

Hard Choices in Hard Times: Valence Voting in Germany 2009

Supplemental Materials

Harold D. Clarke

University of Texas at Dallas and University of Essex
clarke475@msn.com

and

Guy D. Whitten

Texas A&M University
g-whitten@pols.tamu.edu

Introduction

In this document we provide a set of supplemental materials which augment the materials presented in our paper.

The German economy in 2009

As Figure 1 indicates, at the time of the September 2009 parliamentary elections, the German stock market had begun to come back from its major dive during the global economic downturn. But, as indicated by Figure 2, real quarterly economic growth, though trending upward, was still negative in the quarters before the elections.

Figure 3 shows the percentage of respondents who identified an economic issue as the most important problem facing the nation across the four waves of our survey.

Models Estimated

As we indicated in the paper, we made our inferences about rival models of voting behavior from mixed logit models where the probability of an individual voting for party j given their utilities, u_i is written as

$$P(j|u_i) = \frac{e^{U_{ji}}}{\sum e^{U_{ji}}}$$

and U_{ji} , the utility of party j for voter i is modeled as

$$U_{ji} = \alpha_{ji} + \beta_j X_i + \phi_j Z_{ji} + \theta_{ji} W_{ji}$$

where:

- α_{ji} is an alternative-specific constant (fixed or varying);
- β_j and ϕ_j are vectors of fixed coefficients;
- θ_{ji} is vector of varying coefficients;
- X_i is a fixed vector of individual characteristics;
- Z_{ji} and W_{ji} are attributes that vary across parties and voters.

The randomly-varying coefficients, θ_{ji} , are modeled as:

$$\theta_{ji} = p_{jk} + \delta_{jk}\xi_i + \sigma_k\psi_{ki}$$

where:

- p_{jk} is a constant term;
- δ_{jk} is a coefficient for individual-specific means;
- ξ_i is a set of individual characteristics;
- σ_k is a standard deviation of marginal distribution of p_{jk} ;
- ψ_{ki} is individual, choice-specific, random disturbances.

Table 1 shows the results from our model of vote choice on the constituency side of the ballot in 2009 and Table 2 shows the results from our model of vote choice on the list side of the ballot.

We also estimated an OLS model of respondents' evaluations of Angela Merkel. The results from this model are presented in Table 3.

