

# Japanese Voter Turnout and Socioeconomic Data



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## Introduction

### Research Question

How do socioeconomic factors affect voter turnout in Japan?

### Theory

Japan’s government and electoral system resembles the United States in many ways, yet there are significant differences in the cultures. Differences in Japanese and American culture should reflect in voting behavior of the Japanese, even when comparing Japanese single member district elections.

### Hypothesis

- $H_1$  - An increase of the ratio of adults in a prefecture will increase voter turnout.
- $H_2$  - An increase in wages in a prefecture received will decrease voter turnout.
- $H_3$  - General elections cause an increase voter turnout in a prefecture.
- $H_4$  - Females will increase overall voter turnout more than men.

## Method

Aggregate of local and general elections in single member districts by prefecture and year  
Linear Regression Model

- Dependent Variable: Total Voter Turnout
- Independent Variables: Ratio of Adults, Rate of Marriage, General Election
- Controls: Population Density, Urban Areas, GDP, Year Fixed Effects

## Linear Regression Model for Voter Turnout

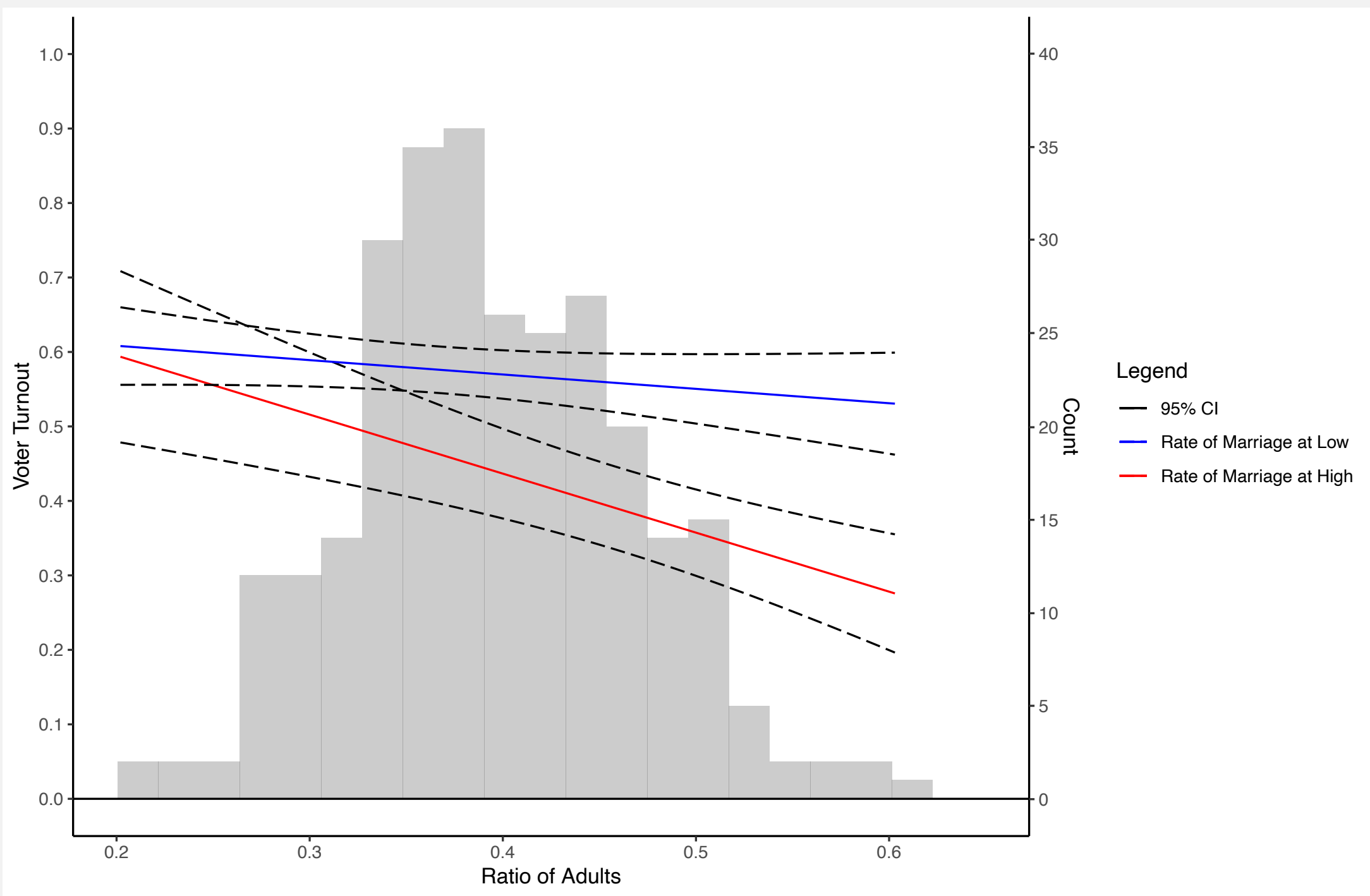
	Total Turnout				
	(1)	(2)	(3)	(4)	(5)
Total Population (Ten Millions)	−0.050 (0.053)	−0.083* (0.047)	−0.068 (0.047)	−0.038 (0.045)	
Female Turnout					0.246* (0.139)
Male Turnout					0.725*** (0.125)
Total Female Population (Ten Millions)					0.049 (0.033)
Average Female Wages per Month (Million Yen)					0.005 (0.031)
Total Male Population (Ten Millions)					−0.047 (0.033)
Average Male Wages per Month (Million Yen)					0.014 (0.021)
Ratio of Adults	−0.397*** (0.093)	−0.231** (0.102)	−0.091 (0.112)		−0.037* (0.020)
Ratio of Elderly				0.475*** (0.130)	
Rate of Marriage per Thousand	−0.042*** (0.011)	−0.021** (0.010)	−0.028*** (0.010)	0.006 (0.013)	0.003* (0.002)
