# Οικονομετρική ανάλυση εκλογικών αποτελεσμάτων

### ΗΠΑ Παράδειγμα 10.6 Wooldridge

$$Δημοκρατικό ‰t = .481 - .0435Εκλεγμένοιt + .0544Εκλεγμένοςt$$

$$(0.12) (.0405) \qquad (0.134)$$

- $+.0108Εκλεγμένοι Καλά_Νέα_t$  (.0041)
- .0077Εκλεγμένοι Πλή $\theta_t$  (.0033)
- n = 20 [Τετραετίες 1966-92],  $R^2 = 0.663$ ,  $R^2 = 0.573$

Εκλεγμένος = 
$$\begin{cases} 1 \text{ an είναι ο } \Delta \text{ υποψήφιος} \\ -1 \text{ an είναι ο } P \text{ υποψήφιος} \end{cases}$$
 
$$Aλλιώς 0$$

Καλά\_Νέα = # τριμήνων (από 15) με ανάπτυξη > 2.9% Πληθωρισμός = Μέσος 15 τριμήνων

#### Προβλέψεις

Κλίντον – Ντόουλ, 1996:

Εκλεγμένοι = 1

Εκλεγμένος = 1

 $K\alpha\lambda\dot{\alpha}_N\dot{\epsilon}\alpha = 3$ 

 $\Pi$ ληθ. = 3.019

 $\Rightarrow \Delta \eta \mu.\% \approx 50.11\%$ 

Αποτέλεσμα 54.65%

#### Ελλάδα, ετήσια στοιχεία

Κεντροαριστερά% = .466 + .029Εκλεγμένοι
$$_t$$
 (0.034) (.052)

- + 0.026Εκλεγμένος (0.048)
- -.483Εκλεγμένοι Ανάπτυξη $_t$  (.604)
- .001Εκλεγμένοι Πλή $\theta_t$  (.003)

 $n = 14 [1961-2008], R^2 = 0.21, Radj^2 = 0.02, dw = 2.18$ 

Εκλεγμένος/οι(89)=0,

Εκλεγμένος =1 αν ΚΑ Πρωθυπουργός υποψήφιος,

-1 αν ΚΔ Πρωθυπουργός υποψήφιος

Κεντροαριστερά
$$%_t = .513 + .164Εκλεγμένοι_t + (0.021) (.0527)$$

-.0175Εκλεγμένοι Ανεργία<sub>t</sub> (.0069)

 $n = 14 [1961-2008], R^2 = 0.497, R_{adj}^2 = 0.405, dw = 2.04$ 

Κεντροαριστερά
$$%_t = .505 + .180$$
Εκλεγμένοι $_t + (.021)(.051)$ 

-.055ΕκλεγμένοιΔύοΦορές (.036)

-.016Εκλεγμένοι Ανεργία<sub>t</sub> (.006)

 $n = 14 [1961-2008], R^2 = 0.595, R_{adj}^2 = 0.474, dw = 2.12$ 

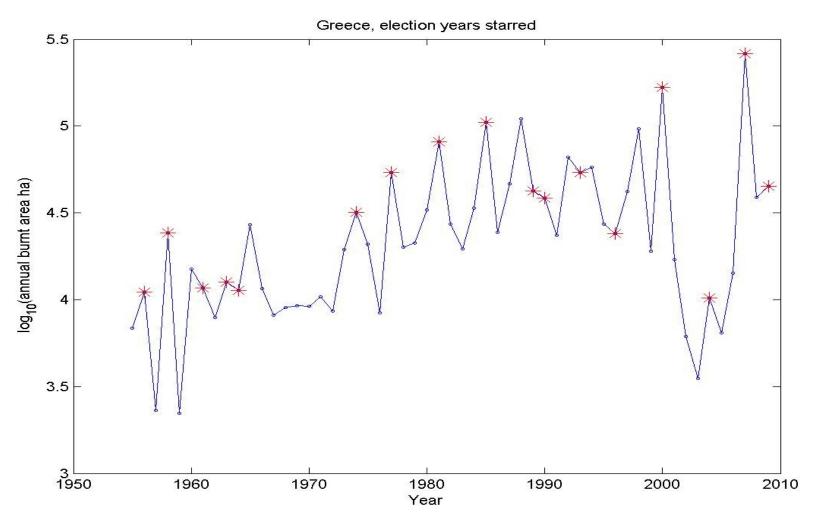
Πόση ανεργία χρειάζεται για να κερδίσει η κεντροαριστερά με κεντροδεξιά κυβέρνηση;

