Abstract

In this paper we examine the relationship between government functionality and voter turnout. Prior studies show that high voter turnout is said to increase satisfaction in government. Developed democracies are linked to higher voter turnout as well. To compare government functionality and voter turnout, we merge two, cross national datasets from 2006-2024. We merge a functioning government index, and compare it to Voter turnout of the Voting-Age population. Through correlation and regression analysis, we find a statistically significant, though moderate, positive relationship between government functionality and voter turnout. The results indicate a non-linear relationship; voter turnout stabilizes at mid-levels of functionality and increases as institutional performance improves. These findings contribute to the broader discourse on democratization by indicationing a linkage between high government function, and high voter turnout.

Introduction

The relationship between a country's government and its voters is very prevalent in the study of political science. A large body of research exists that studies these correlations. Correlations have been found between higher voting turnouts and government functionality and levels of democratization. There are also many schools of thought, and studies, that address why people may choose not to vote and how that correlates to their perception of government functionality. Additional research addresses how low voter turnout can negatively impact countries. Each of these studies tends to measure these concepts in different ways, since they are fairly abstract concepts, making it difficult to make generalizations. However, there is limited available research where government functionality acts as the independent variable, making our research unique. Additionally, measuring this relationship at a country-level is unique, as most research is limited to specific case studies. This paper examines the correlation between the functionality of government and voter turnout. Can the effectiveness of a government explain constituents' participation?

This topic is very important to democratization. Voter participation is crucial to a functioning democracy. Constituents' opinions should determine a government's policies and outcomes. If constituents stop participating and voting, a government cannot effectively provide the needs of the people. In order for a democracy to be legitimate, there has to be a close relationship between political elites and the citizens. A sort of feedback loop should exist to hold officials responsible for reflecting the citizens' wants.

Functioning government, as defined by the Economist Intelligence Unit, is the extent to which a governing body is working and reflective of the desires of citizens. Logically, this would mean the decisions of the government would be the results of elections and voters' choices.

Therefore, in a comparison of countries, we assume voter turnout to be higher amongst countries with higher scores of functioning governments. The government's high functionality encourages voters to turnout and cast their ballots as they choose, because voters think their opinions will be heard and recognized.

To accomplish this, two datasets were merged, both provided by *Our World in Data*.[1][2] One measures Functioning Government Index as an interval variable, on a scale of one to ten. The other measures voter turnout of the voting-age population, using percentages. Both used a country-level unit of analysis for the years of 2006-2024. We found there to be a statistically significant positive correlation between functioning government and voter turnout, implying that those with a higher functioning government are more likely to vote.

Literature Review

Precedents for this research come from Rose, 1967, as he discusses the potential for growth within the field of voters and elections. He describes it as an emergent field, and proposes comparison of aggregate level voting data across countries. He argues research further within this field is important as elections themselves serve to provide lines of succession, control policy outcomes, influence policy decisions of government, and secure legitimate power.

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[1] Economist Intelligence Unit (2006–2024) – processed by Our World in Data. "Functioning Government Index" [dataset]. Economist Intelligence Unit, "Democracy Index 2021: The China Challenge"; "Democracy Index 2022: Frontline Democracy and the Battle for Ukraine"; "Democracy Index 2023: Age of Conflict"; "Democracy Index 2024: What's Wrong with Representative Democracy?"; Gapminder, "Democracy Index v4" [original data]. Retrieved April 19, 2025, from https://ourworldindata.org/grapher/functioning-government-index-eiu.
[2] V-Dem (2025) – processed by Our World in Data. "Voter Turnout of Voting-Age Population" [dataset]. V-Dem, "Democracy Report v15" [original data]. Retrieved April 19, 2025, from https://ourworldindata.org/grapher/voter-turnout-of-voting-age-population.

In researching existing studies on democratic government functioning and voter turnout, a few theories held consistently true. Citizens who actively vote are more likely to perceive their government to be highly functioning (Rose, 1967; Kostelka, 2018; Blais, 2007).

