.

Infrastructure (H1e SUPPORTED), with a positive coefficient of 0.353 and highly significant, such that a 1-point increase in the infrastructure score (on a scale of 0-100) is associated with a 0.35 point increase in competitiveness, other things being equal. Although the impact per unit is smaller than government effectiveness, the role of infrastructure remains vital and significant. This supports the conventional view that good physical and digital infrastructure is a prerequisite for economic efficiency.

Economic Performance (H1d SUPPORTED), with a positive coefficient of 0.150 and significant at the 5% level, it can be interpreted that a 1-point increase in the economic performance score is associated with a 0.15 point increase in competitiveness, other things being equal. This shows that healthy macroeconomic conditions have a smaller direct impact compared to governance and infrastructure in this model. Perhaps economic performance also serves as outcome from governance and good infrastructure, as well as being an input for competitiveness.

Political Stability and Absence of Violence/Terrorism (H1b REJECTED), there is a counter-intuitive finding, namely a negative coefficient (-3.683) and significant at the 5% level, which means that other things being equal, a 1-unit increase in the political stability score is associated with a 3.68-point decrease in competitiveness. This result contradicts conventional hypotheses. A possible explanation is that very high political stability scores in the WGI capture not only "good stability" (democratic and dynamic), but also "bad stability" that is authoritarian and repressive. Authoritarian regimes can often create superficial stability (superficial stability) by suppressing opposition and conflict, but at the same time creating an environment that is rigid, uninnovative, and prone to policy errors due to a lack of check and balance. This kind of stability may attract investment in certain state-guaranteed sectors (Jensen, 2008), but it hinders the creativity, entrepreneurship, and adaptability necessary for high competitiveness in the economy and
science. In other words, the relationship between political stability and competitiveness may be in the form of an inverted U-shaped curve (inverted-U), where a moderate level of stability is optimal.

Voice and Accountability (H1c REJECTED), there is a counter-intuitive finding, namely a negative coefficient (-3.350) and very significant (p=0.002). All else being equal, a 1-unit increase in both voice and accountability scores is associated with a 3.35-point decrease in competitiveness. This is a most surprising finding, as civil liberties and accountability have long been considered the foundations of democracy and good governance. Potential explanations are similar to those for political stability, namely that very high levels of participation and accountability, especially in immature or highly fragmented political systems, can lead to inefficiencies. These could be: (1) Too much veto players slowing down or blocking the decision-making process necessary for economic reform (Rodrik, 2011); (2) Short-term populist policies that are driven by electoral pressure but are detrimental to long-term fiscal or economic health;

(3) Conflicts of interest and prolonged public debates that create policy uncertainty. Li & Resnick (2003) found evidence that excessive accountability can reduce growth, suggesting that there may be trade-off between full participation/accountability and the efficiency of economic decision-making, at least in the short term or in a transitional context.

Discussion

The findings of this study provide a complex and nuanced picture of the determinants of competitiveness. On the one hand, they strongly confirm the central role of government effectiveness and infrastructure, which aligns with mainstream literature and the frameworks of institutions such as the WEF and the World Bank. Countries such as Switzerland, Singapore, and Denmark, which top the competitiveness rankings, also have score of government effectiveness very high.

On the other hand, this study raises significant questions about the simple linear assumption of political stability and voice/accountability. The significant negative relationship challenges the conventional narrative that "more is always better." This finding suggests that the concept of good governance may be more complex than simply maximizing each indicator, and perhaps what is needed is an optimal combination or balance between these dimensions. A country needs sufficient stability to provide certainty, but also flexibility and room for change and innovation. Similarly, a country needs accountability to prevent abuse of power, but also the capacity to make decisive, evidence-based decisions without getting caught in political deadlock.

These findings also highlight the importance of context and institutional quality. Stability in mature democracies (e.g., Germany) may have different implications than stability in authoritarian regimes. Accountability in systems with strong institutions and a deliberative political culture (such as the Scandinavian countries) may be more efficient than in systems with high polarization and weak institutions.

