Independent Analysis Project: Do Political Participations lead to Better Economic Governance?

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# Introduction

Generally speaking, people can get involved in political institutions and make their voices heard in governance through political participation such as voting, protesting, and social movements. When the political or economic environment changes, groups of people who are impacted will actively participate in politics to force the government to improve policy. In Mexico, a political movement coalition of poor people arose to demand democracy from the Mexican government, showing that political participation can lead to improvements in the political environment (Rubin, 1997, pp. 210.). This paper aims to explore whether this relationship extends to economic concerns: will a high level of political participation around economic issues force the government to improve economic governance? This research will discuss the relationship between levels of political participation and government expenditure as an outcome of economic governance among different countries with empirical analysis.

# Research Design

In this paper, the research model uses political participation as the independent variable to explain its influence on economic governance. I use data from the 2017-2021 World Value Survey (WVS) Wave 7 questionnaire to measure political participation and data from the World Bank’s World Development Indicators (WDI) to measure economic governance.

## Research variables

### Dependent variable: economic governance

In this research, I measure economic governance by using government expenditure on providing goods and services to people. It is direct for people to distinguish a good or bad economic and social policy based on their receiving of benefits and aids from government, which directly reflects the efficacy of economic governance. Since the WVS are conducted from 2017 to 2021, the research calculated average government expenditure as a percentage of GDP from the same period among different countries as the indicator for economic governance. By taking the mean of expenditure, we can preserve the largest sample size possible in case some countries only have partial data between 2017 to 2021.

### Independent variable 1: social movements

Regarding political participation, the research will use two main components of political participation: social movements and political activism as the independent variable. By observing average intensity levels of social movements and political activism, we can understand the degree of political participation in a country.

The WVS questionnaire, however, only asks questions about people’s involvement in social movements and political activism in a general sense, and not about particular policy issues. This problem is addressed by filtering respondents who chose economic issues as their first response to the question of the most important issues of the country for the next ten years (See Appendix I). From there, I further filtered respondents who responded that the government should take more responsibility to provide goods and services rather than individuals should (See Appendix I). Therefore, we are convinced that our observations prioritize economic issues and that when they engage in social movements and political activism, they are motivated mainly by economic issues such as their unsatisfaction about economic governance.

For social movements, WVS asks about people’s involvement in petitions, boycotts, peaceful demonstrations and strikes. The questions ask whether people did, might, or didn’t engage any of the four actions. Then, I created a scale of participation in social movements from 0 to 1, based on individuals’ answers to the questions (See Appendix I).

We also consider the radicalization level increases as the question goes on. So, these four different types should have different significance in contributing to social movements. In the end, we aggregate four weighted answers that are calculated based on their significance dividing 1 into 4 levels of weight, as the indicator for social movements (See Appendix I).

### Independent variable 2: political activism

For political activism, WVS asks about people’s experience in an active role in political activities such as political donations, contacting government officials, encouraging actions and voting. Likewise, we regard questions as in possibility scale and questions have different weights of significance for measuring political activism. I recoded the four questions and calculated the indicator for political activism in the same way as for social movements (See Appendix I).

### Control variables

In this research, I selected three control variables from both WDI and WVS datasets. Firstly, corruption might influence the effectiveness of a government’s economic and social policies. Policies in governments with abundant corruption can be manipulated by influential interest groups for their monopolistic benefits. Moreover, corruption makes policy hard to implement because the budget has been embezzled. We measure corruption from WVS by collecting respondent’s perception of the rate of corruption in their countries (See Appendix I).

Secondly, economic development can have a direct effect on how much the government can spend on economic and social policies. Countries that are well developed have more generous budgets to address problem of social equity, whereas developing countries might have to utilize most of the budget to build up economy. To measure economic development of a country, we use average GDP per capita (constant 2015 US dollar) from 2017 to 2021 from WDI dataset.

Thirdly, owing to the fact that unemployment is a notable and crucial economic problem, when a country is facing a severe unemployment situation, it might incentivize government to focus on addressing the problem directly, thus it will affect the allocation of financial resources by the government. We measure unemployment of a country by using average unemployment rate as percentage of total labor force from 2017 to 2021 from WDI dataset.

## Research hypothesis

### Hypothesis 1: higher level of social movements leads to good economic governance.

Figure 1

Chart, scatter chart

Description automatically generated

Source: Inglehart, R., C. Haerpfer, A. Moreno, C. Welzel, K. Kizilova, J. Diez-Medrano, M. Lagos, P. Norris, E. Ponarin & B. Puranen et al. (eds.). (2022). World Values Survey: Wave 7. Madrid, Spain: JD Systems Institute. Retrieved from <http://www.worldvaluessurvey.org/WVSDocumentationWVL.jsp>; World Bank. (2022). World Development Indicators. Retrieved from <https://datacatalog.worldbank.org/dataset/world-development-indicators>

From the plot above, we can see that social movements might have a positive correlation with economic governance—countries with higher levels of social movements might have better economic governance. Country might be forced to address economic or social equity problems when people are engaging in frequent social movements to express dissatisfaction about the status quo. However, this relationship needs to be tested with a regression model for further verification.

