E C O N O M I C S B U L L E T I N

Income and vote switching between local and national elections: evidence from New York State

Raphael Franck
Bar Ilan University

Samia Tavares
Rochester Institute of Technology

Abstract

Between 1994 and 2004, New York State voters returned a Republican governor but always cast a majority of the popular vote in favor of the Democratic candidate in the presidential election. This paper exploits those elections in an effort to understand voters' motivations to switch party allegiances from presidential to gubernatorial elections. We argue that voters are likely to switch political allegiances between gubernatorial and presidential elections because they understand that the purpose of these elections is different. Using individual-level data, we find that low-income individuals are the main source of the switch in the vote.

Franck gratefully acknowledges financial support from the Adar Foundation of the Economics Department at Bar Ilan University.
Citation: Franck, Raphael and Samia Tavares, (2008) "Income and vote switching between local and national elections: evidence from New York State." *Economics Bulletin*, Vol. 4, No. 10 pp. 1-10
Submitted: April 13, 2008. **Accepted:** April 19, 2008.
URL: http://economicsbulletin.vanderbilt.edu/2008/volume4/EB-08D70020A.pdf

1. Introduction

Studies that analyze the voters' motivation to vote for representatives from different parties in local and national elections, e.g. Atkeson and Partin (1995), Carsey and Wright (1998), Alesina and Rosenthal (1995), Beck et al. (1992), have usually focused on the macroeconomic circumstances which are more propitious to vote switching [1]. They have not, however, discussed which voters are more likely to be influenced by these macroeconomic conditions so as to actually switch party allegiance between elections.

This paper investigates which group of voters is the most likely to forsake party allegiance between local and national elections. Focusing on the gubernatorial and presidential elections in New York State, we try to understand the motivations of New York State voters to elect a Republican governor after twenty years of Democratic leadership, while continuing to vote for the Democratic candidates in presidential elections.

Our choice of New York State is motivated on two grounds. First, by focusing on one state, we can exclude differences in macroeconomic conditions between different states as the cause of split-ticket voting. Second, in New York State, the voters' motivation to elect a Republican governor in a predominantly Democratic state could not have stemmed from their willingness to stop cronyism, as was the case in Massachusetts between 1990 and 2002 (see Fiorina, 1992).

In New York State, registered Democrat voters have long outnumbered Republicans. As of November 2006, the ratio of Democrats to Republicans was 7 to 4 in the state, with the difference being entirely due to New York City, where the ratio was 5 to 1. It is therefore not surprising that Democratic candidates have carried New York State in every presidential election since 1988. However, little-known Republican candidate George Pataki was elected in 1994 to the governorship, defeating the incumbent Democratic governor, Mario Cuomo, only to be reelected twice, in 1998 and 2002, with comfortable margins.[2]

Using probit and multinomial logit regressions on individual-level data, we find that low-income individuals are the individuals who are most likely to split their vote between national and local elections, as they vote Democratic for president but not for governor. We argue that this is because this group of voters benefits from the redistribution policies offered by the Democrats and the Republicans when they are elected: public-financed transfers at the national level and a tough approach to crime at the local level.

---

[1] See Chari et al. (1997), Fiorina (1992) and Burden and Kimball (2002) on the vote differences in U.S. national elections, i.e., between presidential and congressional elections. See also Shachar (2003) and Degan (2007) on vote switching in consecutive presidential elections.

[2] Pataki's victories were matched by those of Republican politician Rudolf Giuliani, whom New York City voters elected and then returned as mayor. They then elected and returned another Republican, Michael Bloomberg, to the same office. Pataki decided not to run for governor in 2006, and a Democrat, Elliot Spitzer, was elected. Spitzer was very popular as an Attorney General for the state, and his Republican opponent, John Faso, was largely unknown, so that the election was a foregone conclusion.

The remainder of this paper is as follows. Section 2 presents the data used in this study. Section 3 discusses the empirical methodology. Section 4 analyzes the results. Section 5 concludes.

2. Data

This paper employs individual-level data in the form of general election exit polls conducted by Voter News Service (VNS) in 1994 and 1998 in New York State.[3] In both years, VNS asked voters whom they selected for governor, as well as whom they had voted for president in the previous presidential election. Both polls also included questions on the respondent's age, race/ethnicity, income level, and gender. From the questions, we generate indicators that take a value of 1 if the individual belongs to a particular category and zero otherwise, which we include as explanatory variables in this study. Summary statistics are shown in Table 1.

