

A1 Appendix

A1.1 Summary Statistics

Table A3: Summary Statistics

Variable	Overall		No Prepaid Postage		Prepaid Postage	
	Mean	SD	Mean	SD	Mean	SD
Population Size	2.62	6.53	2.37	6.28	7.13	8.94
Population Density	328.13	558.78	307.45	540.57	708.85	726.85
Mean Income	55898.80	16514.35	55722.30	16759.54	59475.06	10686.23
Median Income	46848.69	7906.84	46741.01	7906.45	49058.93	7500.69
Median / Mean Income	0.85	0.08	0.85	0.08	0.83	0.08
% foreign	10.38	8.23	10.02	7.96	17.14	9.94
% young	28.97	4.61	29.02	4.63	28.18	4.25
% aged	16.60	4.44	16.61	4.45	16.21	4.30
Postage	0.05	0.22	0.00	0.00	1.00	0.00
Stamp Price Change	0.07	0.25	0.07	0.26	0.00	0.00

A1.2 Alternative Identification Strategy (IV)

The original study by Schelker and Schneiter (2017) relies on an IV approach and leverages price changes in stamps. We do the same here and show first that the effects are smaller and second that the effect varies with municipality size.

The following table shows the evolution of stamp prices in Switzerland.

Table A4: Different Stamp Prices

period	stamp price	source
1991 - 2000	0.50 CHF	Schelker & Schneiter 2017
2001 - 2003	0.70 CHF	Schelker & Schneiter 2017
2004 - today	0.85 CHF	Schelker & Schneiter 2017
1991 - 1992	0.50 CHF	Swiss Post Office
1993 - 1995	0.60 CHF	Swiss Post Office
1996 - 2003	0.70 CHF	Swiss Post Office
2004 - today	0.85 CHF	Swiss Post Office

Schelker and Schneiter (2017) argue that voters are exposed to changes of postage

costs – at least in municipalities that do not prepay postage. This can be leveraged for identification, and we follow their approach here. The only difference is, again, that we rely on the full universe of cases rather than only on municipalities from one canton. We estimate a two-way fixed effects regression.

$$y_{it} = \beta_1 \text{Postage costs}_{it} + \mathbf{X}_{it}\theta + \tau_t + \mu_i + \epsilon_{it} \quad (2)$$

The outcome y_{it} is voter turnout in municipality i on ballot day t . We include the same controls and fixed effects as in strategy I (see section 2.1). We then go on and explore possible channels through which postage costs may influence turnout. We estimate three different specifications for the instrumental variable models, where y_{it} is the nominal or the real postage costs of a municipality i for time t .

$$\text{1st stage: } y_{it} = \beta_1 \text{PrepaidPostage}_{it} + \beta_2 \text{Stamp price}_{it} + \mathbf{X}_{it}\theta + \tau_t + \mu_i + \epsilon_{it} \quad (3)$$

The outcome y_{it} represents the price of a stamp. We estimate both real and nominal prices. As above, *Prepaid postage* is a dummy variable, indicating that postage is prepaid or not, and *stamp price* indicates if an increase in stamp prices is introduced. \mathbf{X}_{it} includes our controls, τ_t and μ_i are vote day and municipality fixed effects, respectively, and ϵ_{it} is the error term.

The second stage regresses turnout in municipality i at time t onto the instrumented estimate (as well as controls):

$$\text{2nd stage: } z_{it} = \beta_2 \hat{y}_{it} + \mathbf{X}_{it}\theta + \tau_t + \mu_i + \epsilon_{it} \quad (4)$$

A1.3 IV Regression Results

The first stage includes a binary indicator whether a municipality introduced prepaid envelopes (or not) and if the Swiss post office introduced a higher price for a stamp

during the period of investigation, in terms of both real and nominal prices. As Schelker and Schneiter (2017) note, variation, therefore, has three potential sources: a) introduction of prepaid envelopes, b) rise in costs, and c) through inflation (measured as stamp price in real terms).

Table A5 refers to nominal prices and Table A6 to real prices. Column one presents the two-way fixed effects regression described in 2. Columns 2–4 present results from estimations relying on different instrumental variables.

