# Online Appendix

## 1. Descriptive Statistics (Main models)

### Table 1: Summary statistics for the adoption of tobacco control policies

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Variable** | **Obs.** | **Mean** | **Std. Dev.** | **Min.** | **Max.** | **Measure and source** |
| Tobacco adv. restriction | 293 | .0511945 | .2207714 | 0 | 1 | Dummy; Year then the advertising ban entered into force; Federal Office for Public Health[[1]](#footnote-1) |
| Support for European integration | 338 | 56.23547 | 12.59311 | 25.13 | 80.32 | For the years 1998 and 1999, I am using the vote on the entry in the EU, in 1992. For the period 2000-2004, I am referring to the votes on the Bilateral Treaties I (2000-05-21). The year 2005 entails mean value of the results for the votes on the Bilateral Treaties II (2005-06-05 & 2005-09-25). 2006-2008, I am referring to the federal law on the cooperation with Eastern European countries (2006-11-26). 2009-2010 employs the vote concerning the extension of the free movement of people to Eastern European countries.[[2]](#footnote-2) |
| Tobacco industry / cultivation | 338 | .4171598 | .4938208 | 0 | 1 | Presence of tobacco companies or cultivation in the canton; Tobacco companies, Swiss-Tabac, tabaction.ch; e-learning platform on tobacco control[[3]](#footnote-3) |
| Time in Board of CDP | 338 | 2.532544 | 3.748844 | 0 | 13 | Continuous variable; Annual reports CDP[[4]](#footnote-4) |
| Ban in neighbouring canton or country | 338 | 1.109467 | 1.264617 | 0 | 5 | Number of neighbouring cantons or countries with a ban of tobacco advertising. |
|  | 312 | .1454899 | .2625141 | 0 | 1 | Spatial lag based on a connectivity matrix of shared borders between cantons, according to Gilardi and Wasserfallen ([2016](#_ENREF_1)). |
| Public opinion | 338 | 23.93346 | 4.599317 | 13.79 | 33.16 | Proportion of the population that voted yes in the referendum regarding the ban of tobacco advertising, in 1992; Centre for Research on Direct Democracy, Aarau, CH[[5]](#footnote-5) |
| Regulation of other civil liberties | 338 | 49.87815 | 4.554228 | 38.96878 | 58.73561 | Data from the Avenir Suisse’s Freedom Index. The variable uses the average of eight sub indexes of the civil liberties’ index: home-schooling, free school choice, average time to obtain a building permit, video surveillance, bans on wearing masks, ban of alcohol consumption, frequency of fixed radar devices for traffic control, and church tax rates. The values of the indicator are standardized around the mean of 50. If the indicator value is above 50, freedom in the cantons is above average, and vice versa. To make the interpretation of the variable suitable for this paper, the author deducted the indicator value from 100, the theoretical maximum of the index, which inverses the scale. This way, a higher value indicates the presence of more regulation. The author obtained the data by email from Dr. Samuel Rutz (Samuel.Rutz@avenir-suisse.ch) and Tobias Schlegel (Tobias.Schlegel@avenir-suisse.ch) from Avenir Suisse, on March 9, 2016. Regarding the period of analysis for this project, data is available from 2008-2010. I extrapolated the data from 2008 to the years 1998-2007. |
| Seats of Social Democrats | 338 | 22.77684 | 14.97286 | 0 | 60 | Percentage of seats in the cantonal government; Swiss federal office for statistics[[6]](#footnote-6) |
| Seats of Swiss Peoples Party | 338 | 11.2426 | 14.25309 | 0 | 42.85714 | Percentage of seats in the cantonal government; Swiss federal office for statistics[[7]](#footnote-7) |
| Seats of Christian Democrats | 338 | 28.62003 | 22.02736 | 14.28571 | 100 |
| Seats of Liberal Party | 338 | 27.69019 | 13.68593 | 0 | 71.42857 |
| German-speaking population | 338 | 68.74438 | 34.24672 | 5.765506 | 95.47135 | Percentage of the German-speaking population in the canton; snapshot of 2010; Swiss federal office for statistics[[8]](#footnote-8) |
| Population size | 338 | 2.839641 | 2.920194 | .14873 | 13.51297 | Population in 100,000, Swiss federal office for statistics[[9]](#footnote-9) |
| Time | 338 | 6 | 3.747205 | 0 | 12 | -- |
| Time2 | 338 | 5 | 4.665232 | 0 | 14.4 | -- |
| Time3 | 338 | 4.68 | 5.47735 | 0 | 17.28 | -- |

