

Online Appendix for Japan Decides 2021: Ch. 15 Did COVID-19 Impact Japan’s 2021 General Election?

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1 Surveys

We conducted online surveys before and after the 2021 General Election. For both surveys, we recruited respondents using *Yahoo! JAPAN Crowd Sourcing*.¹ We fielded the pre-election survey on October 20, 2021, and the post-election survey on November 8, 2021. The number of respondents were 2025 and 3100, respectively.

1.1 Data

Our survey data are available at <https://github.com/yukiyanai/ThiesYanaiJD2021>.

- Pre-election survey: `thies_yanai_jd2021_pre.csv`
- Post-election survey: `thies_yanai_jd2021_post.csv`

The variables contained in the data sets are as follows (variable [column] names are in parentheses).

- **Gender** (`gender`): Female, Male, Other, or refuse [to answer].
- **Age** (`age`).
- **Prefecture of residence** (`pref`):
- **Highest degree earned** (`education`).
 - 1: Elementary school or junior high school
 - 2: High School
 - 3: Some college
 - 4: Bachelor’s degree or higher
- **Self-reported party identification** (`pid`).
 - 1: Liberal Democratic Party (LDP)
 - 2: Constitutional Democratic Party (CDP)
 - 3: Democratic Party for the People (DPP)

¹URL: <https://crowdsourcing.yahoo.co.jp/>

- 4: Komeito
- 5: Japanese Communist Party (JCP)
- 6: Japan Innovation Party (Ishin)
- 7: Social Democratic Party (SDP)
- 11: other
- 33: Non-partisan
- 99: Don't know / NA
- **Perceived party competence:** Question wording: “Do you think [political party] is capable of taking control of the government?” [political party] is one of LDP (`ability_1`), CDP (`ability_2`), DPP (`ability_3`), Komeito (`ability_4`), JCP (`ability_5`), and Ishin (`ability_6`).
 - 1: Agree
 - 2: Tend to agree
 - 3: Tend to disagree
 - 4: Disagree
 - 99: Don't know
- **Priority (priority):** Question wording “Which policy do you think the government should focus on the most?”
 - 1: Economic recovery
 - 2: China-Japan relations
 - 3: COVID-19 countermeasure
 - 4: Income inequality
 - 5: Climate change
 - 11: other
 - 99: Don't know / NA
- **Evaluation of performance by the LDP-Komeito government since the previous election** in the pre-election survey: On the economy (`performance1_1`), COVID-19 countermeasure in general (`performance1_2`), vaccine rollout (`performance1_3`), and China-Japan relations (`performance1_4`).
 - 1: Well
 - 2: Pretty well
 - 3: Pretty poor
 - 4: Poor
 - 99: Don't know / NA
- **Evaluation of performance by the *current* government** in the pre-election survey: On the economy (`performance2_1`), COVID-19 countermeasure in general (`performance2_2`), vaccine rollout (`performance2_3`), and China-Japan relations (`performance2_4`).
 - 1: Well
 - 2: Pretty well
 - 3: Pretty poor
 - 4: Poor
 - 99: Don't know / NA
- **Evaluation of performance by the LDP-Komeito government** in the post-election survey: On the economy (`performance1_1`), Economic support for those who suffer from COVID-19 (`performance1_2`), vaccine rollout (`performance1_3`), other COVID-19 countermeasures (`performance1_5`), and China-Japan relations (`performance1_4`).
 - 1: Well
 - 2: Pretty well
 - 3: Pretty poor
 - 4: Poor
 - 99: Don't know / NA

1.2 Policy Priority

Figure 15.7 in the chapter shows that people's first priority right after the election was not COVID-19 but the economy. Figure 1 is the pre-election version, which shows the pattern similar to the post-election version

presented in the chapter.

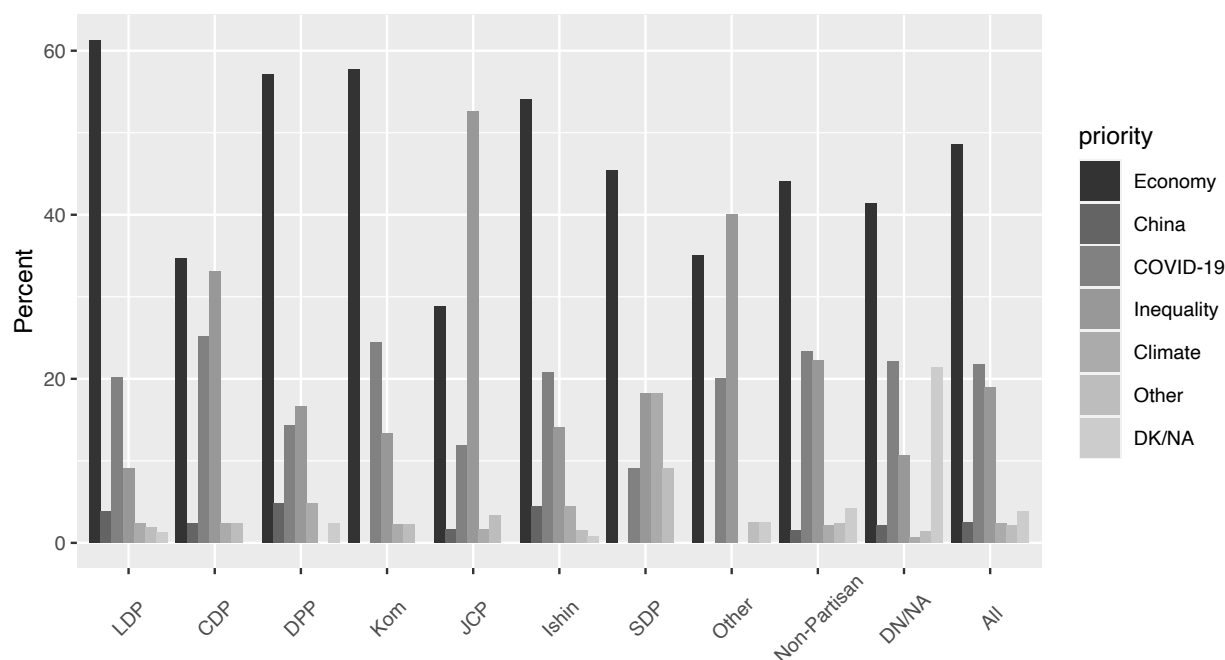


Figure 1: Priority by self-identified partisanship in the pre-election survey

2 Regression Analysis

2.1 Data

We conducted regression analyses using the variables shown below. The data set is available as `thies_yanai_jd2021_reg.csv` at <https://github.com/yukiyanai/ThiesYanaiJD2021>.

2.1.1 Response variable

- Difference in a [party]’s prefectural vote shares in the PR tier between the 2017 and 2021 elections. [party] is one of:
 - Liberal Democratic Party (LDP)
 - Komeito
 - Constitutional Democratic Party (CDP)
 - Japan Innovation Party (Ishin)
 - Japanese Communist Party (JCP)

2.1.2 Primary explanatory variables

- Cumulative number of COVID-19 deaths per 1,000 people up to the day before the election.²
- Urbanness of the prefecture. We use one of the following three measures.
 - UEA (`uea3`): Dummy showing if the prefecture belongs to the three largest urban employment areas (Tokyo, Osaka, and Nagoya) defined by [Kanemoto and Tokuda \(2002\)](#).

²Source: NHK. <https://www3.nhk.or.jp/news/special/coronavirus/data/>. Last accessed: January 27, 2022.

- DID (`did_c`): Percentage of people who live in a densely inhabited district within prefecture in 2015.³ DID is defined by the Ministry of Internal Affairs and Communications (MIAC).⁴
- Metropolitan (`big3`): Dummy showing if the prefecture belongs to the three largest metropolitan areas (Tokyo, Osaka, and Nagoya) defined by MIAC.⁵

2.1.3 Confounding variables

- Cumulative number of COVID-19 cases per 10 people up to the day before the election.⁶
- Share of the population fully vaccinated as of October 30, 2021.⁷

2.1.4 Other control variables

- Dummy showing if Ishin fielded a single-member district in a prefecture.
- Dummy showing if Komeito fielded a single-member district in a prefecture.
- Share of the single-member districts where major opposition parties coordinated.
- Number of single-member districts within a prefecture.
- Difference in the turnout rate between the 2017 and 2021 elections.
- Distance from Osaka (in 100 km), which is the hometown of Ishin.⁸

³Source: e-Stat. *2015 Population Census*. <https://www.stat.go.jp/english/data/kokusei/index.html>. Last accessed: January 27, 2022.

⁴<https://www.stat.go.jp/english/data/chiri/did/1-1.html>. Last accessed: January 27, 2022.

⁵<https://www.stat.go.jp/data/idou/topics/topi60-4.html>. Last accessed: January 27, 2022.

⁶Source: NHK. <https://www3.nhk.or.jp/news/special/coronavirus/data/>. Last accessed: January 27, 2022.

⁷Source: NHK. <https://www3.nhk.or.jp/news/special/coronavirus/data/>. Last accessed: January 27, 2022.

⁸In the data set, measurement unit is “km” instead of “100 km”.

2.2 Regression with UEA as the measure of urbanness

In this section, we use UEA as our measure of urbanness. The following variables are centered at mean.

