

**The Valence Side of the EU:
EU Issue Voting in the Aftermath of the Eurozone Crisis**

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APPENDIX A– METHODOLOGICAL NOTE

CAWI surveys

The fieldwork for the French survey took place between 21/03/2017 and 11/04/2017, whereas that for the Italian survey took place between 06/02/2018 and 12/02/2018. Both the French and Italian surveys were conducted by Demetra Spa. The universe of the surveys corresponds to citizens (aged 18 or more) residing in France and Italy at the time of the fieldwork and belonging to an opt-in web panel. The surveys were conducted through the CAWI (Computer Assisted Web Interviewing) technique on a sample of the target population and guaranteeing respondent anonymity. A non-probability quota sampling technique was adopted using gender, age class, region of residence and education as stratification variables. The margin of error (95% CI) would be 2.82% and 3.09%, respectively, in France and Italy, for an equivalent probability sample. An IPF (Iterative Proportional Fitting) technique was used to create sample weights on the basis of real population distributions on education, gender * age-class, geographical region and voting behavior in the last presidential/general elections¹. The total sample size is equal to 1,207 respondents in France and 1,000 respondents in Italy.

Questionnaire design

The ICCP questionnaire is designed to study issue competition in each surveyed country. Before the pre-electoral CAWI fieldwork in each country, country experts were asked to identify the main issues of the campaign. The selection of issues is, thus, country specific, which allows for mapping the specific issue structure of each country campaign. The pre-selection procedure resulted in the identification of a large number of both positional and valence issues, on which individual issue attitudes are measured.

The ICCP has developed an innovative measurement strategy which allows for a consistent measurement and comparison of both positional and valence issues. Specifically, the distinction between positional and valence issues is overcome by referring to the concept of an issue-goal (D'Alimonte, De Sio and Franklin 2020). Positional issues are defined by a pair of rival goals (e.g. Remain in the EU vs Leave the EU), while valence issues are defined by (what in a specific context is perceived as) a single, shared goal (e.g. support economic growth). Once this distinction is acknowledged, a common measurement is possible for the relevant properties of each goal, i.e., its level of support and its specific association (worded in terms of issue goal credibility) with one or more parties.

For positional issues, the respondent (R) was asked to place themselves on a six-point self-anchoring scale, anchored by the two rival goals. After one of the two rival goals is selected, R is asked to select which parties she/he deems credible to achieve that particular goal. For valence issues (assumed to be commonly shared by the overall electorate), only party credibility is asked. As a result, party credibility is taken as a measure of association between voters and parties on specific issue goals. Party credibility

¹ Data for education, age, gender and geographical region was taken from EUROSTAT, while data for voting behaviour in the last presidential/general elections was taken from national official sources.

is preferred to party competence because of its greater generality, required for goals that can be either positional or valence (see D'Alimonte, De Sio, and Franklin 2020).

For further details please refer to the study description *ZA7499: Issue Competition Comparative Project (ICCP)*, available at GESIS data archive (<https://dbk.gesis.org/dbksearch/sdesc2.asp?no=7499&db=e>).

APPENDIX B – VALIDATION TESTS OF THE EU VALENCE ISSUE

Table B1 reports the proportion of pro- and anti- EU voters assigning a high priority to the valence issue “making the country count more in Europe” in France and Italy, alongside the association between the two variables (Kendall’s tau). As clarified in fn.10 of the main text, issue priorities are measured as ordered scales (1=Low; 2=Medium; 3=High), while respondents’ positions on the EU are measured on a 1 to 6 scale (1=Remain in the EU; 6= Leave the EU). For the sake of simplicity, for this validation test, both variables have been dichotomized. For issue priority we simply distinguished voters who assigned a high priority to the issue (=3) from all the others; as for positions on the EU integration, respondents coded as 1,2 and 3 have been considered as pro-EU voters; respondents coded as 4,5 and 6 have been instead considered as anti-EU.

Table B1 – Proportion of pro- and anti-EU voters assigning a high priority to the issues goal “making the country count more in Europe” in France and Italy.

	Anti-EU	Pro-EU	Delta anti/EU-pro/EU (in pct. points)	Kendall's tau
France	42%	49%	-7*	0.07*
Italy	63%	59%	4	-0.04

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table B2 reports full models' specification of the validation models depicted in Table 1 of the manuscript.