[Insert Table 1]

3. Empirical methodology

To assess the determinants of the vote when using individual-level data, we estimate both a probit and a multinomial logit model due to the discrete nature of the dependent variable. The probit model, which estimates the probability that individual *i* will vote for the Democratic candidate in the gubernatorial election, is given by

$$y_i^* = \beta_1 dempres_i + \beta_2 X_i + \beta_3 dempres_i * X_i + \varepsilon_i \quad (1)$$

where

$$y_i^* = \begin{cases} 0 \text{ if individual } i \text{ votes for the Republican candidate in the gubernatorial election} \\ 1 \text{ if individual } i \text{ votes for the Democratic candidate in the gubernatorial election} \end{cases} \quad (2)$$

and where $dempres_i$ indicates whether individual *i* voted for the Democratic candidate in the previous presidential election; X_i is a vector of individual *i*'s characteristics; $dempres_i * X_i$ is the interaction between the presidential election indicator and each of the individual *i*'s characteristics; and ε_i is the heteroskedasticity-consistent error term, clustered at the precinct level.

As a robustness check on the probit regression results, we further analyze the gubernatorial vote by examining whether the individual voted for the Democratic, the Republican, the Independent, or the other minor party candidates.[4] Because these choices belong

[3] We do not use the 2002 poll, which asked similar questions as the 1994 and 1998 polls, because only the national sample is available for that year.

[4] In 1994, the VNS poll options for the question "in today's election for Governor, did you just vote for" included Mario Cuomo (Democrat/Liberal), George E. Pataki (Republican/Conservative), Robert T. Walsh, Sr. (Right to Life), Thomas Golisano (Independent), other, and did not vote for Governor. We thus combined votes for Walsh with votes classified under "Other." In the 1998 poll, the options for Governor were Peter F. Vallone (Democrat), George E. Pataki (Republican/Conservative), Tom Gollisano (Independent), Betsy McCaughey Ross (Liberal), Other, and Did not vote for Governor. In this case, we combined votes for Ross with votes classified under "other."

to unordered categories, we use a multinomial logit (MNL) model which estimates how individual *i*'s characteristics X_i affect his vote. For this purpose, we define the response probability $\text{Prob}\left(governor_i = j \middle| X_i\right)$ where

$$j = \begin{cases} 0 \text{ for the Republican candidate in the gubernatorial election} \\ 1 \text{ for the Democratic candidate in the gubernatorial election} \\ 2 \text{ for the Independent candidate in the gubernatorial election} \\ 3 \text{ for the other candidates in the gubernatorial election} \end{cases}$$

The probability that an individual *i* will select gubernatorial candidate *j* is given by

$$\text{Prob}\left(governor_i = j \middle| X_i\right) = \frac{\exp\left(\beta_j' X_i\right)}{1 + \sum_{k=1}^{n} \exp\left(\beta_k' X_i\right)} \tag{3}$$

with *j*=1,2,3 and

$$\text{Prob}\left(governor_i = 0 \middle| X_i\right) = \frac{1}{1 + \sum_{k=1}^{n} \exp\left(\beta_k' X_i\right)} \tag{4}$$

where X_i is the vector of individual *i*'s characteristics. Since probabilities must sum to unity, $\text{Prob}\left(governor_i = 0 \middle| X_i\right)$, which is the probability of a vote for the omitted category, is determined once the probabilities for the other categories are determined (Wooldridge, 2002).

A restriction of the MNL model is that it relies on the irrelevant alternative assumption (IIA), which requires that the relative probabilities for any two alternatives are not modified if another alternative is added or if the characteristics of the third alternative are changed. The IIA can be tested using the McFadden-Haussman test (Wooldridge, 2002).

Finally, because coefficients on multinomial logit models are difficult to interpret, we also report the marginal effects of changes in the regressors, evaluated at the mean of the respective explanatory variables. These marginal effects are meant to provide the response probability of voting for one of the candidates.

4. Results

This section discusses our regression results. Table 2 present probit and multinomial results in regressions where we pooled the 1994 and 1998 election results, while Table 3 shows the marginal effects from the multinomial logit estimation. The IIA is tested for the MNL regressions and is found to hold.