- Deaths per 1000
- Cases per 10
- Share of people fully vaccinated

2.2.1 LDP

Table 1: Response variable: Difference in LDP's prefectural vote share between the 2017 and 2021 elections

	Model 1	Model 2	Model 3	Model 4	Model 5
Intercept	0.0334 (0.0049)	0.0339 (0.0051)	0.0015 (0.0191)	0.0016 (0.0193)	-0.0163 (0.0208)
Deaths / 1000	-0.0675 (0.0788)	-0.0354 (0.1206)	-0.1303 (0.1257)	-0.1426 (0.1298)	-0.2005 (0.1286)
UEA	-0.0166 (0.0092)	-0.0177 (0.0099)	-0.0123 (0.0101)	-0.0107 (0.0108)	-0.0018 (0.0114)
Deaths \times UEA	-0.2031 (0.1141)	-0.2176 (0.1188)	-0.4430 (0.1265)	-0.4088 (0.1480)	-0.2821 (0.1567)
Cases / 10		-0.0055 (0.1157)	-0.0352 (0.1201)	-0.0409 (0.1220)	-0.0842 (0.1196)
Ratio vaccinated		0.1231 (0.2123)	-0.0060 (0.2003)	-0.0299 (0.2090)	-0.0594 (0.2019)
Ishin SMD			-0.0105 (0.0094)	-0.0089 (0.0102)	-0.0042 (0.0101)
Komeito SMD			0.0317 (0.0182)	0.0320 (0.0185)	0.0317 (0.0178)
Num. SMDs			0.0037 (0.0014)	0.0036 (0.0014)	0.0029 (0.0014)
Opposition coord.			0.0226 (0.0195)	0.0225 (0.0197)	0.0226 (0.0190)
Change in turnout				-0.0008 (0.0018)	-0.0002 (0.0018)
Distance from Osaka (100 km)					0.0036 (0.0019)
Adj. R ²	0.3361	0.3106	0.4577	0.4458	0.4858
Num. obs.	47	47	47	47	47

Standard errors are in parentheses.

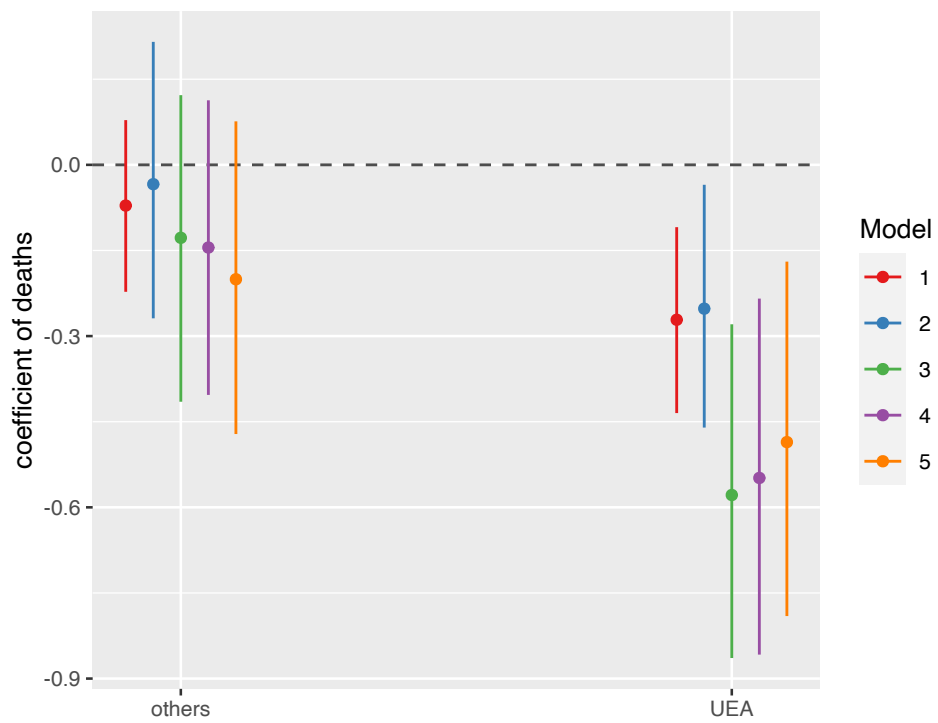


Figure 2: Response variable: Difference in LDP's prefectural vote share between the 2017 and 2021 elections

2.2.2 Komeito

Table 2: Response variable: Difference in Komeito's prefectural vote share between the 2017 and 2021 elections

	Model 1	Model 2	Model 3	Model 4	Model 5
Intercept	0.0028 (0.0016)	0.0038 (0.0015)	-0.0004 (0.0057)	-0.0003 (0.0056)	-0.0061 (0.0059)
Deaths / 1000	0.0818 (0.0264)	0.0046 (0.0342)	0.0442 (0.0376)	0.0316 (0.0376)	0.0130 (0.0368)
UEA	-0.0035 (0.0031)	-0.0071 (0.0028)	-0.0049 (0.0030)	-0.0034 (0.0031)	-0.0005 (0.0033)
Deaths \times UEA	-0.1321 (0.0381)	-0.1243 (0.0337)	-0.0917 (0.0378)	-0.0568 (0.0429)	-0.0160 (0.0448)
Cases / 10		0.1303 (0.0329)	0.1263 (0.0359)	0.1205 (0.0353)	0.1066 (0.0342)
Ratio vaccinated		0.1319 (0.0603)	0.1594 (0.0599)	0.1350 (0.0605)	0.1255 (0.0577)
Ishin SMD			-0.0014 (0.0028)	0.0003 (0.0029)	0.0018 (0.0029)
Komeito SMD			-0.0079 (0.0055)	-0.0075 (0.0053)	-0.0076 (0.0051)
Num. SMDs			-0.0002 (0.0004)	-0.0004 (0.0004)	-0.0006 (0.0004)
Opposition coord.			0.0094 (0.0058)	0.0093 (0.0057)	0.0094 (0.0054)
Change in turnout				-0.0008 (0.0005)	-0.0006 (0.0005)
Distance from Osaka (100 km)					0.0012 (0.0005)
Adj. R ²	0.2106	0.4091	0.4836	0.5053	0.5526
Num. obs.	47	47	47	47	47

Standard errors are in parentheses.

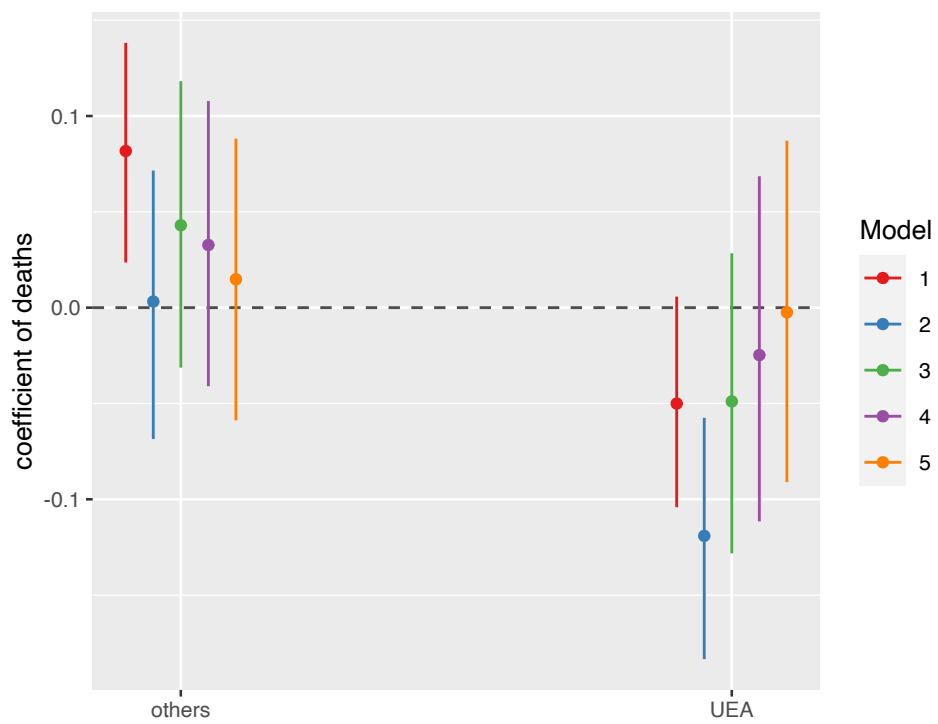


Figure 3: Response variable: Difference in Komeito's prefectural vote share between the 2017 and 2021 elections

2.2.3 CDP

Table 3: Response variable: Difference in CDP's prefectural vote share between the 2017 and 2021 elections

	Model 1	Model 2	Model 3	Model 4	Model 5
Intercept	0.0342 (0.0053)	0.0327 (0.0055)	0.0404 (0.0202)	0.0407 (0.0201)	0.0098 (0.0195)
Deaths / 1000	-0.1267 (0.0859)	-0.2022 (0.1282)	-0.0624 (0.1332)	-0.0971 (0.1351)	-0.1966 (0.1206)
UEA	-0.0346 (0.0100)	-0.0316 (0.0105)	-0.0245 (0.0108)	-0.0202 (0.0112)	-0.0048 (0.0107)
Deaths \times UEA	-0.0917 (0.1243)	-0.0549 (0.1263)	-0.0770 (0.1340)	0.0197 (0.1540)	0.2373 (0.1469)
Cases / 10		0.0012 (0.1231)	0.0313 (0.1272)	0.0152 (0.1269)	-0.0591 (0.1122)
Ratio vaccinated		-0.3328 (0.2257)	-0.1942 (0.2122)	-0.2617 (0.2174)	-0.3124 (0.1894)
Ishin SMD			-0.0300 (0.0100)	-0.0253 (0.0106)	-0.0172 (0.0095)
Komeito SMD			-0.0147 (0.0193)	-0.0136 (0.0192)	-0.0142 (0.0167)
Num. SMDs			0.0002 (0.0014)	-0.0002 (0.0015)	-0.0013 (0.0013)
Opposition coord.			0.0138 (0.0207)	0.0135 (0.0205)	0.0136 (0.0178)
Change in turnout				-0.0023 (0.0019)	-0.0012 (0.0017)
Distance from Osaka (100 km)					0.0062 (0.0017)
Adj. R^2	0.4288	0.4353	0.5587	0.5652	0.6721
Num. obs.	47	47	47	47	47

Standard errors are in parentheses.