Table A5: Estimation of Turnout on Nominal Postage Costs (All Municipalities)

Dependent Variable:	-	Prepaid Postage	Turnout Stamp Price	Prepaid Postage, Stamp Price
Instrumental Variable:	(1)	(2)	(3)	(4)
	<i>Second Stage Regression</i>			
Nominal Postage Costs	-0.016** (0.008)	-0.017** (0.008)	-0.082* (0.046)	-0.017** (0.008)
	<i>First Stage Regression</i>			
Postage		-81.138*** (1.070)		-80.890*** (1.091)
Stamp Price Change			12.113*** (2.346)	4.406*** (0.255)
Controls	✓	✓	✓	✓
Municipal FE	✓	✓	✓	✓
Year FE	✓	✓	✓	✓
Observations	31,393	31,393	31,393	31,393
R ²	0.005	0.005	0.003	0.005

Note:

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

Table A6: Estimation of Turnout on Nominal Postage Costs (All Municipalities)

Dependent Variable:	-	Prepaid Postage	Turnout Stamp Price	Prepaid Postage, Stamp Price
Instrumental Variable:	(1)	(2)	(3)	(4)
	<i>Second Stage Regression</i>			
Real Postage Costs	-0.021** (0.010)	-0.021** (0.010)	-0.087* (0.048)	-0.022** (0.010)
	<i>First Stage Regression</i>			
Postage		-63.542*** (0.510)		-63.240*** (0.516)
Stamp Price Change			11.403*** (1.813)	5.378*** (0.118)
Controls	✓	✓	✓	✓
Municipal FE	✓	✓	✓	✓
Year FE	✓	✓	✓	✓
Observations	31,393	31,393	31,393	31,393
R ²	0.005	0.005	0.003	0.005

Note:

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

Our results go in the same direction as those from Schelker and Schneiter (2017), but the magnitudes of the effects differ. Relying on the full sample leads to a reduction of turnout by about 0.016 percentage points (nominal terms) and 0.021 percentage points (real terms). Both estimates are smaller than Schelker and Schneiter (2017) report for the canton of Berne.

In all of the specifications, an increase of 1 cent (CHF) in nominal terms reduces voter turnout by about 0.016 to 0.082. The same increase in real terms reduces turnout by 0.021 to 0.087. While we still find a reduction in turnout, it is less pronounced in all specifications except when we instrument stamp price (nominal and real). Here we found a stronger reduction of turnout compared to that reported by Schelker and Schneiter (2017).⁶ Column 3 reports effects that are driven by stamp price changes by the Swiss post. The intuition for this specification is that we compare turnout in municipalities where increases in stamp price have no effect to the turnout in municipalities where envelopes are not prepaid; therefore, increases in prices should exhibit an effect.

The first stage regressions in column 2 show that introducing prepaid envelopes reduces nominal postage costs by about 81 cents (real costs: 64 cents). Overall, the coefficients are relatively stable, smaller in magnitude compared to those reported by Schelker and Schneiter (2017) with the exception for the third IV specification in column 3.

⁶This might be a result from the fact that we rely on different stamp prices than Schelker and Schneiter (2017) (see Table A4 in the Appendix).

A1.4 Large and Small Municipalities: IV IV Identification Strategy and Effect Heterogeneity

Additionally, we re-estimate the IV regressions described in A1.2. This time we split our sample into small and large municipalities. For both scenarios, real and nominal terms, costs are not significantly correlated with turnout for small municipalities (except in the third scenario, where we instrument costs with a change in stamp prices).

Table A7: Estimation of Turnout on Nominal Postage Costs (Small Municipalities)

Dependent variable:	Turnout			
Instrumental Variable:	-	Prepaid Postage	Stamp Price	Prepaid Postage & Stamp Price
	(1)	(2)	(3)	(4)
	<i>Second Stage Regression</i>			
Nominal Postage Costs	0.006 (0.007)	0.004 (0.007)	-0.460*** (0.089)	0.003 (0.007)
	<i>First Stage Regression</i>			
Postage		-84.995*** (0.013)		-84.982*** (0.022)
Stamp Price Change			5.106*** (0.855)	4.229*** (0.011)
Controls	✓	✓	✓	✓
Municipal FE	✓	✓	✓	✓
Year FE	✓	✓	✓	✓
Observations	7,603	7,603	7,603	7,603
R ²	0.006	0.006	0.0003	0.006

Note:

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

Table A8: Estimation of Turnout on Real Postage Costs (Small Municipalities)

Dependent Variable:	Turnout			
Instrumental Variable:	-	Prepaid Postage	Stamp Price	Prepaid Postage & Stamp Price
	(1)	(2)	(3)	(4)
	<i>Second Stage Regression</i>			
Real Postage Costs	0.010 (0.009)	0.005 (0.009)	-0.392*** (0.060)	0.004 (0.009)
	<i>First Stage Regression</i>			
Postage		-65.193*** (0.028)		-65.176*** (0.023)
Stamp Price Change			6.015*** (0.651)	5.343*** (0.009)
Controls	✓	✓	✓	✓
Municipal FE	✓	✓	✓	✓
Year FE	✓	✓	✓	✓
Observations	7,603	7,603	7,603	7,603
R ²	0.006	0.006	0.001	0.006

Note:

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

This changes when we only look at large municipalities (see Table A9 and Table A10). Here, nominal and real postage costs are significantly correlated with turnout. Depending on the given specification, prepaid envelopes are associated with a turnout that is roughly 1.5 percentage point higher compared to large municipalities that do not use prepaid envelopes. Interestingly, instrumenting costs with a change in stamp prices does not yield a significant effect.