[Insert Table 2] [Insert Table 3]

We do not include Tom Gollisano in the "Other" category because in both elections he won the third highest share of the vote and was thus a prominent third party candidate in both elections.

Table 3 shows that those over 65 years old are more likely to vote Democrat for governor, regardless of who they voted for president. Young people, on the other hand, are found not to vote for the Democratic gubernatorial candidate.

In addition, Table 2 indicates that Blacks who voted Democratic in the previous presidential election do not have a significant impact on the vote for the Democratic gubernatorial candidate. However, when examining the marginal effects in Table 3, it is seen that Blacks vote for the Democratic gubernatorial candidate, regardless of whether they voted Republican or Democrat in the previous presidential election. The same is true of Hispanics.

As for income, the data suggest that low income people who voted Democratic for president switch since they vote Republican in the gubernatorial elections. In Table 2, it is seen that individuals who voted for the Democratic presidential candidate are less likely to vote for the Democratic than the Republican gubernatorial candidate, while in Table 3, it is seen that these individuals vote for the Republican candidate in the gubernatorial elections. Other income categories are mostly insignificant. This suggests that the voting pattern of individuals with low income explains Pataki's victories in predominantly Democratic New York State.

Two explanations of their behavior may be given. First, the platforms of the Republican and Democratic parties may lead voters from different income groups to switch their voting pattern. Second, voters are likely to switch political allegiances between gubernatorial and presidential elections because they understand that the purpose of these elections is different. Gubernatorial elections mainly focus on the redistribution of local taxes, and do not tackle major ideological issues, unlike presidential elections. Therefore, low income individuals may care less about redistribution policies at the state level than about local issues such as crime. In other words, a cause for the change in the voting pattern stems from the relative importance of ideology and economic opinions in national and local elections.

5. Conclusion

Using individual data on New York State gubernatorial and presidential elections, this paper shows that low income individuals who voted for the Democratic presidential candidate do not vote for the Democratic gubernatorial candidate, and in fact vote Republican. It also suggests that voters understand the different purposes of elections at the local and national level, and hence are more likely to base their vote on expected policy outcome than on party platforms.

References

Alesina, Alberto, Rosenthal, Howard, 1995, Partisan politics, divided government and the economy, Cambridge University Press, Cambridge, UK.

Atkeson, Lonna Rae, Partin, Randall W., 1995, Economic and referendum voting: a comparison of gubernatorial and senatorial elections, American Political Science Review 89 (1), 99-107.

Beck, Paul Allen, Baum, Lawrence, Clausen, Aage R., Smith Jr, Charles E., 1992, Patterns and sources of ticket splitting in subpresidential voting, American Political Science Review 86 (4), 916-928.

Burden, Barry C. and David C. Kimball, 2002, Why Americans Split their Tickets: Campaigns, Competition and Divided Government, Ann Arbor: Michigan University Press.

Carsey, Thomas M., Wright, Gerald C., 1998, State and national factors in gubernatorial and senatorial elections, American Journal of Political Science 42 (3), 994-1002.

Chari, V.V., Larry E. Jones and Ramon Marimon, 1997, "The Economics of Split-Ticket Voting in Representative Democracies," American Economic Review 94, 1476-1504.

Degan, Arianna. 2007. "Candidate Valence: Evidence from Consecutive Presidential Elections." International Economic Review, 48 (2), 457-482.

Fiorina, Morris, 1992, Divided Government. New York: Macmillan.

Shachar, Ron, 2003, "Party Loyalty as Habit Formation", Journal of Applied Econometrics 18, 251-269.

Voter News Service, 1994, "Voter News Service General Election Exit Polls, 1994." Ann Arbor, MI: Inter-university Consortium for Political and Social Research study # 6520, 1995.

Voter News Service, 1998, "Voter News Service General Election Exit Polls, 1998." Ann Arbor, MI: Inter-university Consortium for Political and Social Research study # 2780, 2004.

Wooldridge, Jeffrey M., 2002, Econometric Analysis of Cross Section and Panel Data. Cambridge: MIT Press.