### Hypothesis 2: higher level of political activism leads to good economic governance.

Figure 2

A picture containing graphical user interface

Description automatically generated

Source: Inglehart, R., C. Haerpfer, A. Moreno, C. Welzel, K. Kizilova, J. Diez-Medrano, M. Lagos, P. Norris, E. Ponarin & B. Puranen et al. (eds.). (2022). World Values Survey: Wave 7. Madrid, Spain: JD Systems Institute. Retrieved from <http://www.worldvaluessurvey.org/WVSDocumentationWVL.jsp>; World Bank. (2022). World Development Indicators. Retrieved from <https://datacatalog.worldbank.org/dataset/world-development-indicators>

From the scatter plot, political activism might have a weak positive correlation with economic governance. Through participating in political activities inside the political institutions, it is likely that the policy makers would address people’s voices and interests under economic governance.

This relationship needs to be tested with a regression model for further verification.

### Research model

# Regression Analysis

Table 1

A screenshot of a computer

Description automatically generated with medium confidence

Source: Inglehart, R., C. Haerpfer, A. Moreno, C. Welzel, K. Kizilova, J. Diez-Medrano, M. Lagos, P. Norris, E. Ponarin & B. Puranen et al. (eds.). (2022). World Values Survey: Wave 7. Madrid, Spain: JD Systems Institute. Retrieved from <http://www.worldvaluessurvey.org/WVSDocumentationWVL.jsp>; World Bank. (2022). World Development Indicators. Retrieved from <https://datacatalog.worldbank.org/dataset/world-development-indicators>

For model 1 and model 2, we test research hypothesis 1 and 2 respectively. Only research hypothesis 1—social movements—passed 95% of significance level. For research hypothesis 2, we do not have enough evidence to conclude that political activism is correlated with economic governance.

Furthermore, we enter control variables into regression model 3 to estimate more precise relationship between political participation and economic governance. The scale-location plot suggests that there may be linearity of the residual, which might be a violation of the homoscedasticity assumption (See Figure 3, Appendix II). To address this, regression model 4 excludes the outliers defined by the Q-Q plot (See Figure 3, Appendix II). The red line in new scale-location plot for model 4 is horizontal, and shows no sign of linearity among residuals (See Figure 4, Appendix II). What’s more, we can also see a cloud shape-like distribution in residuals vs. fitted value plot (See Figure 4, Appendix II).

Both social movements and political activism gain statistical significance in regression model 4. Two control variables, unemployment and economic development, however, also have statistical significance. The multicollinearity test of model 4 shows the VIF value of social movements is slightly above 5 and public activism is closely to 5.

In order to eliminate the collinear influence of control variables, we need to do further interaction analysis. Through making plots of prediction model between the independent variables and control variables, we can find out which control variables interact with which independent variables on the correlation with economic governance (See Figure 5, Appendix II). All four plots show no significant evidence to demonstrate that both control variables have an interactive effect on the independent variable because both social movements and political activism are evenly distributed.

Relatively, unemployment is likely to have an interactive effect with social movements on economic governance because it might trigger more people to participate in social movements. People in a country with more advanced economic development might have more resources and economic basis to be involved in a political campaign, so the government is more likely to reflect the interests of more people in economic governance. For both reasons, model 5 and model 6 are to further test for interactive effects via regression.

Both results of model 5 and model 6 have statistical significance for the interaction. By examining the interaction plots, we can also conclude that both independent variables have no differences in their influence on the dependent variable given the involvement of control variables (See Figure 6 & 9, Appendix II). After a closer examination of the marginal analysis of model 5 and 6, we do not find that there is a lot of influence from outliers on the regression models (See Figure 7, 8, 10, 11, Appendix II).

After ruling out the problem of multicollinearity and interactive effects from control variables with model 5 and 6, we are convinced that regression model 4 is statistically reliable regression. To have more precise p-value and to minimize statistical error, we do a robust regression based on model 4, and the model explains 51.9% of the variation in the observations.

# Conclusion

Only social movements, political activism and unemployment have a statistically significant impact on economic governance at the 95% confidence level in the robust model. According to this model, a 1% change in social movement participation will increase government expenditure as a percentage of GDP by 2.145%. A 1% change in political activism will decrease government expenditure as a percentage of GDP by 1.41%. When unemployment increases by 1%, government expenditure as a percentage of GDP will increase by 0.191%.