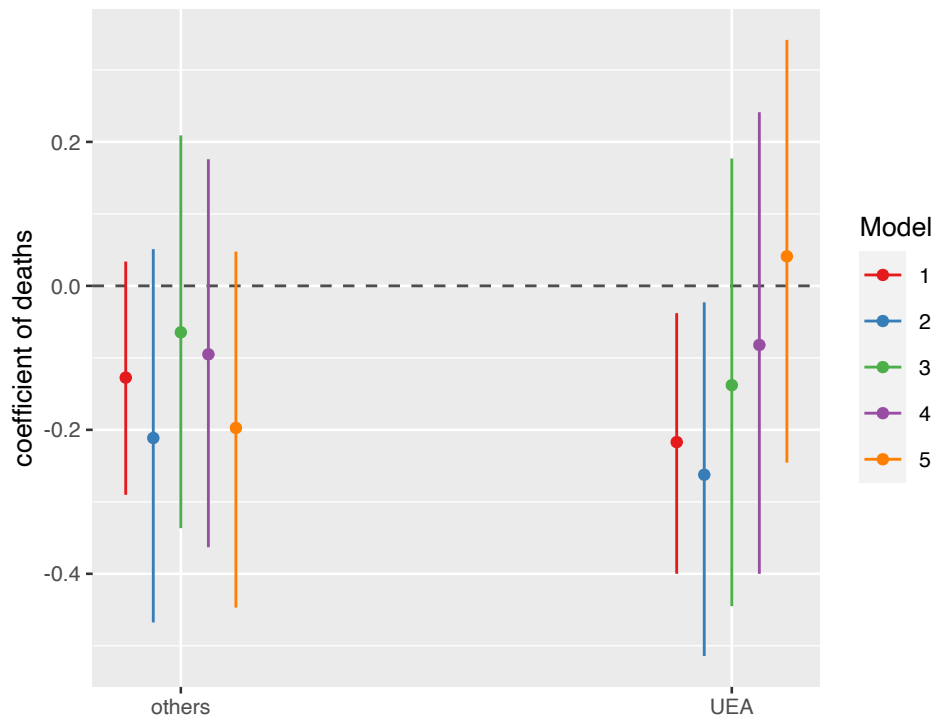


Figure 4: Response variable: Difference in CDP's prefectural vote share between the 2017 and 2021 elections

2.2.4 Ishin

Table 4: Response variable: Difference in Ishin’s prefectural vote share between the 2017 and 2021 elections

	Model 1	Model 2	Model 3	Model 4	Model 5
Intercept	0.0472 (0.0059)	0.0477 (0.0058)	0.0561 (0.0194)	0.0557 (0.0190)	0.0835 (0.0187)
Deaths / 1000	−0.0122 (0.0949)	0.2280 (0.1362)	0.1454 (0.1276)	0.1887 (0.1275)	0.2783 (0.1156)
UEA	0.0287 (0.0111)	0.0305 (0.0112)	0.0248 (0.0103)	0.0194 (0.0106)	0.0055 (0.0102)
Deaths × UEA	0.3458 (0.1373)	0.2803 (0.1343)	0.5105 (0.1284)	0.3898 (0.1453)	0.1939 (0.1409)
Cases / 10		−0.2268 (0.1308)	−0.1894 (0.1219)	−0.1694 (0.1198)	−0.1024 (0.1075)
Ratio vaccinated		0.2433 (0.2398)	0.2498 (0.2033)	0.3339 (0.2052)	0.3796 (0.1815)
Ishin SMD			0.0381 (0.0095)	0.0323 (0.0100)	0.0250 (0.0091)
Komeito SMD			−0.0008 (0.0185)	−0.0021 (0.0181)	−0.0017 (0.0160)
Num. SMDs			−0.0038 (0.0014)	−0.0033 (0.0014)	−0.0023 (0.0013)
Opposition coord.			−0.0149 (0.0198)	−0.0146 (0.0193)	−0.0147 (0.0171)
Change in turnout				0.0029 (0.0018)	0.0019 (0.0016)
Distance from Osaka (100 km)					−0.0056 (0.0017)
Adj. R ²	0.3876	0.4399	0.6443	0.6601	0.7354
Num. obs.	47	47	47	47	47

Standard errors are in parentheses.

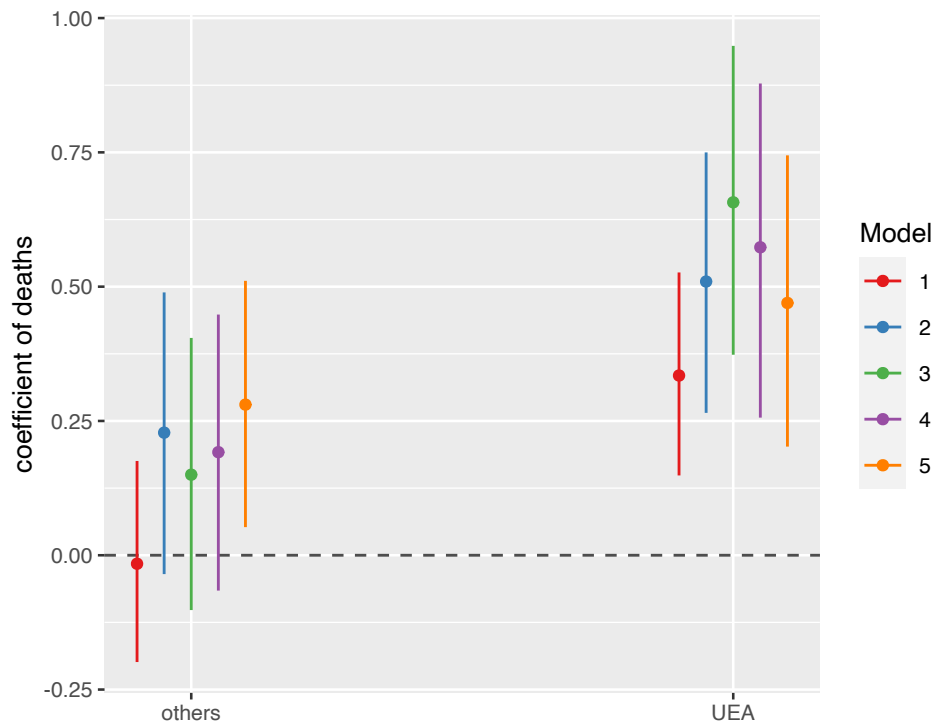


Figure 5: Response variable: Difference in Ishin's prefectural vote share between the 2017 and 2021 elections

2.2.5 JCP

Table 5: Response variable: Difference in JCP's prefectural vote share between the 2017 and 2021 elections

	Model 1	Model 2	Model 3	Model 4	Model 5
Intercept	−0.0073 (0.0013)	−0.0069 (0.0013)	−0.0059 (0.0053)	−0.0059 (0.0053)	−0.0067 (0.0060)
Deaths / 1000	−0.0294 (0.0206)	−0.0091 (0.0306)	0.0154 (0.0347)	0.0125 (0.0359)	0.0101 (0.0374)
UEA	−0.0005 (0.0024)	−0.0013 (0.0025)	−0.0028 (0.0028)	−0.0024 (0.0030)	−0.0020 (0.0033)
Deaths × UEA	0.0171 (0.0298)	0.0075 (0.0301)	−0.0294 (0.0350)	−0.0214 (0.0409)	−0.0159 (0.0456)
Cases / 10		−0.0014 (0.0294)	−0.0317 (0.0332)	−0.0331 (0.0337)	−0.0349 (0.0348)
Ratio vaccinated		0.0858 (0.0539)	0.0635 (0.0554)	0.0579 (0.0578)	0.0566 (0.0587)
Ishin SMD			−0.0041 (0.0026)	−0.0037 (0.0028)	−0.0035 (0.0029)
Komeito SMD			−0.0060 (0.0050)	−0.0059 (0.0051)	−0.0059 (0.0052)
Num. SMDs			0.0008 (0.0004)	0.0008 (0.0004)	0.0008 (0.0004)
Opposition coord.			−0.0031 (0.0054)	−0.0031 (0.0055)	−0.0031 (0.0055)
Change in turnout				−0.0002 (0.0005)	−0.0002 (0.0005)
Distance from Osaka (100 km)					0.0002 (0.0005)
Adj. R ²	0.0018	0.0236	0.0882	0.0668	0.0424
Num. obs.	47	47	47	47	47

Standard errors are in parentheses.