Ratio in Primary Education	1.700*** (0.526)				0.093* (0.056)
GDP	0.227*** (0.077)	0.181** (0.073)	0.183*** (0.068)		−0.005 (0.004)
Percent of Out-migration		−0.022** (0.010)			
Ratio in College			−0.893** (0.393)	−1.278*** (0.409)	
Ratio Unemployed				−1.791*** (0.541)	
Average Wages per Month (Million Yen)		−0.514*** (0.181)	−0.266 (0.191)	−1.006*** (0.264)	
Ratio of Christians			0.254*** (0.058)		
Average Hours Worked per Month (Hundred Hours)				0.195 (0.158)	
Population Density (Ten Thousands)	0.012 (0.072)	0.106 (0.076)	0.039 (0.065)	0.213*** (0.077)	0.005 (0.004)
Urban	−0.018 (0.020)	−0.022 (0.018)	−0.024 (0.019)	−0.040** (0.018)	0.002 (0.001)
General Election	0.177*** (0.012)	0.177*** (0.012)	0.177*** (0.012)		
Constant	0.709*** (0.061)	0.941*** (0.056)	0.712*** (0.057)	0.503 (0.355)	0.002 (0.010)
Observations	284	284	237	183	141
Adjusted R <sup>2</sup>	0.753	0.753	0.796	0.912	0.998
Residual Std. Error	0.047 (df = 262)	0.047 (df = 261)	0.043 (df = 217)	0.041 (df = 166)	0.003 (df = 126)

Note:

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

## Outcome

### Predicted Values for Interaction between Ratio of Adults and Marriage Rates



## Conclusions

- An increase in wages in a prefecture correlates with a decrease in voter turnout.
- General elections correlate with an increase in voter turnout in a prefectures.
- Male voter turnout in a prefecture correlates with a greater increase in voter turnout than compared to females.
- An increase in the ratio of adults in a prefecture correlates with a decrease in voter turnout.
- A decrease in the rate of marriage in a prefecture decreases the effect the ratio of adults has on voter turnout.

The impact of male voters in overall voter turnout in Japan defies traditional theory that females are more likely to engage in political activity. Further research would explore male political activity in Japan.



Please contact me if you have any questions about my research.