The regression analysis only verified research hypothesis 1. Research hypothesis 2 needs to be further examined. Besides, after eliminating the problem of multicollinearity and interactive effect, unemployment still has significance in the robust model. More research needs to be done to decide whether to include corruption as research hypothesis 3.

The primary limitation of this research lies in the amount of missing data, leading to a small sample size. Each model has only about 40 observations due to missing value. With cross-sectional analysis, variable might lack of conformity. Another limitation is that the unit of observation of the WVS data is individuals, while for WDI it is country. This might result in, for example, corruption has theoretical value of qualitative research, but doesn’t pass any of the regression models because corruption is measured by individual answers instead of country unit. The problem can be addressed by using an objective country unit indicator.

# Reference

Haerpfer, C., Inglehart, R., Moreno, A., Welzel, C., Kizilova, K., Diez-Medrano J., M. Lagos, P. Norris, E. Ponarin & B. Puranen (eds.). 2022. World Values Survey: Round Seven – Country-Pooled Datafile Version 5.0. Madrid, Spain & Vienna, Austria: JD Systems Institute & WVSA Secretariat. Doi:10.14281/18241.20

‌Rubin, Jeffrey W. Decentering the Regime: Ethnicity, Radicalism, and Democracy in Juchitán, Mexico. Duke University Press, 1997, pp. 1–328.

# Appendix I

## Filtering data

Q152. Would you please say which one of these you, yourself, consider the most important? (Code one answer only under “first choice”)

1. A high level of economic growth

2. Making sure this country has strong defense forces

3. Seeing that people have more say about how things are done at their jobs and in their communities

4. Trying to make our cities and countryside more beautiful

We select observations that has value 1 in Q152.

Q108.

|  |  |
| --- | --- |
| Government should take more responsibility to ensure that everyone is provided for | People should take more responsibility to provide for themselves |
| 1 2 3 4 5 | 6 7 8 9 10 |

Also, we select observations that has value 1 to 4 in Q108. To make sure our observations have strong inclination to government’s role in economic governance, we don’t select value 5 because it is the dividing point between government’s role and individual’s role.

## Social movements

If respondents have done, which means it happened, we assign value 1 to the answer; if respondents would never do, which means it never happens, we assign value 0 to the answer; if respondents might do, which means it might or might not happen, we assign value 0.5 to the answer.

Q209. Signing a petition

Have done=1, Might do=2, Would never do=3 (original)

Have done=1, Might do=0.5, Would never do=0 (recoded)

Q210. Joining in boycotts

Have done=1, Might do=2, Would never do=3 (original)

Have done=1, Might do=0.5, Would never do=0 (recoded)

Q211. Attending peaceful demonstrations

Have done=1, Might do=2, Would never do=3 (original)

Have done=1, Might do=0.5, Would never do=0 (recoded)

Q212. Joining strikes

Have done=1, Might do=2, Would never do=3 (original)

Have done=1, Might do=0.5, Would never do=0 (recoded)

## Political activism

If respondents have done, which means it happened, we assign value 1 to the answer; if respondents would never do, which means it never happens, we assign value 0 to the answer; if respondents might do, which means it might or might not happen, we assign value 0.5 to the answer.

Q213. Donating to a group or campaign

Have done=1, Might do=2, Would never do=3 (original)

Have done=1, Might do=0.5, Would never do=0 (recoded)

Q214. Contacting a government official

Have done=1, Might do=2, Would never do=3 (original)

Have done=1, Might do=0.5, Would never do=0 (recoded)

Q215. Encouraging others to take action about political issues

Have done=1, Might do=2, Would never do=3 (original)

Have done=1, Might do=0.5, Would never do=0 (recoded)

Q216. Encouraging others to vote

Have done=1, Might do=2, Would never do=3 (original)

Have done=1, Might do=0.5, Would never do=0 (recoded)

## Corruption

Q112.

|  |  |
| --- | --- |
| There is no corruption in my country | There is abundant corruption in my country |
| 1 2 3 4 5 | 6 7 8 9 10 |

# Appendix II

Figure 3

Chart

Description automatically generated

Source: Inglehart, R., C. Haerpfer, A. Moreno, C. Welzel, K. Kizilova, J. Diez-Medrano, M. Lagos, P. Norris, E. Ponarin & B. Puranen et al. (eds.). (2022). World Values Survey: Wave 7. Madrid, Spain: JD Systems Institute. Retrieved from <http://www.worldvaluessurvey.org/WVSDocumentationWVL.jsp>; World Bank. (2022). World Development Indicators. Retrieved from <https://datacatalog.worldbank.org/dataset/world-development-indicators>