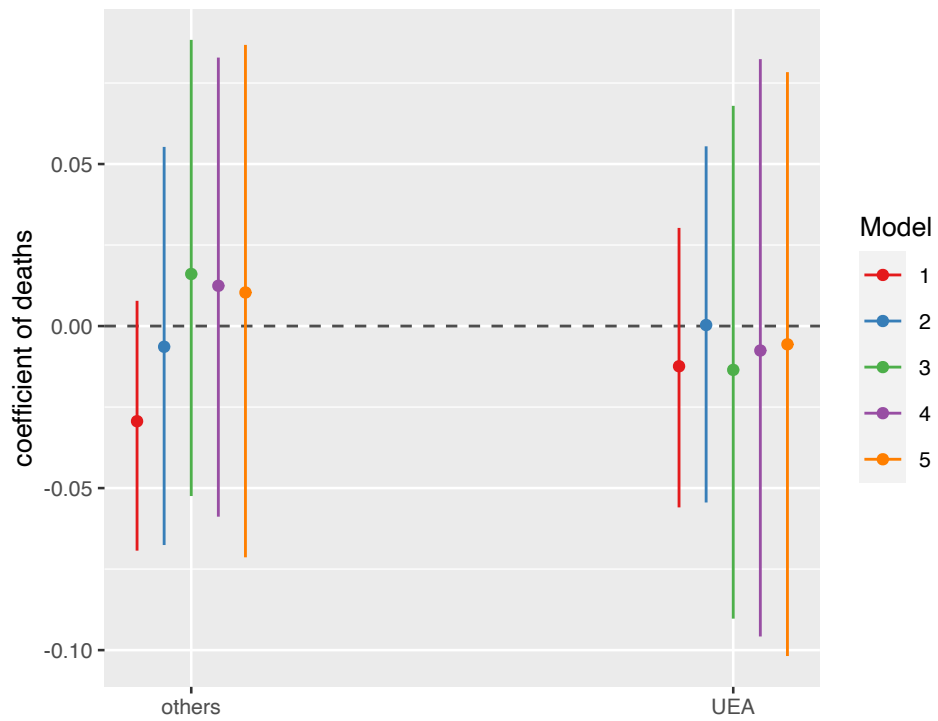


Figure 6: Response variable: Difference in JCP's prefectural vote share between the 2017 and 2021 elections

2.3 Regression with DID as the measure of urbanness

In this section, we use DID as our measure of urbanness. The following variables are centered at mean.

- Deaths per 1000
- Cases per 10
- Share of people fully vaccinated

2.3.1 LDP

Table 6: Response variable: Difference in LDP's prefectural vote share between the 2017 and 2021 elections

	Model 1	Model 2	Model 3	Model 4	Model 5
Intercept	0.0282 (0.0054)	0.0282 (0.0055)	-0.0135 (0.0186)	-0.0091 (0.0187)	-0.0236 (0.0175)
Deaths / 1000	-0.1108 (0.1139)	-0.0983 (0.1387)	-0.1363 (0.1313)	-0.1555 (0.1306)	-0.1637 (0.1176)
DID ratio	-0.0002 (0.0004)	-0.0002 (0.0004)	-0.0010 (0.0005)	-0.0009 (0.0005)	-0.0009 (0.0004)
Deaths \times DID ratio	-0.0030 (0.0033)	-0.0030 (0.0033)	-0.0112 (0.0037)	-0.0095 (0.0039)	-0.0091 (0.0035)
Cases / 10		-0.0290 (0.1308)	0.0912 (0.1258)	0.0563 (0.1270)	-0.0029 (0.1159)
Ratio vaccinated		-0.0247 (0.2249)	-0.0846 (0.2048)	-0.1284 (0.2050)	-0.0970 (0.1848)
Ishin SMD			-0.0108 (0.0100)	-0.0069 (0.0102)	-0.0061 (0.0092)
Komeito SMD			0.0512 (0.0192)	0.0485 (0.0191)	0.0439 (0.0172)
Num. SMDs			0.0046 (0.0017)	0.0043 (0.0017)	0.0042 (0.0015)
Opposition coord.			0.0373 (0.0180)	0.0324 (0.0182)	0.0227 (0.0167)
Change in turnout				-0.0022 (0.0016)	0.0000 (0.0016)
Distance from Osaka (100 km)					0.0047 (0.0015)
Adj. R ²	0.2366	0.2003	0.4201	0.4332	0.5410
Num. obs.	47	47	47	47	47

Standard errors are in parentheses.

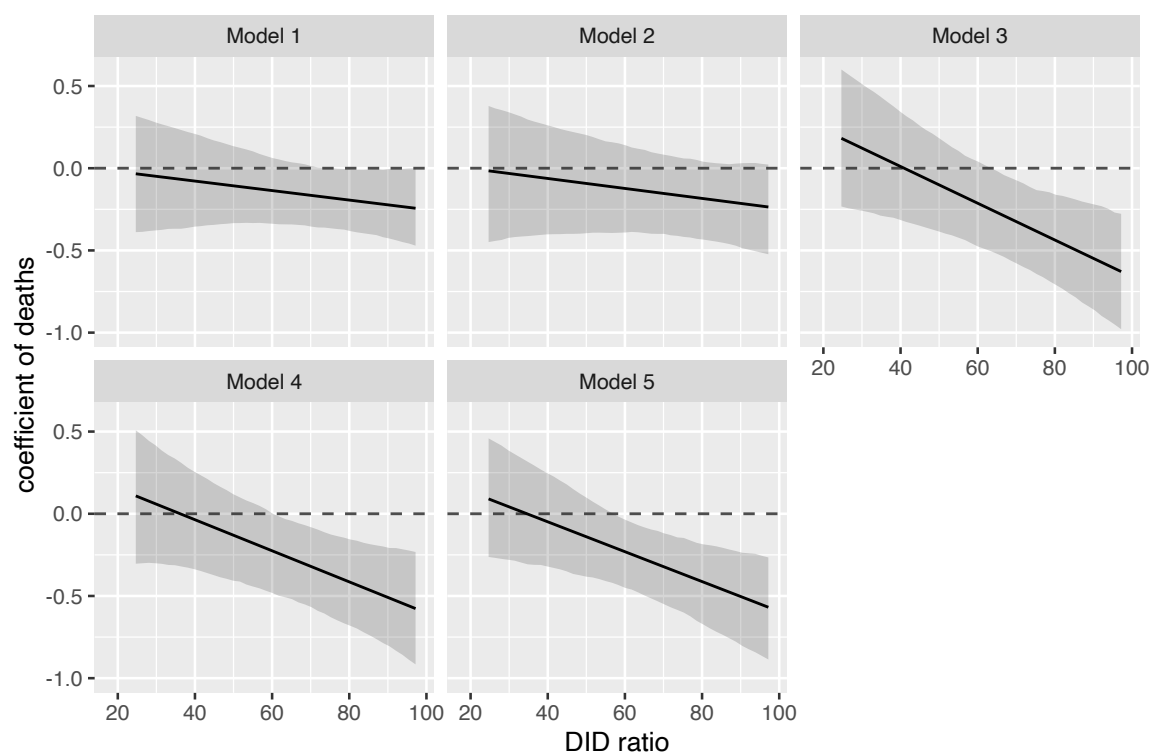


Figure 7: Response variable: Difference in LDP's prefectural vote share between the 2017 and 2021 elections

2.3.2 Komeito

Table 7: Response variable: Difference in Komeito's prefectural vote share between the 2017 and 2021 elections

	Model 1	Model 2	Model 3	Model 4	Model 5
Intercept	0.0030 (0.0017)	0.0028 (0.0014)	-0.0066 (0.0052)	-0.0048 (0.0050)	-0.0085 (0.0047)
Deaths / 1000	0.1086 (0.0368)	0.0337 (0.0359)	0.0541 (0.0364)	0.0459 (0.0349)	0.0438 (0.0317)
DID ratio	-0.0002 (0.0001)	-0.0004 (0.0001)	-0.0004 (0.0001)	-0.0003 (0.0001)	-0.0003 (0.0001)
Deaths \times DID ratio	-0.0031 (0.0011)	-0.0029 (0.0009)	-0.0030 (0.0010)	-0.0023 (0.0010)	-0.0022 (0.0009)
Cases / 10		0.1621 (0.0338)	0.1615 (0.0349)	0.1467 (0.0339)	0.1314 (0.0312)
Ratio vaccinated		0.1136 (0.0582)	0.1336 (0.0567)	0.1150 (0.0548)	0.1231 (0.0498)
Ishin SMD			-0.0017 (0.0028)	-0.0001 (0.0027)	0.0001 (0.0025)
Komeito SMD			-0.0014 (0.0053)	-0.0026 (0.0051)	-0.0037 (0.0046)
Num. SMDs			0.0003 (0.0005)	0.0002 (0.0004)	0.0002 (0.0004)
Opposition coord.			0.0138 (0.0050)	0.0117 (0.0049)	0.0092 (0.0045)
Change in turnout				-0.0009 (0.0004)	-0.0004 (0.0004)
Distance from Osaka (100 km)					0.0012 (0.0004)
Adj. R ²	0.1538	0.4311	0.5267	0.5698	0.6452
Num. obs.	47	47	47	47	47

Standard errors are in parentheses.