Table 1: Summary Statistics

Variable	Obs	Mean	Std Dev
Democratic Governor	2279	0.467	0.025
Democratic president	2279	0.628	0.023
Black	2279	0.102	0.020
Hispanic	2279	0.058	0.019
Asian	2279	0.014	0.004
Age 18-24	2279	0.528	0.049
Age >65	2279	0.090	0.014
Income <$15K	2279	0.075	0.010
Income $15K-30K	2279	0.161	0.015
Income $30K-50K	2279	0.236	0.013
Income $50K-75K	2279	0.245	0.013
Income $75K-100K	2279	0.118	0.011
Females	2279	0.513	0.012

Notes:
- Unit of observation is the individual voter.
- Data sources are VNS exit polls conducted in 1994 and 1998, ICPSR studies # 6520 and 2780, respectively.

Table 2. The vote in the gubernatorial elections

	(1)	(2)	(3)	(4)
		Democrat	Independent	Other
	Probit	Multinomial Logit		
Democratic President	1.694***	2.663***	0.326	0.841
	(0.296)	(0.334)	(0.482)	(0.844)
Black	0.525	1.918***	0.792*	-0.035
	(0.490)	(0.364)	(0.433)	(1.047)
Dempres*Black	0.844	0.519	-2.175*	2.263*
	(0.517)	(0.465)	(1.096)	(1.177)
Hispanic	-0.077	1.460***	-0.413	0.046
	(0.455)	(0.494)	(0.597)	(0.811)
Dempres*Hispanic	0.909**	-0.020	0.084	-0.302
	(0.441)	(0.463)	(0.870)	(1.397)
Asian	0.428	1.517***	0.591	-20.309***
	(0.304)	(0.530)	(0.745)	(1.117)
Dempres*Asian	0.058	-0.677	-32.616***	21.285
	(0.487)	(0.657)	(0.852)	(0.000)
Age 18-24	-0.730***	-0.339	0.275	1.106***
	(0.162)	(0.234)	(0.428)	(0.409)
Dempres*Age 18-24	0.308	-0.377	0.362	-0.023
	(0.194)	(0.275)	(0.317)	(0.660)
Age > 65	0.517***	0.651**	-0.726	1.076
	(0.166)	(0.304)	(0.759)	(1.069)
Dempres*Age > 65	-0.106	0.059	0.424	-31.912***
	(0.256)	(0.443)	(0.649)	(1.537)
Income <$15K	-0.137	0.156	-0.351	-0.062
	(0.331)	(0.334)	(0.640)	(0.787)
Dempres*Income <$15K	-0.661**	-1.421***	0.279	-1.032
	(0.324)	(0.386)	(0.998)	(0.875)
Income $15-30K	-0.227	-0.454	-0.068	0.630
	(0.354)	(0.389)	(0.420)	(0.524)
Dempres* Income $15-30K	-0.361	-0.515	0.061	-0.676
	(0.368)	(0.435)	(0.465)	(0.808)
Income $30-50K	-0.161	-0.611	-0.631	-0.621
	(0.292)	(0.370)	(0.400)	(0.433)
Dempres* Income $30-50K	-0.345	-0.241	0.495	0.339
	(0.287)	(0.389)	(0.440)	(0.728)
Income $50-75K	-0.202	-0.575*	-0.116	-0.664
	(0.303)	(0.337)	(0.350)	(0.515)
Dempres* Income $50-75K	-0.245	-0.165	0.195	0.023
	(0.304)	(0.362)	(0.439)	(0.679)
Income $75-100K	0.007	-0.193	0.358	0.266
	(0.306)	(0.352)	(0.385)	(0.636)
Dempres* Income $75-100K	-0.458	-0.538	-0.376	-0.186

	(0.322)	(0.409)	(0.504)	(0.814)
Females	-0.086	0.123	-0.392**	0.632
	(0.141)	(0.153)	(0.170)	(0.386)
Dempres*Females	0.059	-0.164	0.019	-0.115
	(0.157)	(0.194)	(0.282)	(0.568)
Observations	2279	3335	3335	3335
F-statistic	24.5204			
Prob F	0.0000			
Percent correctly predicted	75.87	60.90		

Notes:

- In column 1, the dependent variable is an indicator that equals 1 if the individual voted Democrat and 0 if the individual voted Republican, whereas in columns 2, 3, and 4, the dependent variable is an indicator that equals 0 if the individual voted Republican, 1 if Democrat, 2 if Independent, and 3 if Other. The omitted category is Republican. Individual data are for 1994 and 1998.
- All regressions include county and year-fixed effects and are weighted by the total number of votes cast. Column 1 presents probit estimates, with regressions estimated using Stata's survey command. In columns 2, 3 and 4, multinomial results are shown. Those regressions were also estimated using Stata's survey command, with heteroskedasticity-consistent standard errors adjusted for clustering at the precinct level.
- * denotes significance at the 10-percent level; ** at the 5- percent level; and *** at the 1-percent level.