Table A9: Estimation of Turnout on Nominal Postage Costs (Large Municipalities)

Dependent Variable:	Turnout			
Instrumental Variable:	-	Prepaid Postage	Stamp Price	Prepaid Postage, Stamp Price
	(1)	(2)	(3)	(4)
<i>Second Stage Regression</i>				
Nominal Postage Costs	-0.017** (0.008)	-0.018** (0.008)	-0.057 (0.045)	-0.018** (0.008)
<i>First Stage Regression</i>				
Postage		-80.834*** (1.094)		-80.564*** (1.113)
Stamp Price Change			12.499*** (2.420)	4.454*** (0.269)
Controls	✓	✓	✓	✓
Municipal FE	✓	✓	✓	✓
Year FE	✓	✓	✓	✓
Observations	23,790	23,790	23,790	23,790
R ²	0.005	0.005	0.003	0.005

Note:

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

Table A10: Estimation of Turnout on Real Postage Costs (Large Municipalities)

Dependent Variable:	Turnout			
Instrumental Variable:	-	Prepaid Postage	Stamp Price	Prepaid Postage & Stamp Price
	(1)	(2)	(3)	(4)
<i>Second Stage Regression</i>				
Real Postage Costs	-0.023** (0.010)	-0.023** (0.010)	-0.061 (0.049)	-0.023** (0.010)
<i>First Stage Regression</i>				
Postage		-63.417*** (0.524)		-63.090*** (0.526)
Stamp Price Change			11.698*** (1.871)	5.398*** (0.125)
Controls	✓	✓	✓	✓
Municipal FE	✓	✓	✓	✓
Year FE	✓	✓	✓	✓
Observations	23,790	23,790	23,790	23,790
R ²	0.005	0.005	0.004	0.005

Note:

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

A1.5 Determinants of Treatment Exposure

Table A11: Potential Determinants of Prepaid Postage

	Schelker and Schneiter (1)	Our Data (all cantons) (2)
Mean income	-0.0002 (0.001)	0.000 (0.000000)
Median/mean income	0.053 (0.067)	-0.011 (0.052)
Population	0.027 (0.018)	0.027 (0.022)
Population density	0.026 (0.021)	0.0001 (0.0001)
% foreigners	0.004 (0.004)	0.001 (0.001)
% young	-0.002 (0.002)	-0.002 (0.001)
% old	-0.001 (0.003)	-0.003* (0.002)
Municipal FE	✓	✓
Year FE	✓	✓
Observations	8,450	10,209
R ²	0.018	0.014

Note: *p<0.1; **p<0.05; ***p<0.01

A1.6 Population Density vs Population Size

It is not evident that population size is the adequate measure. Ideally, we would have the number of postal mail boxes and how far somebody has to walk/drive to get there on average. We do not have this. Next, we would like to know how many postal mail boxes there are but we do not have this data as a time-variant measure for the years we are looking at. But, we are able to retrieve the number of postal mail boxes for 2021 and can look at how this correlates with population size and density.⁷ This allows us to see whether one of the two measures may be more suited to account for different impacts that prestamped postage may have.

Table A12: Importance of Population Density vs. Population Size, both z-transformed

	Model 1	Model 2	Model 3
Population Size	13.427*** (0.322)		14.344*** (0.367)
Population Density		7.925*** (0.913)	-2.556*** (0.523)
Constant	7.267*** (0.366)	8.188*** (0.730)	7.123*** (0.360)
Observations	494	492	492
R ²	0.780	0.133	0.790
Adjusted R ²	0.779	0.132	0.789

Note: *p<0.1; **p<0.05; ***p<0.01
(population size and density are -z-standardized)

The models in Table A12 present our estimations. We use the number of postal mail boxes per municipality in 2021 and regress this on the z-standardized population size variable (Model 1), on the z-standardized density variable (Model 2), and also present a model with both variables (Model 3). Using standardized variables allows us to gauge the correlation but one can also look at the R^2 measure. The results indicate that population size is the better proxy for number of postal mail boxes.

⁷This data can be found here: <https://swisspost.opendatasoft.com/explore/dataset/zugangspunkte-post/table/>.