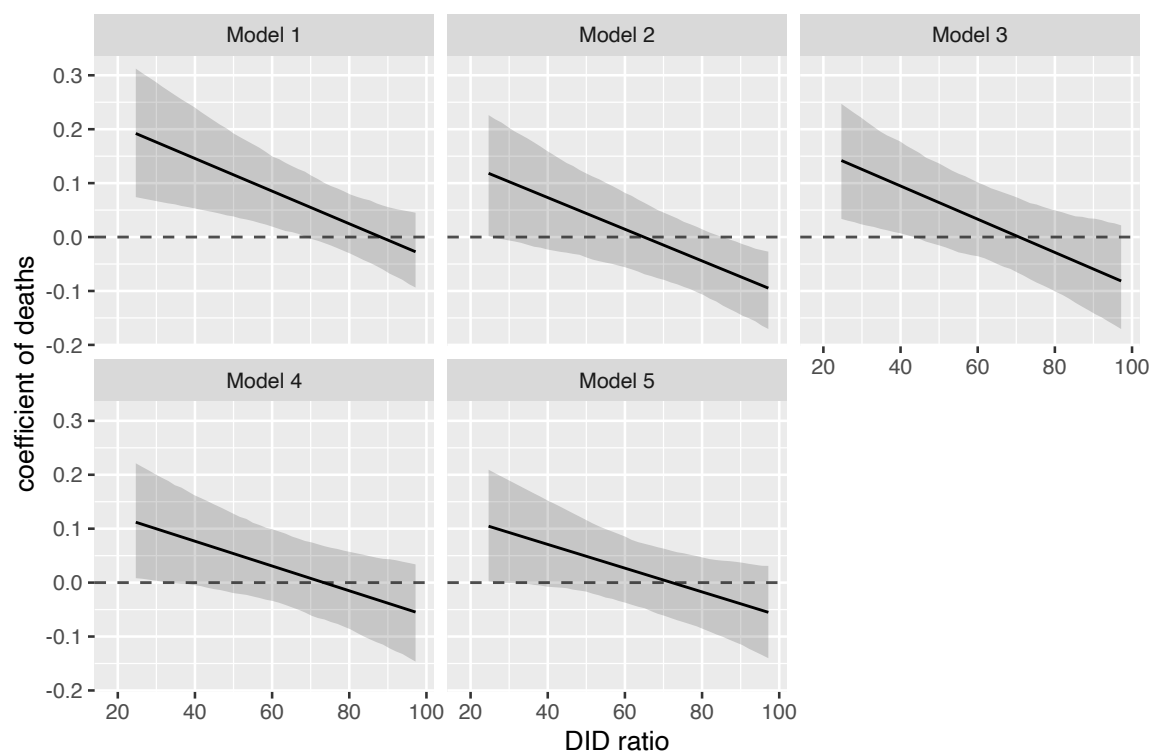


Figure 8: Response variable: Difference in Komeito's prefectural vote share between the 2017 and 2021 elections

2.3.3 CDP

Table 8: Response variable: Difference in CDP's prefectural vote share between the 2017 and 2021 elections

	Model 1	Model 2	Model 3	Model 4	Model 5
Intercept	0.0206 (0.0058)	0.0201 (0.0057)	0.0115 (0.0197)	0.0175 (0.0194)	0.0004 (0.0174)
Deaths / 1000	-0.0969 (0.1233)	-0.2028 (0.1432)	-0.0838 (0.1391)	-0.1104 (0.1358)	-0.1201 (0.1172)
DID ratio	-0.0010 (0.0004)	-0.0009 (0.0004)	-0.0008 (0.0005)	-0.0006 (0.0005)	-0.0006 (0.0004)
Deaths \times DID ratio	0.0011 (0.0035)	0.0015 (0.0035)	-0.0010 (0.0039)	0.0014 (0.0040)	0.0018 (0.0035)
Cases / 10		0.0333 (0.1350)	0.0763 (0.1333)	0.0280 (0.1320)	-0.0419 (0.1156)
Ratio vaccinated		-0.4097 (0.2322)	-0.2740 (0.2169)	-0.3347 (0.2131)	-0.2974 (0.1843)
Ishin SMD			-0.0266 (0.0106)	-0.0213 (0.0107)	-0.0204 (0.0092)
Komeito SMD			-0.0019 (0.0203)	-0.0057 (0.0198)	-0.0110 (0.0172)
Num. SMDs			0.0010 (0.0018)	0.0006 (0.0017)	0.0005 (0.0015)
Opposition coord.			0.0340 (0.0191)	0.0272 (0.0189)	0.0157 (0.0166)
Change in turnout				-0.0030 (0.0017)	-0.0004 (0.0016)
Distance from Osaka (100 km)					0.0055 (0.0015)
Adj. R ²	0.3521	0.3827	0.5285	0.5560	0.6691
Num. obs.	47	47	47	47	47

Standard errors are in parentheses.

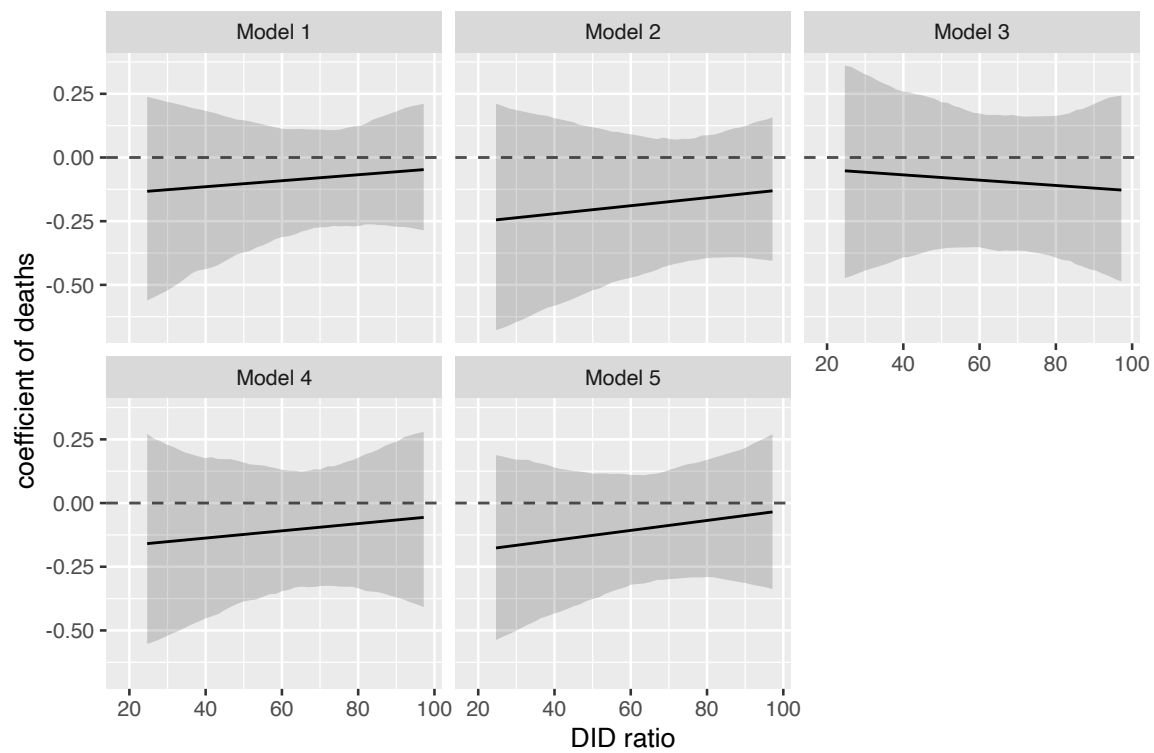


Figure 9: Response variable: Difference in CDP's prefectural vote share between the 2017 and 2021 elections

2.3.4 Ishin

Table 9: Response variable: Difference in Ishin's prefectural vote share between the 2017 and 2021 elections

	Model 1	Model 2	Model 3	Model 4	Model 5
Intercept	0.0598 (0.0069)	0.0607 (0.0065)	0.0878 (0.0210)	0.0776 (0.0193)	0.0979 (0.0158)
Deaths / 1000	0.0893 (0.1464)	0.3254 (0.1630)	0.2134 (0.1482)	0.2580 (0.1345)	0.2695 (0.1063)
DID	0.0006 (0.0005)	0.0008 (0.0005)	0.0013 (0.0005)	0.0010 (0.0005)	0.0009 (0.0004)
Deaths \times DID ratio	0.0017 (0.0042)	0.0010 (0.0039)	0.0087 (0.0042)	0.0047 (0.0040)	0.0042 (0.0031)
Cases / 10		-0.2476 (0.1537)	-0.3322 (0.1420)	-0.2512 (0.1308)	-0.1684 (0.1048)
Ratio vaccinated		0.4082 (0.2643)	0.3595 (0.2311)	0.4612 (0.2112)	0.4171 (0.1671)
Ishin SMD			0.0334 (0.0112)	0.0244 (0.0106)	0.0233 (0.0083)
Komeito SMD			-0.0210 (0.0216)	-0.0147 (0.0196)	-0.0083 (0.0156)
Num. SMDs			-0.0043 (0.0019)	-0.0036 (0.0017)	-0.0036 (0.0014)
Opposition coord.			-0.0421 (0.0203)	-0.0307 (0.0187)	-0.0172 (0.0151)
Change in turnout				0.0051 (0.0017)	0.0020 (0.0015)
Distance from Osaka (100 km)					-0.0065 (0.0014)
Adj. R ²	0.1977	0.2976	0.5302	0.6172	0.7611
Num. obs.	47	47	47	47	47

Standard errors are in parentheses.