Table 3. The vote in the gubernatorial elections: marginal effects in the multinomial logit model

	Democrat	Republican	Independent	Other
Democratic President	0.556***	-0.522***	-0.0326	-0.00175
	(0.054)	(0.055)	(0.022)	(0.0059)
Black	0.422***	-0.401***	-0.0140	-0.00614
	(0.067)	(0.058)	(0.018)	(0.0038)
Dempres*Black	0.123	-0.116	-0.0543***	0.0477
	(0.11)	(0.11)	(0.0100)	(0.056)
Hispanic	0.353***	-0.312***	-0.0372***	-0.00448
	(0.100)	(0.095)	(0.013)	(0.0038)
Dempres*Hispanic	-0.00557	0.00300	0.00475	-0.00218
	(0.10)	(0.11)	(0.042)	(0.0086)
Asian	0.348***	-0.325***	-0.0119	-0.0115***
	(0.10)	(0.095)	(0.028)	(0.0018)
Dempres*Asian	-0.378***	-0.553***	-0.0623***	0.993***
	(0.017)	(0.017)	(0.010)	(0.0022)
Age 18-29	-0.0888	0.0601	0.0189	0.00980***
	(0.055)	(0.053)	(0.019)	(0.0033)
Dempres*Age 18-29	-0.0939	0.0661	0.0270	0.000789
	(0.060)	(0.059)	(0.020)	(0.0056)
Age > 60	0.165**	-0.140*	-0.0345***	0.00957
	(0.072)	(0.073)	(0.012)	(0.018)
Dempres*Age > 60	0.0138	-0.0123	0.0243	-0.0258***
	(0.099)	(0.11)	(0.039)	(0.0046)
Income <$15K	0.0436	-0.0256	-0.0171	-0.000874
	(0.079)	(0.080)	(0.022)	(0.0060)
Dempres*Income <$15K	-0.261***	0.223**	0.0422	-0.00427
	(0.044)	(0.089)	(0.081)	(0.0041)
Income $15-30K	-0.104	0.0903	0.00445	0.00875
	(0.081)	(0.080)	(0.021)	(0.0077)
Dempres* Income $15-30K	-0.113	0.104	0.0131	-0.00347
	(0.088)	(0.084)	(0.028)	(0.0045)
Income $30-50K	-0.126	0.146*	-0.0176	-0.00285
	(0.078)	(0.077)	(0.016)	(0.0030)
Dempres* Income $30-50K	-0.0673	0.0288	0.0347	0.00383
	(0.083)	(0.082)	(0.031)	(0.0082)
Income $50-75K	-0.126*	0.124*	0.00492	-0.00339
	(0.070)	(0.071)	(0.016)	(0.0036)
Dempres* Income $50-75K	-0.0422	0.0280	0.0136	0.000625
	(0.082)	(0.076)	(0.026)	(0.0061)
Income $75-100K	-0.0529	0.0260	0.0240	0.00296
	(0.076)	(0.077)	(0.025)	(0.0066)
Dempres* Income $75-100K	-0.112	0.120	-0.00840	0.0000912
	(0.080)	(0.083)	(0.020)	(0.0068)
Females	0.0345	-0.0179	-0.0217**	0.00510

	(0.036)	(0.034)	(0.0083)	(0.0034)
Dempres*Females	-0.0383	0.0346	0.00414	-0.000444
	(0.043)	(0.045)	(0.013)	(0.0046)
Observations	3335			

Notes:

- Estimates are marginal effects, evaluated at the mean of each variable, from the multinomial logit regression presented in Table 2.
- In 1994, the Democratic candidate for governor was Mario Cuomo; the Republican George Pataki; the Independent Tom Gollisano; and Other includes votes for candidates from remaining third parties. In 1998, the Democratic candidate for governor was Peter Vallone; the Republican George Pataki; the Independent Tom Gollisano; and Other again includes the votes for candidates from the remaining third parties.
- * denotes significance at the 10-percent level; ** at the 5- percent level; and *** at the 1-percent level.