Overall, the model in this study was successful in predicting competitiveness ($R^2 > 92\%$), but its counter-intuitive findings actually open up space for further questions and in-depth research, perhaps using non-linear methods, interactions between variables, or more qualitative-based analysis in specific cases.

Theoretical Implications

This study makes several important contributions to the development of theory, particularly regarding institutional economics and the determinants of competitiveness. First, the findings in this study confirm and strengthen Institutional Theory with strong findings regarding government effectiveness supporting the core of Douglass North's theory (1990). Institutions that reduce transaction costs and create certainty, in this case a competent bureaucracy and credible policies, turned out to be the strongest predictors of competitiveness. This strengthens the argument that sustainable economic development cannot be separated from state capacity building.

Second, the findings of this study challenge the assumptions of linearity and universality in studies of governance with the presence of negative results for political stability and voice and

accountability is a challenge for approaches that often look at governance as a set of checkboxes that must be met. This finding supports the idea that the relationship between political institutions and economic performance may be non-linear, conditional, or even subject to trade-offs, as hinted by Acemoglu & Robinson (2019) in The Narrow Corridor that prosperity often arises from a fragile dynamic balance between state power and civil society, not from the maximization of one side alone. Authoritarian stability can stifle innovation, while unchecked accountability can paralyze decision-making.

Third, the results of this study also introduce nuance to the discussion of stability vs. democracy by adding depth to the long-standing debate about whether authoritarian regimes are better for economic growth. The results show that while superficial stability may exist in authoritarian regimes, this type of stability is also associated with lower competitiveness when other factors are controlled. This provides empirical support for the view that genuine and healthy stability for long-term growth is one that stems from legitimacy, institutional adaptability, and rule of law, not from repression.

Fourth, the findings of this study highlight the importance of interactions and configurations by suggesting that the influence of one governance dimension may depend on the level of other dimensions. For example, voice and accountability may have a positive impact on competitiveness only if accompanied by high government effectiveness (the state is able to channel participation into effective policies). Without adequate state capacity, high participation can actually lead to deadlock (gridlock). Therefore, future research could test such interactions.

Policy Implications

In addition to theoretical implications, the findings of this study also contain strong and practical policy messages for governments that want to increase their country's competitiveness, namely:

1. Government Effectiveness Revolution and Bureaucratic Reform

   The most important investment to increase competitiveness is improving the quality of government from within, which will have a far greater impact than simply building new roads or offering fiscal incentives if the bureaucracy remains slow and untrustworthy. This can be achieved through meritocratic-based bureaucratic reform, which involves establishing a recruitment, promotion, and remuneration system based on performance and competence merit-based), not patronage or seniority. The World Bank (2018) emphasized that meritocracy significantly improves business regulation. Furthermore, simplifying and digitizing public services by reducing cumbersome licensing procedures, automating services, and creating single submission point for businesses. Measurable targets include reducing the time and costs of starting a business and managing cross-border trade. Furthermore, strengthening policy-making capacity by improving the quality of policy analysis within the government by recruiting experts, establishing data and research centers, and implementing a collaborative approach evidence-based policy making. Improving internal coordination and accountability is also important by clarifying responsibilities between ministries/agencies, implementing a performance management

system for bureaucrats, and creating robust internal feedback mechanisms.

2. Continue to Invest in Infrastructure, with an Emphasis on Quality and Connectivity.

Infrastructure remains a critical driver, but investments must be smart and integrated with governance improvements. Focus on connecting and digital infrastructure, such as projects that improve logistics connectivity (logistics hubs, efficient ports) and digital infrastructure (national broadband networks, cybersecurity). It is also necessary to implement good project governance by implementing transparent and competitive procurement practices, strict project oversight, and ongoing maintenance mechanisms to ensure infrastructure investments do not become wasteful. Furthermore, it is also crucial to create healthy public-private partnerships (PPP) by developing a clear, fair, and attractive PPP framework to fund major infrastructure projects, while protecting the public interest.