In voting on an issue, citizens practice civic engagement. Through this engagement they are informed, to a degree, on the issue or person that is being voted on. These citizens are generally more concerned with how their government functions, meaning citizens vote in ways that increase functionality of government. (Ezrow 2014; Saunder, 2011; Rosema, 2007). A functioning government acts on citizens behalf, and citizens contribute to the government through the act of voting (Yang, 2005). Trust and functionality of the government are proven to increase the turnout of the voting population (Grönlund, 2007). It is proven that citizens are more satisfied with their government, and thus its functionality, when election outcomes match up with an individual's vote (Kostelka, 2018; Blais, 2007). If there's a higher turnout, it stands to reason that there will be a higher degree of trust within the government. More citizens will be voting on matters pertaining to the government, thus a larger population of citizens will be satisfied with government matters, or functionality. In addition, a great trust in government institutions, and a greater confidence in the functionality of government are proven to increase the turnout of the voting population (Grönlund, 2007).

In the same sense, low voter turnout is taken to be an indicator of a decrease of trust in government and government institutions. Developing democracies, like India, lack voter turnout to be able to accurately gauge and create policies reflective of citizens (Jaison, 2025). With low voter turnout, who gets elected and the policies put into plate only reflect a select few, as politicians see no need to cater to a base that does not vote. People not voting theoretically implies an underrepresented group of the population whose preferences are not considered

(Lijphart, 1996; Rosema, 2007; Stockemer, 2015). In the same sense, low voter turnout is taken to be an indicator of a decrease of trust in government and government institutions. Underdeveloped democracies have a proven lower voter turnout compared to developed democracies (Stockemer, 2015). Low voter turnout indicates a lack of trust in government institutions(Lijphart, 1996), as well as creates a less accurate gauge of public opinion (Jaison, 2025). With low voter turnout, who gets elected and the policies put into plate only reflect a select few, as politicians see no need to cater to a base that does not vote (Jaison, 2025).

We propose that this evidence links the functionality of government to voter turnout. It is established that trust in government increases voter turnout, and satisfaction in a government is heightened with greater voter turnout. To this we propose that a higher voter turnout means an increase in the functionality of a government. If a democracy is high functioning, there is consistently high voter turnout over the time period. With more people's opinions expressed through voting, a democracy may be able to more accurately gauge public opinion and act in accordance. If there is a higher voter turnout, it is expected that there will be a greater index of government functionally. We strive to find a positive correlation between high voter turnout, and the degree to which a government functions.

➢ Hypothesis: We expect as government function increases, it is likely that voter turnout will increase.

Data & Research Design

The two data sets, Functioning Government Index and Voter Turnout of Voting-Age population, will be employed in quantitative, cross-national, longitudinal research design. This research design will allow for a systematic comparison of functioning government and voter turnout

across multiple countries and years. The data will provide patterns and relationships between the two variables. To address the stated research question, this research study considers two theoretical constructs: Functioning Government and Voter Turnout. Voter Turnout is measured through the actual level of citizen participation through active voting to present a direct indicator of electoral engagement.

A functioning democratic government represents an institutional system in which the legislative and judicial branches serve to balance and counteract the decisions of the executive branch (Rose, 1967). In addition, a functioning government should conduct itself in the interest of its own citizens, with the expectation of civic engagement and contribution from the public (Yang, 2005). Voter Turnout is defined as the proportion of eligible individuals who participate in the electoral process by casting votes in a national election. This study measures voter turnout using official electoral results, more specifically the percentage of the voting-age population that actively participated in the election (Voter Turnout of Voting-Age Population).

The concept of a functioning government is defined by the Economist Intelligence Unit's Democracy Index (2006–2024). This index combines expert evaluations and representative survey data to assess access to political institutions and the protection of individual rights. Functioning government will act as the independent variable while voter turnout will act as the dependent variable. The Functioning Government Index is scored on a scale of 0 to 10, where ten represent the strongest institutional performance and zero represents the weakest.