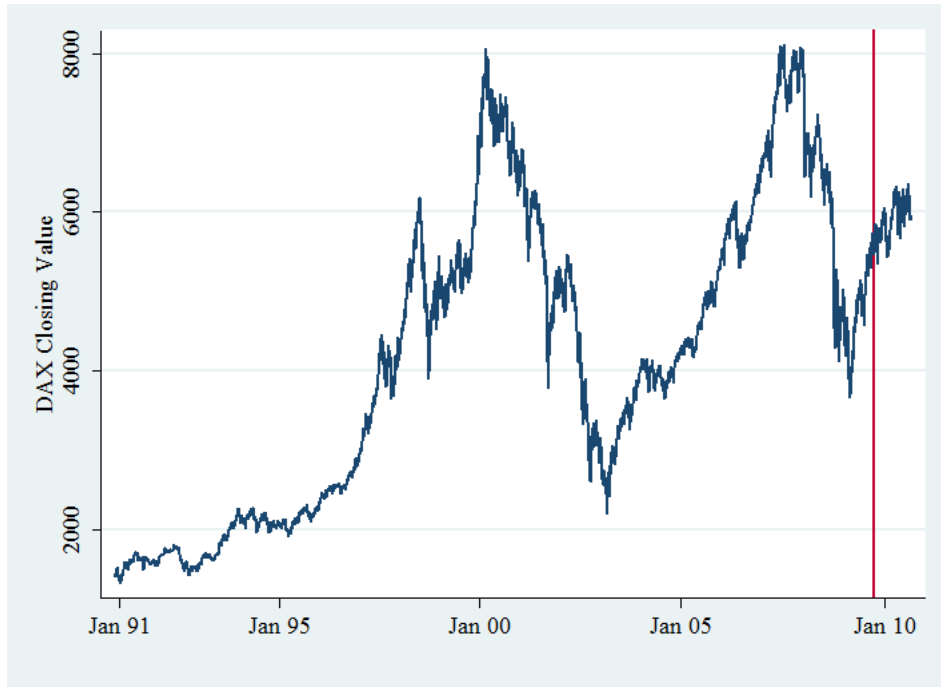


Figure 1: The market was starting to come back in September 2009

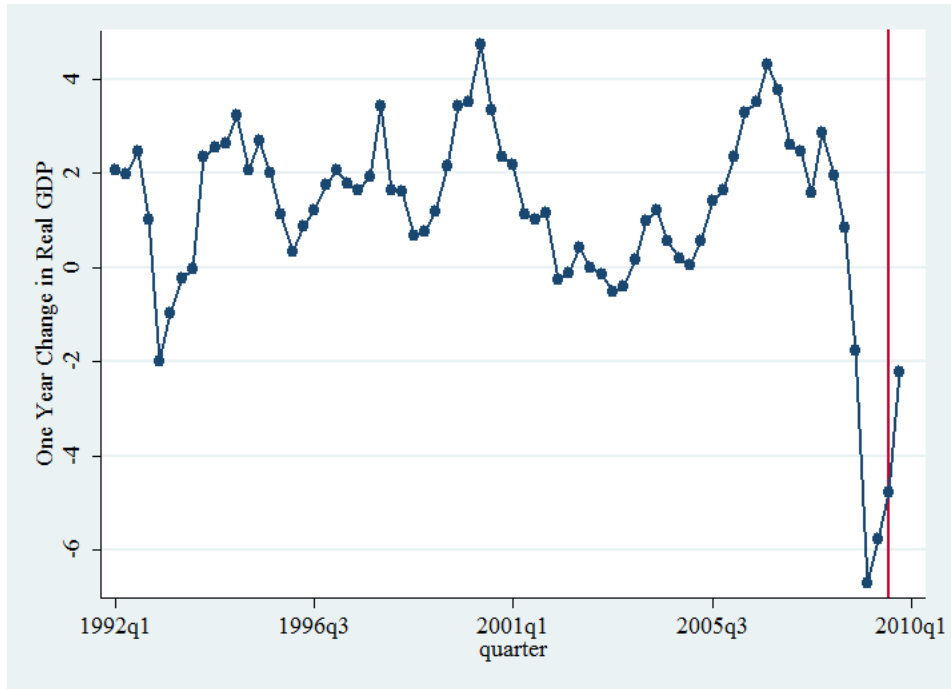


Figure 2: But still, not the best time for incumbents to have an election

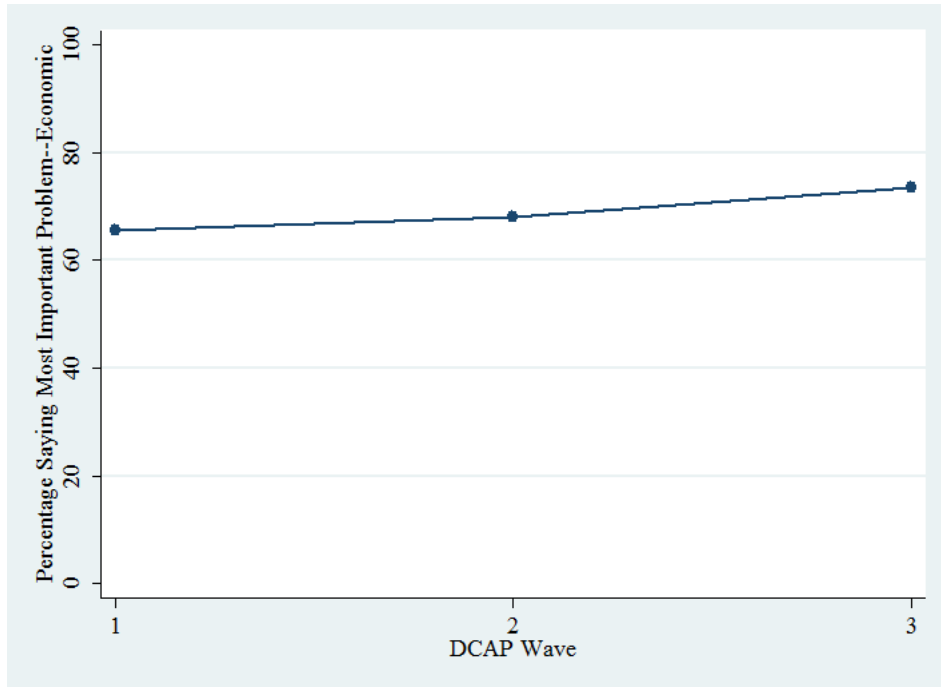


Figure 3: German Voters clearly had the economy on their minds, DCAP 2009

Table 1: Mixed Logit Model – Constituency-Level Voting

Predictor Variables	β			
<i>Characteristics of Choices:</i>				
Party Leader †	-1.01***			
Party Best Most Important Issue	0.77***			
Self-Party Proximity Left-Right Scale	0.28***			
<i>Characteristics of Choosers:</i>				
		Constituency Vote ‡		
	SDP	FDP	Greens	Left
	β	β	β	β
<i>Party Identification:</i>				
CDU/CSU	3.47***	-0.39	-3.01*	-8.13*
SDP	-3.81***	-0.33	-0.89	-0.68
FDP	-0.97 x	0.40	-1.91	-3.66 x
Greens	2.50**	-2.57	4.32**	-0.12
Left	-0.11	-0.31	3.05	9.89**
Other Party	0.00	0.74	1.53	1.98
Age	0.03*	-0.03*	-0.02	0.06 x
Gender	-0.83	-0.83*	1.00 x	0.18
Income	0.00	0.19	-0.07	0.16
Region: East	-0.11	-0.36	-1.68 x	-0.34
Constant	-1.21	0.11	-0.54	-4.83*
<i>Random Parameter:</i>				
	Standard Deviation of Party Leader Coefficient = 0.97**			
	Impact of Economic Evaluations on Party Leader Coefficient = -0.21*			
Log-likelihood = -771.81				
N = 998				
McFadden $R^2 = .52$				
Percent Correctly Classified = 57.7				

Note: *** - $p < .001$; ** - $p < .01$; * - $p < .05$; x - $p < .10$.

† - random parameter, log-normal distribution

‡ - CDU/CSU voting is the reference category

Table 2: Mixed Logit Model – Party List Voting

Predictor Variables	β			
<i>Characteristics of Choices:</i>				
Party Leader †	-0.62 * *			
Party Best Most Important Issue	0.88***			