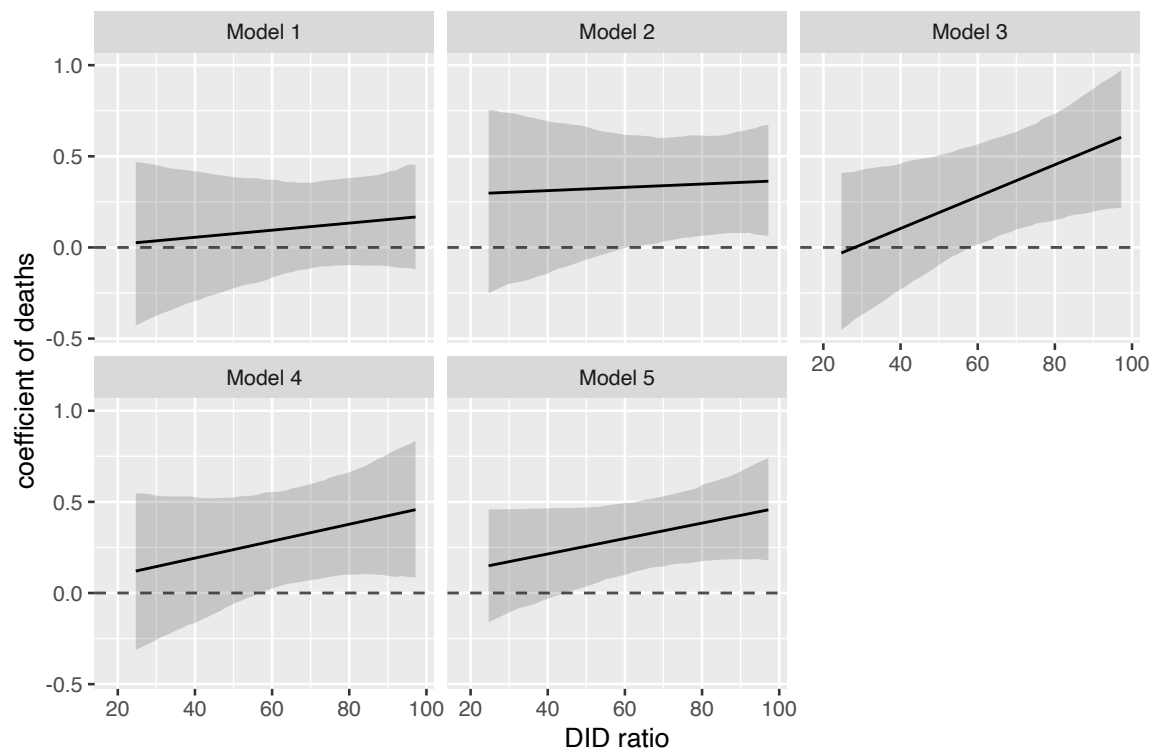


Figure 10: Response variable: Difference in Ishin's prefectural vote share between the 2017 and 2021 elections

2.3.5 JCP

Table 10: Response variable: Difference in JCP's prefectural vote share between the 2017 and 2021 elections

	Model 1	Model 2	Model 3	Model 4	Model 5
Intercept	−0.0075 (0.0013)	−0.0074 (0.0013)	−0.0081 (0.0051)	−0.0073 (0.0052)	−0.0083 (0.0054)
Deaths / 1000	−0.0447 (0.0275)	−0.0207 (0.0325)	0.0067 (0.0358)	0.0032 (0.0361)	0.0026 (0.0364)
DID ratio	0.0001 (0.0001)	0.0001 (0.0001)	−0.0000 (0.0001)	0.0000 (0.0001)	0.0000 (0.0001)
Deaths × DID ratio	0.0003 (0.0008)	0.0002 (0.0008)	−0.0005 (0.0010)	−0.0002 (0.0011)	−0.0001 (0.0011)
Cases / 10		−0.0165 (0.0306)	−0.0282 (0.0343)	−0.0347 (0.0351)	−0.0388 (0.0359)
Ratio vaccinated		0.0668 (0.0526)	0.0530 (0.0558)	0.0449 (0.0567)	0.0471 (0.0572)
Ishin SMD			−0.0037 (0.0027)	−0.0030 (0.0028)	−0.0030 (0.0029)
Komeito SMD			−0.0042 (0.0052)	−0.0047 (0.0053)	−0.0050 (0.0053)
Num. SMDs			0.0007 (0.0005)	0.0006 (0.0005)	0.0006 (0.0005)
Opposition coord.			−0.0003 (0.0049)	−0.0012 (0.0050)	−0.0019 (0.0052)
Change in turnout				−0.0004 (0.0004)	−0.0003 (0.0005)
Distance from Osaka (100 km)					0.0003 (0.0005)
Adj. R ²	0.0179	0.0370	0.0515	0.0470	0.0330
Num. obs.	47	47	47	47	47

Standard errors are in parentheses.

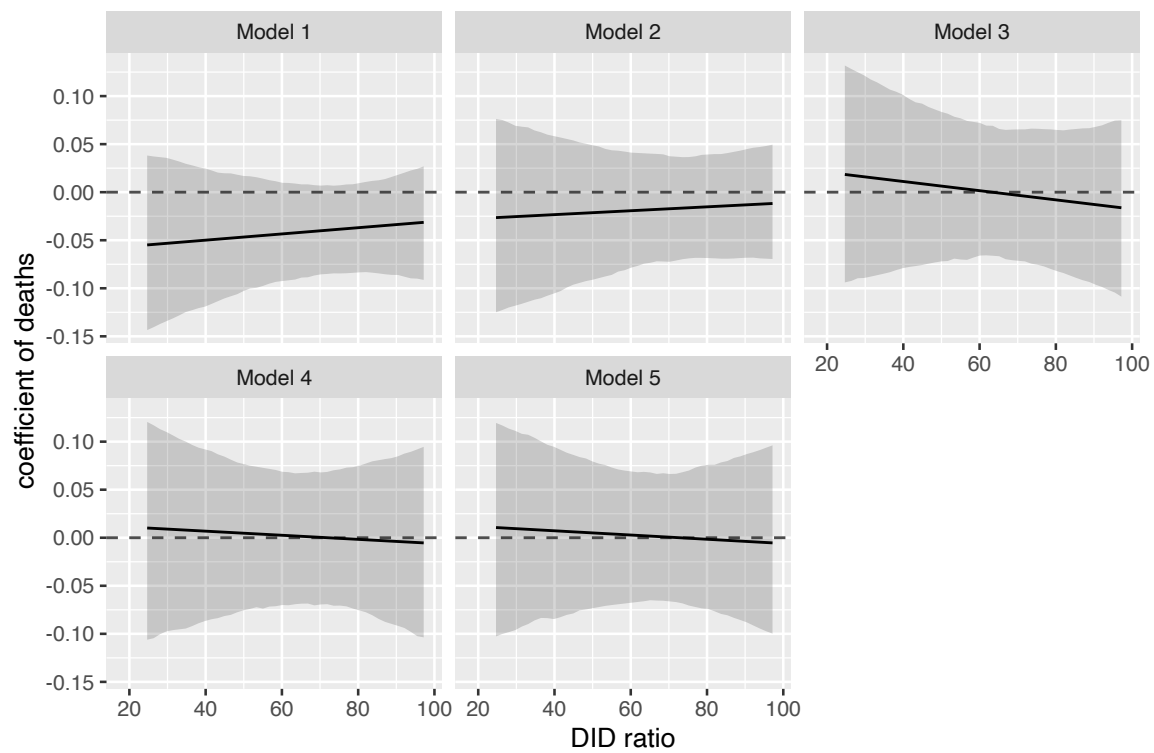


Figure 11: Response variable: Difference in JCP's prefectural vote share between the 2017 and 2021 elections

2.4 Regression with *Metropolitan* as the measure of urbanness

In this section, we use Big3 (three major metropolitan areas) as our measure of urbanness. The following variables are centered at mean.

- Deaths per 1000
- Cases per 10
- Share of people fully vaccinated

2.4.1 LDP

Table 11: Response variable: Difference in LDP's prefectural vote share between the 2017 and 2021 elections

	Model 1	Model 2	Model 3	Model 4	Model 5
Intercept	0.0319 (0.0048)	0.0322 (0.0050)	-0.0008 (0.0189)	-0.0005 (0.0191)	-0.0226 (0.0206)
Deaths / 1000	-0.0703 (0.0795)	-0.0319 (0.1221)	-0.1449 (0.1258)	-0.1588 (0.1297)	-0.2320 (0.1272)
Metropolitan	-0.0133 (0.0124)	-0.0133 (0.0133)	-0.0028 (0.0135)	-0.0014 (0.0139)	0.0126 (0.0146)
Deaths \times Metropolitan	-0.2109 (0.1325)	-0.2272 (0.1389)	-0.4891 (0.1430)	-0.4475 (0.1643)	-0.3218 (0.1654)
Cases / 10		-0.0223 (0.1179)	-0.0291 (0.1197)	-0.0359 (0.1215)	-0.0874 (0.1174)
Ratio vaccinated		0.0905 (0.2137)	-0.0093 (0.1997)	-0.0363 (0.2080)	-0.0700 (0.1977)
Ishin SMD			-0.0110 (0.0095)	-0.0090 (0.0104)	-0.0025 (0.0102)
Komeito SMD			0.0381 (0.0192)	0.0382 (0.0194)	0.0398 (0.0184)
Num. SMDs			0.0035 (0.0014)	0.0033 (0.0014)	0.0025 (0.0014)
Opposition coord.			0.0260 (0.0194)	0.0257 (0.0196)	0.0269 (0.0186)
Change in turnout				-0.0010 (0.0018)	-0.0002 (0.0017)
Distance from Osaka (100 km)					0.0043 (0.0019)
Adj. R ²	0.3173	0.2893	0.4541	0.4434	0.4999
Num. obs.	47	47	47	47	47

Standard errors are in parentheses.