There are three main measurement issues: cross national comparability, index subjectivity and temporal consistency. Cross national comparability may cause a falter in the data as voter eligibility laws may differ across countries and can influence reported turnout figures. However, the study and data set using "Voting-Age Population" to combat this in order to ensure a

standardized baseline. Index subjectivity presents an issue as the Functioning Government Index is based on expert opinion. This is combated by representative citizen survey data to balance institutional evaluations with public opinion. Finally Temporal Consistency is an issue because both government performance and voter turnout fluctuate based on political cycles or external crises. This is combated by the use of multi-year data to average out the single election anomalies. However, for each year we also made note of several missing values. While these were omitted from our overall data analysis, this may also have caused measurement issues.
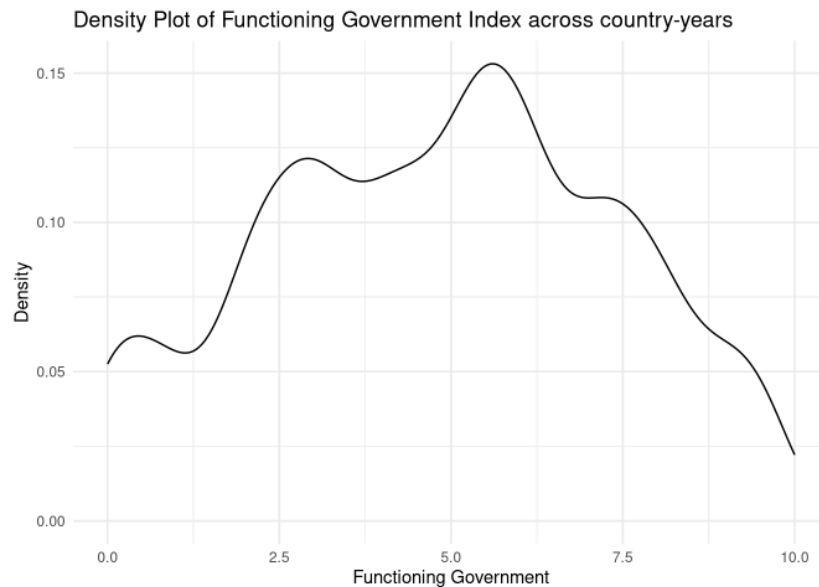
Analysis, Findings & Conclusions

Figure 1: The above figure displays a density plot of Functioning Government Index, as displayed, the range is wide starting at zero and ending at 10 with one mode, in a positively skewed manner. The data suggests that a majority of countries lie above 5.0 Functioning Government Index in 'High Functioning Government Index'.
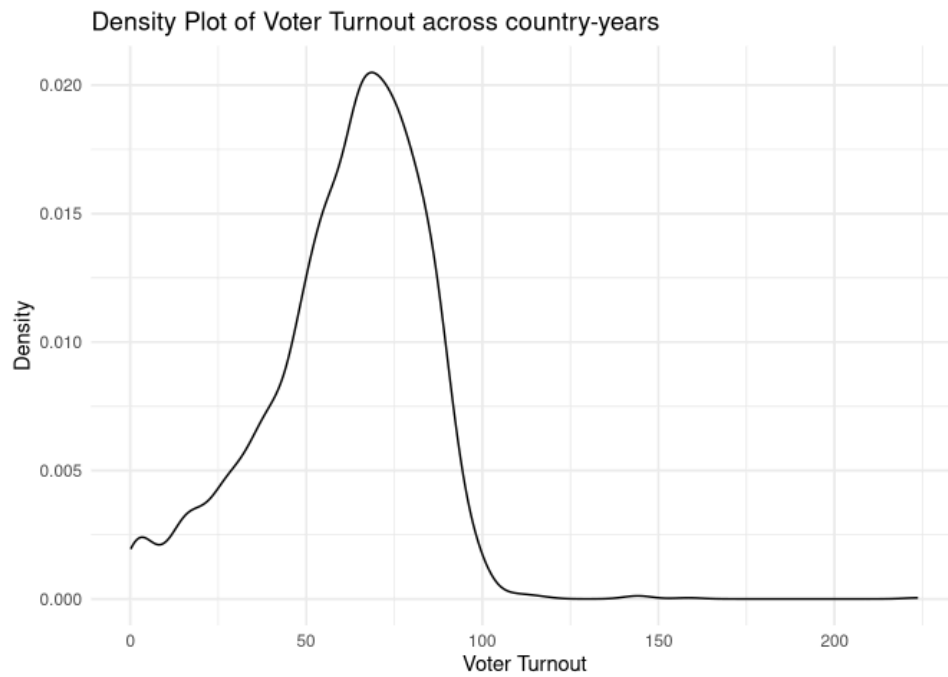
Density Plot of Voter Turnout across country-years

Figure 2:The second figure displays a density plot of Voter Turnout across country-year. The range exists from 0 to 200. The graph is positively skewed with the mode generally around 55.