0.513 - 0.164 + .0175*Ανεργία* > 0.5

 $\Rightarrow$ Avepyía > 8.6%

[2007  $Av\varepsilon\rho\gamma i\alpha = 8.3\%$ ]

## Ποιός ο αντίκτυπος των εκλογών στις πυρκαγιές;



 $ln(area\ burnt)_t = \beta_0 + \beta_1 t + \beta_2 ln(area\ burnt)_{t-1} + \beta_3 ElectionDummy_t$ 

	Benchmark	Partisan	Italy as climate proxy	Weather as climate proxy
	1955-2009	1955-2009	1970-2009	1955-2008
Constant	6.276**	6.338**	-3.418	-444.702**
	(1.173)	(1.191)	(2.556)	(163.921)
t rend	0.019*	0.020*	0.009	0.014
	(0.008)	(0.008)	(0.010)	(0.007)
$\ln(\operatorname{area}(t-1))$	0.293*	0.285*	0.229	0.245**
	(0.125)	(0.127)	(0.117)	(0.114)
$\ln(\operatorname{Italian} \operatorname{area}(t))$			0.944**	
			(0.225)	60 251 **
ln(rain)				68.271** (25.109)
				18.017**
Temperature				(6.386)
T				-2.724**
Temperature*ln(rain)				(0.979)
CL incumbent dummy		-0.197		
•		(0.444)		
election before current summer				
(same or previous yr)				
election after summer but in				
same yr	0.820**	0.876**	0.596*	0.726**
election year dummy				
# obs	(0.239)	(0.271)	(0.254)	(0.229)
$R^2$	0.31	0.39	0.57	0.55
$\frac{R}{R}^2$	0.29	0.33	0.52	0.49
DW	1.99	1.94	1.89	1.98
F	15.04	7.71	11.26	9.32
•	15.01		11.20	J.U.

	election timing 1	election timing 2	Benchmark subsample1	Benchmark subsample2
	tilling 1	tilling 2	subsample1	subsample2
	1955-2009	1955-2009	1955-1982	1983-2009
Constant	6.358**	7.091**	10.845**	7.44**
	(1.206)	(1.258)	(1.293)	(2.017)
t rend	0.019*	0.022*	0.090**	-0.025
rend	(0.008)	(0.009)	(0.015)	(0.023)
$\ln(\operatorname{area}(t-1))$	0.286*	0.220	-0.296	0.291
· · · //	(0.127)	(0.135)	(0.147)	(0.183)
$\ln(\text{Italian area}(t))$				
ln(rain)				
Temperature				
Temperature*ln(rain)				
CL incumbent dummy				
election before current summer	0.144			
(same or previous yr)	(0.408)			
election after summer but in		0.370		
same yr		(0.275)		
alastian year dummy	0.742*		0.849**	0.868*
election year dummy	(0.327)		(0.202)	(0.372)
# obs	54	54	27	27
$R^2$	0.39	0.26	0.7	0.28
$\overline{R}^{2}$	0.34	0.22	0.66	0.19
DW	1.97	2.02	2.12	1.82
F	7.68	6	17.77	3.04