## 2. Alternative Estimators

### Table 2: Probit Models (Robust standard errors - clustered by canton)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 | Model 7 |
| Support for European | 0.0260\* | 0.0421\*\* | 0.0440\*\* | 0.0489\*\* | 0.0517\*\*\* | 0.0709\*\*\* | 0.0836\*\*\* |
| integration | (0.0153) | (0.0184) | (0.0204) | (0.0191) | (0.0199) | (0.0173) | (0.0183) |
| Tobacco | -- | -0.565 | -0.803 | -1.198\*\* | -1.011 | -1.382\*\* | -1.086\* |
| industry/cultiv. |  | (0.376) | (0.529) | (0.521) | (0.625) | (0.632) | (0.620) |
| Time on the CDP | -- | -- | 0.0299 | -0.0348 | -0.00823 | 0.0221 | 0.0486 |
| board |  |  | (0.0352) | (0.0597) | (0.0573) | (0.0590) | (0.0582) |
| Number of neighbouring | -- | -- | 0.403\*\* | 0.627\*\*\* | -- | 0.626\*\*\* | -- |
| cantons / countries with ban |  |  | (0.159) | (0.206) |  | (0.168) |  |
| Public opinion | -- | -- | 0.122\*\*\* | 0.156\*\*\* | 0.141\*\*\* | 0.157\*\*\* | 0.189\*\*\* |
|  |  |  | (0.0260) | (0.0425) | (0.0407) | (0.0607) | (0.0529) |
| Left | -- | -- | 0.0108 | 0.0233\* | 0.0149 | -- | -- |
|  |  |  | (0.0109) | (0.0141) | (0.0109) |  |  |
| Regulation of |  |  |  | 0.130\*\* | 0.0560 | 0.117\*\* | 0.0450 |
| other civil liberties |  |  |  | (0.0601) | (0.0492) | (0.0459) | (0.0443) |
| German-speaking |  |  |  | -0.00765 | -0.00944 | -0.0114 | -0.0181\*\* |
| population (%) |  |  |  | (0.00819) | (0.00642) | (0.00968) | (0.00711) |
| Population size |  |  |  | -0.0218 | 0.0336 | -0.0537 | -0.0389 |
|  |  |  |  | (0.0859) | (0.0888) | (0.0846) | (0.0908) |
| Spatial lag |  |  |  |  | -0.805 |  | -1.650\* |
|  |  |  |  |  | (1.191) |  | (0.976) |
| Swiss People’s |  |  |  |  |  | 0.0257 | 0.0416\*\*\* |
| Party |  |  |  |  |  | (0.0158) | (0.0152) |
| Christian |  |  |  |  |  | -0.00175 | 0.0162 |
| Democrats |  |  |  |  |  | (0.0169) | (0.0155) |
| Liberals |  |  |  |  |  | -0.00476 | -0.00401 |
|  |  |  |  |  |  | (0.0162) | (0.0156) |
| t1 | -0.852\*\*\* | -1.017\*\* | -0.934\* | -0.330 | -2.073\*\* | -0.652 | -2.752\*\* |
|  | (0.326) | (0.408) | (0.540) | (1.044) | (0.969) | (1.031) | (1.177) |
| t2 | 2.079\*\*\* | 2.453\*\* | 2.278\* | 1.690 | 4.298\*\* | 2.217 | 5.508\*\*\* |
|  | (0.797) | (1.002) | (1.229) | (1.784) | (1.727) | (1.730) | (2.022) |
| t3 | -1.089\*\* | -1.287\*\* | -1.199\* | -1.030 | -2.086\*\* | -1.280 | -2.644\*\*\* |
|  | (0.448) | (0.558) | (0.658) | (0.855) | (0.849) | (0.822) | (0.963) |
| Constant | -3.605\*\*\* | -4.299\*\*\* | -8.419\*\*\* | -17.63\*\*\* | -10.00\*\*\* | -17.08\*\*\* | -11.56\*\*\* |
|  | (0.873) | (1.157) | (1.564) | (4.277) | (2.937) | (4.875) | (4.228) |
| N | 293 | 293 | 293 | 293 | 267 | 293 | 267 |
| Pseudo-R2 | 0.206 | 0.230 | 0.400 | 0.458 | 0.401 | 0.470 | 0.437 |
| chi2 | 14.79 | 13.67 | 40.47 | 84.91 | 91.63 | 83.98 | 81.83 |