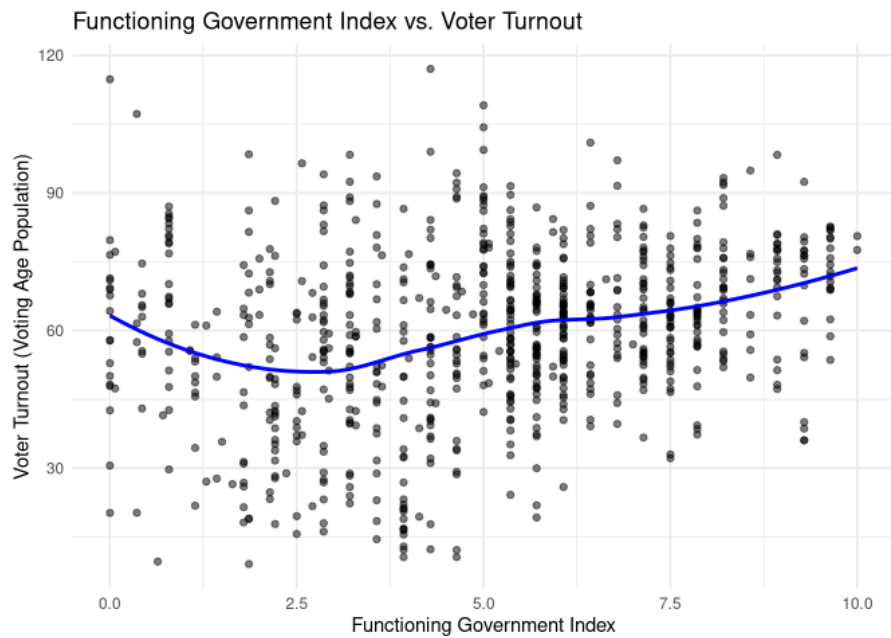## Functioning Government Index vs. Voter Turnout

Figure 3: The Relationship between Functioning Government Index and Voter Turnout

Above, we see a scatterplot of the relationship between our independent variable and dependent variable. Each point reflects a country's values of each variable. The blue line is a line of best fit, representing the conditional mean of *Voter Turnout* given *Functioning Government*, effectively modeling the expected value of turnout rate based on the strength of a country's institutional performance. The plot reveals a non-linear relationship: voter turnout declines slightly at the lowest levels of functioning government, stabilizes around the middle and then gradually increases as the functioning government index increases.

We found Pearson's coefficient value (r) to be 0.25, thus indicating some sort of positive relationship, although weak. Therefore, it can be said that there is a correlation between government functionality and voter turnout. We found the p-value of the data to be 8.153e-13, meaning the probability of observing our dataset if there were truly no correlation is extremely low. The results of our probability calculations indicate that we can reject the null hypothesis (no correlation between our two variables), and conclude that there is a statistically significant relationship between government functionality and voter turnout. Additionally, our 95% confidence interval is between 0.18 and 0.31, meaning we can be 95% sure that the population data will fall within this range of correlation. The confidence interval remains relatively narrow throughout the distribution which suggests that the estimates are precise for most of the sample. Since this range does not include 0, we have further evidence that our observed effect is statistically significant.

Additionally, the results of our linear regression analysis indicate the following equation for our line of best fit:

$$Y_i = 28.97 + 2.46(\textit{Score of Functioning Government})$$

The p-value of this regression was less than 0.001 (three stars), again indicating statistical significance. This equation indicates again a slight positive relationship between our variables. When calculated for each country individually, however, our results vary in standard error and some were found to not be statistically significant. This indicates that the relationship between government functionality and voter turnout is somewhat dependent on the country.

Our results indicate a relationship between our variables, meaning that the level of government functionality is important when it comes to expecting voter turnout. Government functionality may indicate political stability, a trustworthy electoral process, and an implementation of relevant policy, all of which may encourage more voting. Further research is necessary to determine the cause of higher voter turnout and would be important to see how countries can encourage more political participation. This is absolutely necessary in order to make sure the population is accurately represented in government and legislation.

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