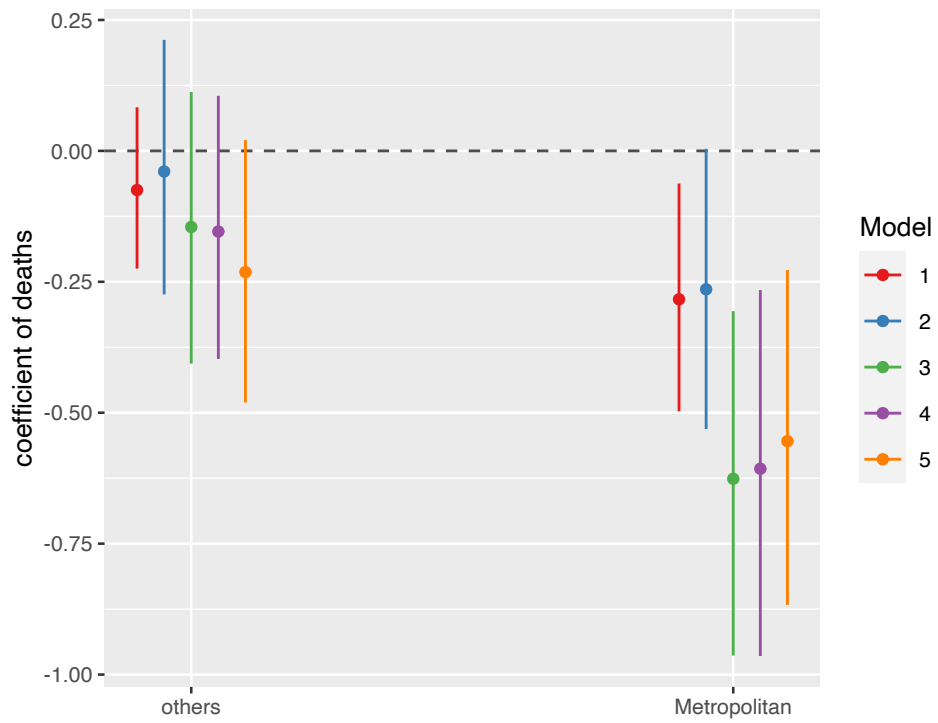


Figure 12: Response variable: Difference in LDP's prefectural vote share between the 2017 and 2021 elections

2.4.2 Komeito

Table 12: Response variable: Difference in Komeito's prefectural vote share between the 2017 and 2021 elections

	Model 1	Model 2	Model 3	Model 4	Model 5
Intercept	0.0025 (0.0015)	0.0032 (0.0014)	-0.0018 (0.0055)	-0.0016 (0.0054)	-0.0082 (0.0058)
Deaths / 1000	0.0844 (0.0255)	0.0145 (0.0339)	0.0460 (0.0369)	0.0345 (0.0370)	0.0125 (0.0360)
Metropolitan	0.0007 (0.0040)	-0.0035 (0.0037)	-0.0015 (0.0040)	-0.0004 (0.0040)	0.0038 (0.0041)
Deaths \times Metropolitan	-0.1678 (0.0425)	-0.1521 (0.0386)	-0.1210 (0.0420)	-0.0864 (0.0469)	-0.0486 (0.0468)
Cases / 10		0.1195 (0.0327)	0.1239 (0.0351)	0.1182 (0.0347)	0.1028 (0.0332)
Ratio vaccinated		0.1204 (0.0593)	0.1543 (0.0586)	0.1319 (0.0593)	0.1218 (0.0559)
Ishin SMD			-0.0018 (0.0028)	-0.0001 (0.0030)	0.0018 (0.0029)
Komeito SMD			-0.0055 (0.0056)	-0.0054 (0.0055)	-0.0049 (0.0052)
Num. SMDs			-0.0002 (0.0004)	-0.0003 (0.0004)	-0.0006 (0.0004)
Opposition coord.			0.0109 (0.0057)	0.0106 (0.0056)	0.0110 (0.0053)
Change in turnout				-0.0008 (0.0005)	-0.0006 (0.0005)
Distance from Osaka (100 km)					0.0013 (0.0005)
Adj. R ²	0.2542	0.4172	0.5000	0.5182	0.5740
Num. obs.	47	47	47	47	47

Standard errors are in parentheses.

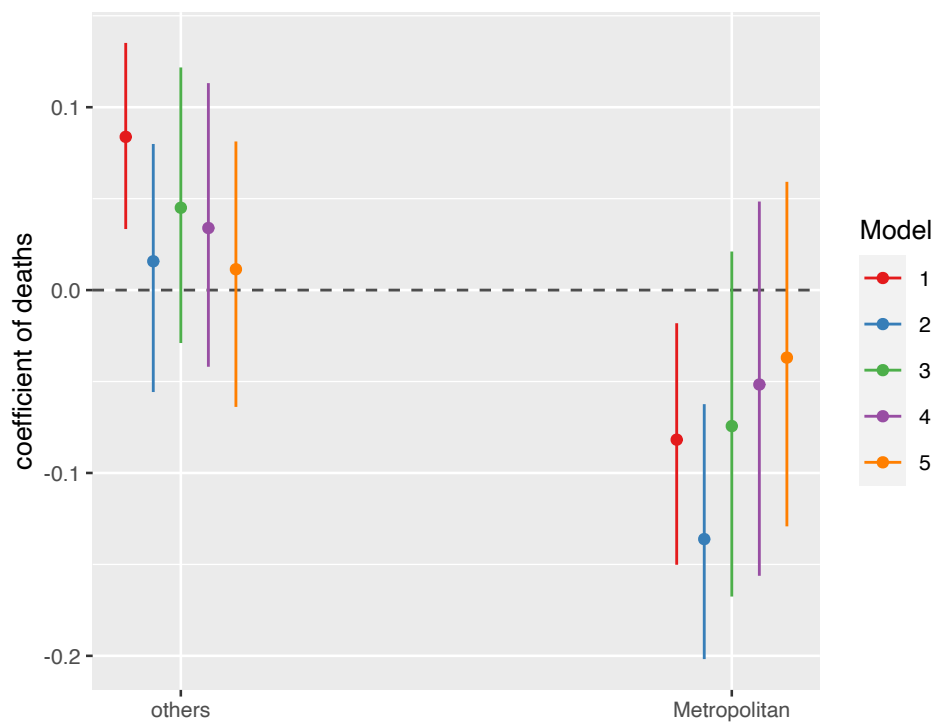


Figure 13: Response variable: Difference in Komeito's prefectural vote share between the 2017 and 2021 elections

2.4.3 CDP

Table 13: Response variable: Difference in CDP's prefectural vote share between the 2017 and 2021 elections

	Model 1	Model 2	Model 3	Model 4	Model 5
Intercept	0.0315 (0.0053)	0.0300 (0.0053)	0.0385 (0.0200)	0.0392 (0.0198)	0.0070 (0.0198)
Deaths / 1000	-0.1175 (0.0883)	-0.1907 (0.1315)	-0.0398 (0.1332)	-0.0751 (0.1348)	-0.1816 (0.1226)
Metropolitan	-0.0362 (0.0138)	-0.0330 (0.0143)	-0.0297 (0.0143)	-0.0262 (0.0145)	-0.0058 (0.0141)
Deaths \times Metropolitan	-0.0668 (0.1472)	-0.0258 (0.1496)	-0.0471 (0.1515)	0.0587 (0.1707)	0.2417 (0.1594)
Cases / 10		-0.0144 (0.1270)	0.0202 (0.1267)	0.0028 (0.1263)	-0.0721 (0.1132)
Ratio vaccinated		-0.3777 (0.2303)	-0.2149 (0.2115)	-0.2835 (0.2161)	-0.3325 (0.1906)
Ishin SMD			-0.0321 (0.0101)	-0.0269 (0.0108)	-0.0176 (0.0099)
Komeito SMD			-0.0180 (0.0204)	-0.0176 (0.0202)	-0.0153 (0.0178)
Num. SMDs			0.0005 (0.0014)	0.0001 (0.0015)	-0.0011 (0.0013)
Opposition coord.			0.0147 (0.0206)	0.0140 (0.0204)	0.0157 (0.0180)
Change in turnout				-0.0024 (0.0019)	-0.0013 (0.0017)
Distance from Osaka (100 km)					0.0062 (0.0018)
Adj. R^2	0.3893	0.4021	0.5563	0.5645	0.6632
Num. obs.	47	47	47	47	47

Standard errors are in parentheses.