Figure4

Chart

Description automatically generated

Source: Inglehart, R., C. Haerpfer, A. Moreno, C. Welzel, K. Kizilova, J. Diez-Medrano, M. Lagos, P. Norris, E. Ponarin & B. Puranen et al. (eds.). (2022). World Values Survey: Wave 7. Madrid, Spain: JD Systems Institute. Retrieved from <http://www.worldvaluessurvey.org/WVSDocumentationWVL.jsp>; World Bank. (2022). World Development Indicators. Retrieved from <https://datacatalog.worldbank.org/dataset/world-development-indicators>

Figure 5

Graphical user interface, line chart

Description automatically generated

Source: Inglehart, R., C. Haerpfer, A. Moreno, C. Welzel, K. Kizilova, J. Diez-Medrano, M. Lagos, P. Norris, E. Ponarin & B. Puranen et al. (eds.). (2022). World Values Survey: Wave 7. Madrid, Spain: JD Systems Institute. Retrieved from <http://www.worldvaluessurvey.org/WVSDocumentationWVL.jsp>; World Bank. (2022). World Development Indicators. Retrieved from <https://datacatalog.worldbank.org/dataset/world-development-indicators>

Figure 6

Chart

Description automatically generated

Source: Inglehart, R., C. Haerpfer, A. Moreno, C. Welzel, K. Kizilova, J. Diez-Medrano, M. Lagos, P. Norris, E. Ponarin & B. Puranen et al. (eds.). (2022). World Values Survey: Wave 7. Madrid, Spain: JD Systems Institute. Retrieved from <http://www.worldvaluessurvey.org/WVSDocumentationWVL.jsp>; World Bank. (2022). World Development Indicators. Retrieved from <https://datacatalog.worldbank.org/dataset/world-development-indicators>

Figure 7

Chart, scatter chart

Description automatically generated

Source: Inglehart, R., C. Haerpfer, A. Moreno, C. Welzel, K. Kizilova, J. Diez-Medrano, M. Lagos, P. Norris, E. Ponarin & B. Puranen et al. (eds.). (2022). World Values Survey: Wave 7. Madrid, Spain: JD Systems Institute. Retrieved from <http://www.worldvaluessurvey.org/WVSDocumentationWVL.jsp>; World Bank. (2022). World Development Indicators. Retrieved from <https://datacatalog.worldbank.org/dataset/world-development-indicators>

Figure 8

Chart, scatter chart

Description automatically generated

Source: Inglehart, R., C. Haerpfer, A. Moreno, C. Welzel, K. Kizilova, J. Diez-Medrano, M. Lagos, P. Norris, E. Ponarin & B. Puranen et al. (eds.). (2022). World Values Survey: Wave 7. Madrid, Spain: JD Systems Institute. Retrieved from <http://www.worldvaluessurvey.org/WVSDocumentationWVL.jsp>; World Bank. (2022). World Development Indicators. Retrieved from <https://datacatalog.worldbank.org/dataset/world-development-indicators>

Figure 9

Chart

Description automatically generated

Source: Inglehart, R., C. Haerpfer, A. Moreno, C. Welzel, K. Kizilova, J. Diez-Medrano, M. Lagos, P. Norris, E. Ponarin & B. Puranen et al. (eds.). (2022). World Values Survey: Wave 7. Madrid, Spain: JD Systems Institute. Retrieved from <http://www.worldvaluessurvey.org/WVSDocumentationWVL.jsp>; World Bank. (2022). World Development Indicators. Retrieved from <https://datacatalog.worldbank.org/dataset/world-development-indicators>

Figure 10

Chart, scatter chart

Description automatically generated

Source: Inglehart, R., C. Haerpfer, A. Moreno, C. Welzel, K. Kizilova, J. Diez-Medrano, M. Lagos, P. Norris, E. Ponarin & B. Puranen et al. (eds.). (2022). World Values Survey: Wave 7. Madrid, Spain: JD Systems Institute. Retrieved from <http://www.worldvaluessurvey.org/WVSDocumentationWVL.jsp>; World Bank. (2022). World Development Indicators. Retrieved from <https://datacatalog.worldbank.org/dataset/world-development-indicators>

Figure 11

Chart, scatter chart

Description automatically generated

Source: Inglehart, R., C. Haerpfer, A. Moreno, C. Welzel, K. Kizilova, J. Diez-Medrano, M. Lagos, P. Norris, E. Ponarin & B. Puranen et al. (eds.). (2022). World Values Survey: Wave 7. Madrid, Spain: JD Systems Institute. Retrieved from <http://www.worldvaluessurvey.org/WVSDocumentationWVL.jsp>; World Bank. (2022). World Development Indicators. Retrieved from <https://datacatalog.worldbank.org/dataset/world-development-indicators>