Self-Party Proximity Left-Right Scale	0.35***			
<i>Characteristics of Choosers:</i>				
		Constituency Vote ‡		
	SDP	FDP	Greens	Left
	β	β	β	β
<i>Party Identification:</i>				
CDU/CSU	-3.08***	-3.02*	-5.16***	-7.42***
SDP	2.15***	-5.17*	-1.99	-1.28
FDP	-1.58 x	5.87*	3.49 x	0.45
Greens	5.14*	-9.81	7.80 * *	2.89
Left	1.57	1.74	2.28	6.59 * *
Other Party	0.35	-4.28	-3.52	-2.08
Age	0.03	0.02	-0.01	0.07*
Gender	-0.45	1.96*	1.20	1.86*
Income	-0.31	0.17	0.20	-0.04
Region: East	0.06	-0.19	-1.43	0.79
Constant	1.50	0.04	2.34	-0.55
<i>Random Parameter:</i>				
Standard Deviation of Party Leader Coefficient = 0.94*				
Impact of Economic Evaluations on Party Leader Coefficient = 0.02				
Log-likelihood = -782.11				
N = 964				
McFadden $R^2 = .49$				
Percent Correctly Classified = 55.7				

Note: *** - $p < .001$; ** - $p < .01$; * - $p < .05$; x - $p < .10$.

† - random parameter, log-normal distribution

‡ - CDU/CSU voting is the reference category

Table 3: Factors Affecting Support for Angel Merkel

Predictor	β	s. e.
Party Best Most Important Issue:		
CDU/CSU	1.70***	0.25
SDP	0.21	0.27
FDP	1.66***	0.31
Greens	0.21	0.35
Left	-0.08	0.32
Other Party	-0.12	0.48
Party Identification:		
CDU/CSU	1.07***	0.26
SDP	1.00***	0.23
FDP	0.14	0.30
Greens	1.06***	0.31
Left	0.39	0.30
Other Party	-1.05*	0.51
Left-Right Proximity Self-Party:		
CDU/CSU	0.31***	0.05
SDP	0.01	0.06
FDP	0.05	0.04
Greens	0.03	0.05
Left	-0.13***	0.04
Economic Evaluations	0.77***	0.08
Age	0.03***	0.01
Gender	0.80***	0.15
Income	-0.11	0.07
Region: East	0.89***	0.08
Constant	3.69***	0.34
$R^2 = .40$		
N = 1281		

Note: *** - $p < .001$; ** - $p < .01$; * - $p < .05$