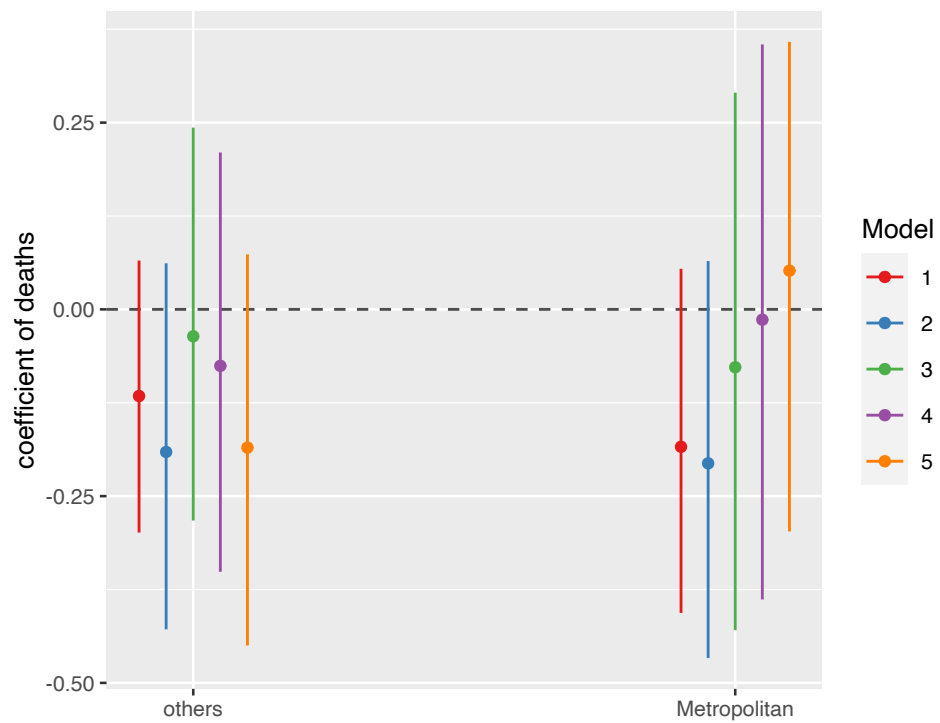


Figure 14: Response variable: Difference in CDP's prefectural vote share between the 2017 and 2021 elections

2.4.4 Ishin

Table 14: Response variable: Difference in Ishin’s prefectural vote share between the 2017 and 2021 elections

	Model 1	Model 2	Model 3	Model 4	Model 5
Intercept	0.0495 (0.0058)	0.0502 (0.0057)	0.0560 (0.0193)	0.0551 (0.0188)	0.0855 (0.0189)
Deaths / 1000	-0.0083 (0.0967)	0.2274 (0.1396)	0.1473 (0.1287)	0.1924 (0.1279)	0.2929 (0.1166)
Metropolitan	0.0251 (0.0151)	0.0288 (0.0152)	0.0249 (0.0139)	0.0205 (0.0137)	0.0013 (0.0134)
Deaths \times Metropolitan	0.3464 (0.1612)	0.2595 (0.1588)	0.4944 (0.1464)	0.3595 (0.1620)	0.1869 (0.1516)
Cases / 10		-0.2102 (0.1347)	-0.1956 (0.1224)	-0.1735 (0.1198)	-0.1028 (0.1076)
Ratio vaccinated		0.2890 (0.2443)	0.2525 (0.2043)	0.3400 (0.2051)	0.3862 (0.1812)
Ishin SMD			0.0399 (0.0097)	0.0333 (0.0102)	0.0244 (0.0094)
Komeito SMD			-0.0012 (0.0197)	-0.0016 (0.0192)	-0.0039 (0.0169)
Num. SMDs			-0.0037 (0.0014)	-0.0032 (0.0014)	-0.0021 (0.0013)
Opposition coord.			-0.0155 (0.0199)	-0.0145 (0.0194)	-0.0162 (0.0171)
Change in turnout				0.0031 (0.0018)	0.0020 (0.0016)
Distance from Osaka (100 km)					-0.0058 (0.0017)
Adj. R^2	0.3570	0.4089	0.6364	0.6555	0.7326
Num. obs.	47	47	47	47	47

Standard errors are in parentheses.

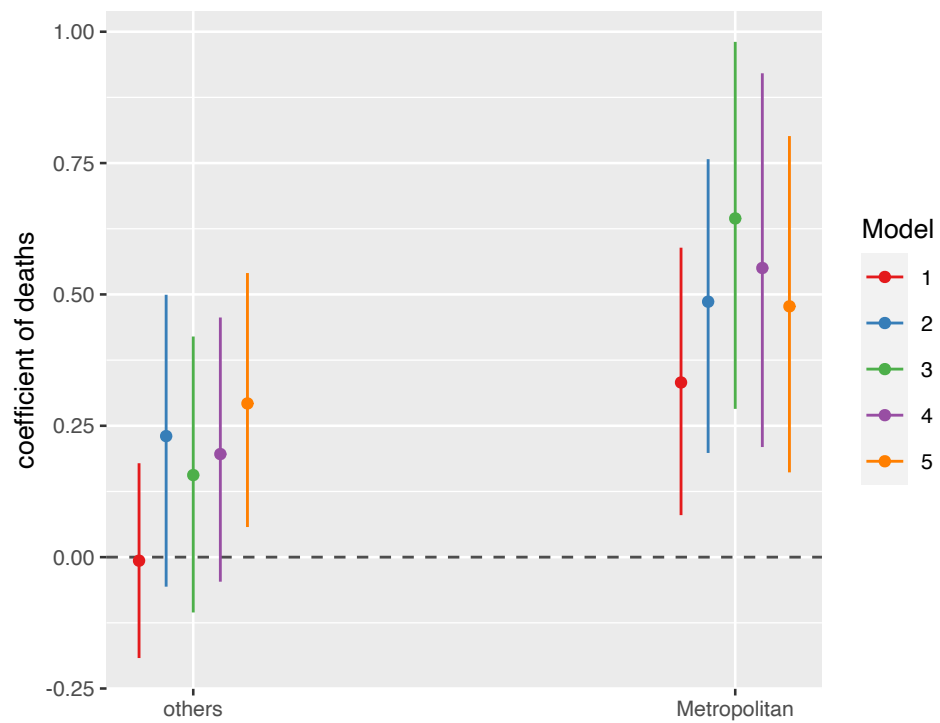


Figure 15: Response variable: Difference in Ishin's prefectural vote share between the 2017 and 2021 elections

2.4.5 JCP

Table 15: Response variable: Difference in JCP's prefectural vote share between the 2017 and 2021 elections

	Model 1	Model 2	Model 3	Model 4	Model 5
Intercept	−0.0075 (0.0012)	−0.0073 (0.0012)	−0.0070 (0.0052)	−0.0069 (0.0053)	−0.0081 (0.0061)
Deaths / 1000	−0.0277 (0.0205)	−0.0029 (0.0306)	0.0164 (0.0347)	0.0135 (0.0359)	0.0097 (0.0376)
Metropolitan	0.0015 (0.0032)	0.0012 (0.0033)	−0.0008 (0.0037)	−0.0006 (0.0038)	0.0002 (0.0043)
Deaths × Metropolitan	0.0014 (0.0342)	−0.0101 (0.0348)	−0.0429 (0.0395)	−0.0343 (0.0454)	−0.0277 (0.0489)
Cases / 10		−0.0089 (0.0295)	−0.0337 (0.0330)	−0.0351 (0.0336)	−0.0378 (0.0347)
Ratio vaccinated		0.0781 (0.0535)	0.0591 (0.0552)	0.0535 (0.0575)	0.0518 (0.0584)
Ishin SMD			−0.0043 (0.0026)	−0.0038 (0.0029)	−0.0035 (0.0030)
Komeito SMD			−0.0048 (0.0053)	−0.0047 (0.0054)	−0.0046 (0.0054)
Num. SMDs			0.0008 (0.0004)	0.0008 (0.0004)	0.0008 (0.0004)
Opposition coord.			−0.0021 (0.0054)	−0.0021 (0.0054)	−0.0021 (0.0055)
Change in turnout				−0.0002 (0.0005)	−0.0002 (0.0005)
Distance from Osaka (100 km)					0.0002 (0.0006)
Adj. R ²	0.0006	0.0201	0.0840	0.0626	0.0402
Num. obs.	47	47	47	47	47

Standard errors are in parentheses.

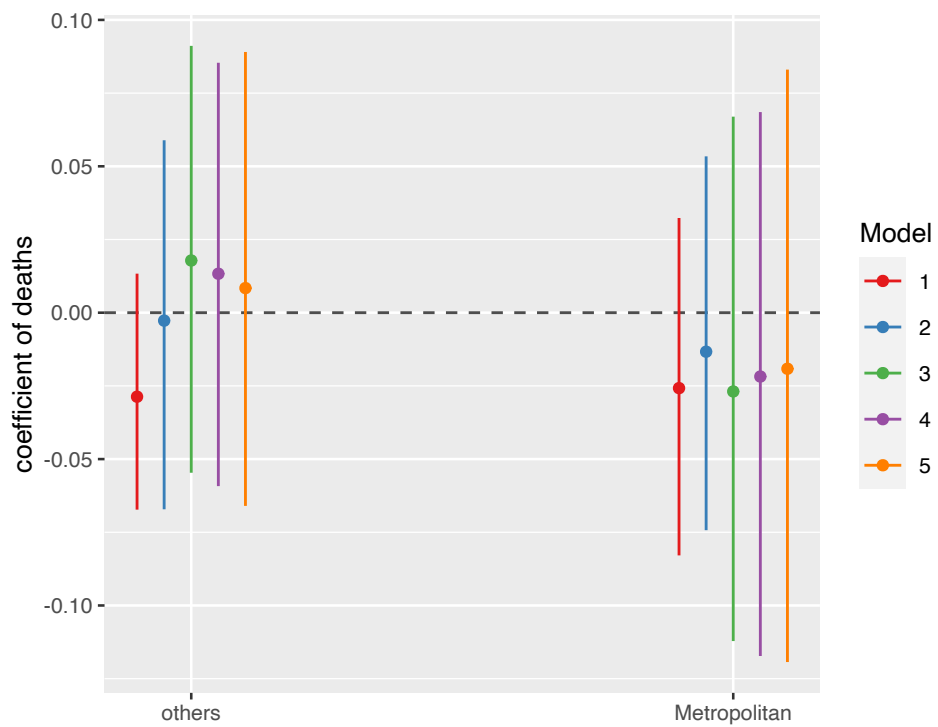


Figure 16: Response variable: Difference in JCP's prefectural vote share between the 2017 and 2021 elections