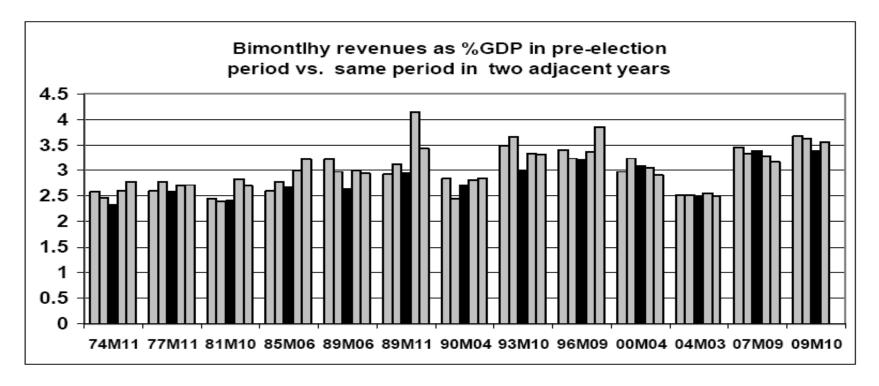
#### Normalized increase in area burnt averaged across election years Constant 0.348\*\* (0.037)first party # of seats / (sum of first and second party # of seats) -0.154\*\* (0.056)# obs 51 0.14 0.12 7.65

	Normalized increase in area burnt averaged across election years	
Constant	0.348**	
	(0.037)	
first party # of seats / (sum of first and second party # of seats)	-0.154**	
	(0.056)	
# obs	51	
$R^2$	0.14	
$\overline{R}^{2}$	0.12	
F	7.65	

Table 5: Forest wildfires across Greek prefectures increase with electoral competition

Notes: We report a negative effect between ease-of-victory in a prefecture and the local impact of elections on wildfires, after controlling for panel effects. The dependent variable uses a normalization to control for regional and temporal effects. We calculate the the log difference of wildfires in each of 51 prefectures on each of four election years during 2000-2009 from the time-series average of 2000-2009. This removes any individual effects due to factors systematically affecting each region. Next, for each election year we calculate the average across regions and subtract this from the observation for each region in that year. This removes any temporal effect which might affect all regions in a particular election year. Finally, we average across all four election years to remove noise. This creates a cross-sectional dependent variable measured across 51 prefectures which we regress against a measure of the ease of victory or lack of competition also averaged across the elections. \*\* denotes significance at the 1% level and \* denotes significance at the 5% level. All estimates are based on OLS regressions. Our sample is 2000-2009 which contains four election years. See Figure 7 for a corresponding plot

### Ποιός ο αντίκτυπος των εκλογών στην φοροδιαφυγή;



**Figure 1: Drop of revenues in election periods.** Bimonthly tax revenues (as % of annual GDP) during the pre-election period of year N vs. the two adjacent years (N-2, N-1, N+1, N+2). We use bi-monthly revenues because the typical official pre-election period includes both the month of the poll and the one before it. Data is not seasonally adjusted and is provisional for 2010, while data for 2011 were not available at the time of writing. Note that in some cases the adjacent years also include election years in which case the effect is somewhat mitigated as we would expect (e.g. 2007 and 1990).

$$\frac{\Delta tax}{gdp}(t) = \beta_0 + \beta_1 EuroDummy(t) + \beta_2 EuroDummy(t) + \beta_2 \frac{\Delta tax}{gdp}(t-1) + \beta_3 \frac{\Delta tax}{gdp}(t-12) + \beta_4 ElectionDummy(t)$$

	Benchmark	Post election	Partisan
	1972:1-2009:12	1972:1-2009:12	1972:1-2009:12
Constant	0.006**	0.006**	0.006**
	(0.001)	(0.001)	(0.001)
Deed Francisco Islands			
Post-Eurozone dummy	-0.010**	-0.010**	-0.010**
	(0.002)	(0.002)	(0.002)
$\Delta tax/gdp(t-12)$	-0.295**	-0.292**	-0.294**
	(0.046)	(0.046)	(0.046)
$\Delta tax/gdp(t-1)$	-0.098	-0.096*	-0.098
	(0.046)	(0.046)	(0.046)
Post election dummy		0.003	
Fost election duminy		(0.006)	
Election Period with CL			-0.003
incumbent dummy			(0.008)
Election Period dummy	-0.009**	-0.009**	-0.009*
	(0.004)	(0.004)	(0.004)
# obs	432	432	432
$R^2$	0.12	0.12	0.12
$\overline{R}^{2}$	0.12	0.11	0.11
DW	1.99	1.99	1.98
F	15.04	12.08	12.05