3. Pursuing Healthy and Stable Economic Performance.

Prudent macroeconomic policies are a necessary foundation, although its direct impact may not be as significant as institutional factors. Therefore, a sustainable fiscal policy is needed to maintain the budget deficit and government debt at a safe level to maintain market confidence. Furthermore, the government must maintain price stability through an independent and credible central bank to control inflation. Prudent financial sector regulations are also important to ensure the stability of the financial system to support investment and growth.

4. Approaching Political Stability and Accountability with a Dynamic Equilibrium Paradigm, not Maximization.

The results of this study suggest that we should not assume that greater stability and greater accountability are always better, as the opposite may be true. Thus, a political environment that is stable enough for investment and sufficiently responsive to the public can be created, without having to descend into authoritarianism or democratic paralysis. Strategic steps that can be taken are to build stability through inclusion and legitimacy, not repression, by encouraging social dialogue, accommodating excluded groups, and resolving conflicts through peaceful legal and political channels, because true stability comes from a sense of justice and shared ownership, not from fear. Furthermore, it is also necessary to establish institutions that are not only representative but also capable of making decisions. This could include: (a) strengthening the role of independent expert/planning bodies in the legislative process; (b) designing mechanisms that limit the cycle of short-term populist policies; (c) improving the quality of public debate through political education and responsible media. The application of the principle of smart accountability can also be an alternative, by focusing on outcome-based accountability rather than just adherence to procedures (compliance-based). Develop a robust policy monitoring and evaluation system so that the public can judge government performance based on evidence, not promises. Learn from The Narrow Corridor, as stated by Acemoglu & Robinson (2019), policies must encourage a dynamic and mutually reinforcing balance between capable states and a vibrant civil society, where each controls the other's access.

Conclusion

This study successfully tested the influence of the dimensions of governance, economic performance, and infrastructure on national competitiveness through a cross-country study of 69 countries. The main conclusion of this study is that the main hypothesis (H1) is accepted. There is a statistically significant influence of these five variables on a country's competitiveness. The model also has very high explanatory power ($R^2 > 92\%$).

Government Effectiveness is the single strongest driver of competitiveness. This finding is consistent with institutional theory and confirms that the quality of government bureaucracy, policies, and implementation is an irreplaceable foundation for
create a productive and competitive economic environment.

Infrastructure and economic performance also have a positive and significant impact, although the per-unit impact is smaller than government effectiveness. Both remain important components of a competitiveness-boosting policy package.

The most provocative finding is the significant negative relationship between Political Stability and Voice/Accountability on competitiveness. This challenges the conventional narrative and indicates that the relationship between the political dimensions governance and economic performance may not be linear and full trade-off Authoritarian and repressive stability, as well as excessive accountability in an immature system, can actually hinder the innovation, adaptability, and efficient decision-making necessary for high competitiveness.

The main policy implication is the need for a paradigm shift. Rather than simply pursuing improvements in each indicator, governance, the government must focus on: (a) deep bureaucratic reform and state capacity building as the number one priority; (b) smart and well-managed infrastructure investment; and (c) achieving the difficult dynamic balance between political stability, accountability, and flexibility to create an environment that is stable enough to attract investment but also flexible enough to allow for innovation and adaptation to change.

Research Limitations and Directions for Future Research

This study has several limitations that open up opportunities for further study. First, the nature of cross-sectional limits causal inference and dynamic analysis, so future research is recommended to use panel data. Second, sample coverage is not universal and may be biased, so it needs to be expanded. Third, the use of composite scores may mask important variations at more detailed indicator levels. Fourth, the linear model used may be too simplistic to capture complex relationships, so nonlinear models need to be considered. Fifth, this study does not reveal detailed causal mechanisms, so path analysis or comparative case studies are needed.

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