Standard errors in parentheses; significance levels: \* p<0.1, \*\* p<0.05, \*\*\* p<0.01

### Table 3: Cloglog Models (Robust standard errors - clustered by canton)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 | Model 7 |
| Support for European | 0.0429 | 0.0845\*\* | 0.0846\*\* | 0.0716\*\* | 0.0924\* | 0.114\*\*\* | 0.137\*\*\* |
| integration | (0.0301) | (0.0393) | (0.0353) | (0.0354) | (0.0545) | (0.0304) | (0.0320) |
| Tobacco | -- | -1.270\* | -2.042\*\* | -2.288\*\* | -2.117 | -3.077\*\* | -2.235 |
| industry/cultiv. |  | (0.727) | (0.926) | (1.115) | (2.067) | (1.406) | (1.392) |
| Time on the CDP | -- | -- | 0.0620 | -0.0310 | 0.0112 | 0.0841 | 0.129 |
| board |  |  | (0.0469) | (0.139) | (0.144) | (0.149) | (0.127) |
| Number of neighbouring | -- | -- | 0.763\*\*\* | 1.053\*\*\* | -- | 0.982\*\*\* | -- |
| cantons / countries with ban |  |  | (0.272) | (0.407) |  | (0.234) |  |
| Public opinion | -- | -- | 0.197\*\*\* | 0.213\*\*\* | 0.210\* | 0.209\* | 0.270\*\* |
|  |  |  | (0.0427) | (0.0655) | (0.121) | (0.123) | (0.110) |
| Left | -- | -- | 0.0226 | 0.0443\* | 0.0257 | -- | -- |
|  |  |  | (0.0187) | (0.0268) | (0.0170) |  |  |
| Regulation of | -- | -- | -- | 0.193 | 0.0122 | 0.168 | 0.0152 |
| other civil liberties |  |  |  | (0.160) | (0.171) | (0.109) | (0.131) |
| German-speaking | -- | -- | -- | -0.00772 | -0.0109 | -0.0131 | -0.0240 |
| population (%) |  |  |  | (0.0191) | (0.0143) | (0.0254) | (0.0152) |
| Population size | -- | -- | -- | -0.0375 | 0.0990 | -0.130 | -0.0912 |
|  |  |  |  | (0.158) | (0.240) | (0.146) | (0.222) |
| Spatial lag | -- | -- | -- | -- | -2.479 | -- | -3.014 |
|  |  |  |  |  | (2.946) |  | (2.175) |
| Swiss People’s | -- | -- | -- | -- | -- | 0.0484 | 0.0747\* |
| Party |  |  |  |  |  | (0.0320) | (0.0405) |
| Christian | -- | -- | -- | -- | -- | -0.0254 | 0.0131 |
| Democrats |  |  |  |  |  | (0.0409) | (0.0301) |
| Liberals | -- | -- | -- | -- | -- | -0.0320 | -0.0257 |
|  |  |  |  |  |  | (0.0353) | (0.0317) |
| t1 | -1.687\*\* | -2.028\*\* | -2.054\* | -0.746 | -3.609 | -1.524 | -4.644\*\* |
|  | (0.703) | (0.839) | (1.147) | (2.496) | (2.433) | (2.348) | (2.360) |
| t2 | 4.268\*\* | 5.107\*\* | 5.104\* | 3.060 | 7.433\* | 4.527 | 9.280\*\* |
|  | (1.692) | (2.102) | (2.713) | (4.450) | (4.276) | (4.161) | (4.026) |
| t3 | -2.275\*\* | -2.726\*\* | -2.715\* | -1.810 | -3.535\* | -2.508 | -4.409\*\* |
|  | (0.952) | (1.189) | (1.461) | (2.153) | (2.037) | (2.007) | (1.888) |
| Constant | -6.772\*\*\* | -8.830\*\*\* | -15.53\*\*\* | -26.81\*\*\* | -13.21 | -24.76\*\* | -15.11 |
|  | (1.751) | (2.638) | (3.394) | (9.466) | (9.592) | (10.12) | (10.26) |
| N | 293 | 293 | 293 | 293 | 267 | 293 | 267 |
| Pseudo-R2 | -- | -- | -- | -- | -- | -- | -- |
| chi2 | 14.43 | 15.39 | 51.83 | 120.8 | 71.93 | 91.13 | 72.83 |

Standard errors in parentheses; significance levels: \* p<0.1, \*\* p<0.05, \*\*\* p<0.01

## 3. Bibliography

GILARDI, F. & WASSERFALLEN, F. 2016. How Socialization Attenuates Tax Competition. *British Journal of Political Science,* 46**,** 45-65.

1. Tobacco advertisement restrictions in the cantons: <http://www.bag.admin.ch/themen/drogen/00041/03814/03816/index.html?lang=de>, last accessed on January 12, 2014. [↑](#footnote-ref-1)
2. The data source is the direct democracy database: <http://www.c2d.ch/votes.php?table=votes>, last access, January 3, 2015. [↑](#footnote-ref-2)
3. Japan Tobacco: <http://www.jti.com/media/news/new-jti-international-headquarters-in-geneva/>, accessed last, January 14, 2013. Philip Morris: <http://www.pmi.com/marketpages/pages/market_en_ch.aspx>, accessed last, January 14, 2013. BAT: <http://www.bat.ch/group/sites/BAT_7XNHN7.nsf/vwPagesWebLive/DO7XQK8R?opendocument&SKN=1>, accessed last, January 14, 2013. tabaction.ch: <http://suchtakademie.files.wordpress.com/2012/06/lmp_tabaction-d.pdf>, last access, October 20, 2013. SwissTabac: <http://www.swisstabac.ch/index.php?getcat=1&page=4>, last access, February 10, 2014. [↑](#footnote-ref-3)
4. <http://www.gdk-cds.ch/index.php?id=990>, accessed last, January 14, 2013. [↑](#footnote-ref-4)
5. <http://www.c2d.ch/detailed_display.php?lname=votes&table=votes&page=1&parent_id=&sublinkname=results&id=34703>, accessed last, April 3, 2014. [↑](#footnote-ref-5)
6. http://www.bfs.admin.ch/bfs/portal/de/index/themen/17/02/blank/key/kantonale\_regierungen.html, accessed last, January 14, 2013. [↑](#footnote-ref-6)
7. http://www.bfs.admin.ch/bfs/portal/de/index/themen/17/02/blank/key/kantonale\_regierungen.html, accessed last, January 14, 2013. [↑](#footnote-ref-7)
8. http://www.bfs.admin.ch/bfs/portal/de/index/themen/01/05/blank/key/sprachen.html, accessed last, January 14, 2013. [↑](#footnote-ref-8)
9. <http://www.bfs.admin.ch/bfs/portal/de/index/themen/01/06/blank/key/09.html>, accessed last, January 14, 2013. [↑](#footnote-ref-9)