Table B2 - A validation model of the EU valence issue. OLS Regression; DV: PTVs

	Arthaud	Asseli.	Dup-Ai	Melen.	Fillon	Hamon	Macron	Le Pen	Poutou	FdI	FI	Lega	LEU	M5S	PD	+EU
EU pos.	-0.170*** (0.0480)	0.00756 (0.0436)	0.126* (0.0524)	-0.255*** (0.0559)	-0.0107 (0.0577)	-0.387*** (0.0579)	-0.347*** (0.0639)	0.950*** (0.0684)	-0.131** (0.0461)	0.277*** (0.0589)	0.182** (0.0636)	0.427*** (0.0700)	-0.292*** (0.0541)	0.166* (0.0733)	-0.423*** (0.0575)	-0.330*** (0.0543)
Cred. on EU valence	3.267** (1.215)	1.260 (1.510)	1.237 (0.712)	2.904*** (0.514)	3.769*** (0.445)	3.018*** (0.510)	3.606*** (0.405)	3.353*** (0.564)	0.573 (0.968)	4.131*** (0.583)	4.398*** (0.440)	4.059*** (0.544)	5.553*** (0.666)	4.740*** (0.510)	4.886*** (0.367)	4.477*** (0.496)
EU pos * Cred.EU valence	-0.161 (0.315)	0.107 (0.334)	0.377* (0.187)	-0.178 (0.161)	-0.103 (0.143)	-0.124 (0.174)	-0.121 (0.133)	-0.0675 (0.135)	0.285 (0.269)	0.229 (0.169)	0.00127 (0.130)	0.0742 (0.151)	-0.820* (0.331)	0.0299 (0.150)	-0.0612 (0.149)	-0.598* (0.276)
Gender	0.435* (0.175)	0.0255 (0.161)	0.259 (0.187)	0.177 (0.195)	0.780*** (0.195)	0.108 (0.200)	-0.0776 (0.202)	0.120 (0.210)	0.0447 (0.168)	-0.0353 (0.201)	0.210 (0.204)	-0.0484 (0.225)	0.0722 (0.194)	-0.541* (0.233)	0.236 (0.189)	0.398* (0.191)
Church attendance	0.284*** (0.0665)	0.425*** (0.0602)	0.455*** (0.0695)	0.141 (0.0733)	0.490*** (0.0739)	0.0633 (0.0757)	0.165* (0.0760)	0.320*** (0.0792)	0.222*** (0.0633)	0.339*** (0.0639)	0.403*** (0.0655)	0.246*** (0.0718)	0.0298 (0.0616)	0.0865 (0.0736)	0.116 (0.0600)	0.0363 (0.0605)
Education	-0.335* (0.138)	-0.114 (0.126)	0.0671 (0.147)	-0.0278 (0.153)	-0.00441 (0.155)	0.167 (0.159)	-0.0584 (0.159)	-0.267 (0.167)	-0.148 (0.133)	-0.0616 (0.164)	-0.378* (0.165)	-0.222 (0.181)	0.447** (0.157)	0.158 (0.187)	0.0152 (0.152)	0.215 (0.155)
Age class 18-29	Base	Base	Base	Base	Base	Base	Base	Base	Base	Base	Base	Base	Base	Base	Base	Base
30-44	-0.388 (0.302)	-0.648* (0.283)	-0.451 (0.323)	-0.810* (0.334)	-0.00978 (0.337)	-0.427 (0.344)	-0.0256 (0.349)	-0.0263 (0.358)	-0.294 (0.293)	-0.0292 (0.359)	-0.252 (0.364)	0.525 (0.397)	-0.926** (0.347)	-0.327 (0.413)	-1.119*** (0.335)	-0.623 (0.346)
45-54	-0.527 (0.312)	-0.528 (0.293)	-0.262 (0.333)	-0.642 (0.347)	0.0626 (0.348)	-0.123 (0.357)	0.388 (0.360)	-0.0902 (0.370)	-0.379 (0.304)	0.00872 (0.378)	-0.959* (0.382)	0.333 (0.417)	-0.939* (0.364)	-0.454 (0.434)	-1.085** (0.353)	-0.734* (0.361)
55-64	-1.012** (0.311)	-0.805** (0.290)	-0.138 (0.331)	-1.055** (0.346)	-0.303 (0.346)	-0.793* (0.355)	0.0470 (0.360)	-0.185 (0.368)	-0.644* (0.302)	-0.406 (0.390)	-1.051** (0.396)	0.232 (0.434)	-0.864* (0.377)	-0.617 (0.452)	-0.739* (0.366)	-0.587 (0.375)
65+	-1.622*** (0.294)	-1.360*** (0.275)	-0.659* (0.314)	-1.393*** (0.323)	-0.235 (0.333)	-1.303*** (0.335)	-0.442 (0.338)	-0.223 (0.348)	-1.376*** (0.285)	-0.113 (0.382)	-0.943* (0.387)	-0.181 (0.423)	-0.849* (0.370)	-1.537*** (0.439)	-0.879* (0.360)	-0.398 (0.367)

Social class	-0.385*** (0.0945)	0.0898 (0.0860)	-0.0107 (0.100)	-0.325** (0.105)	0.240* (0.106)	-0.111 (0.108)	0.185 (0.108)	0.0355 (0.113)	-0.156 (0.0906)	0.160 (0.122)	0.0561 (0.124)	0.164 (0.136)	0.152 (0.117)	-0.105 (0.141)	0.313** (0.115)	0.231* (0.116)
Intercept	4.251*** (0.469)	1.644*** (0.432)	1.141* (0.500)	4.394*** (0.530)	0.393 (0.529)	4.153*** (0.545)	3.055*** (0.553)	0.0970 (0.571)	3.043*** (0.457)	0.218 (0.574)	1.381* (0.586)	0.402 (0.642)	2.343*** (0.557)	3.219*** (0.677)	2.689*** (0.544)	2.198*** (0.550)
<i>N</i>	969	929	951	951	949	963	933	963	944	886	891	876	866	873	877	870
<i>R</i> ²	0.118	0.101	0.113	0.135	0.240	0.166	0.279	0.391	0.064	0.245	0.317	0.271	0.206	0.296	0.449	0.261

Standard errors in parentheses. Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

APPENDIX C – ROBUSTNESS TESTS

In this section we present further empirical tests to validate the results presented in the main text of the manuscript. In Table C1 we replicate the regression models presented in the manuscript using country fixed effects (rather than random intercepts for countries) to control for country differences. Empirical results are fully consistent with the findings presented in the manuscript.

Table C1 - Linear (OLS) regressions with country fixed effects

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
<i>Main effects</i>						
Gender (y-hat)	1.011*** (0.190)	0.860*** (0.174)	0.766*** (0.173)	0.742*** (0.167)	0.586*** (0.157)	0.600*** (0.157)
Church attendance (y-hat)	0.977*** (0.0619)	0.924*** (0.0568)	0.914*** (0.0566)	0.899*** (0.0547)	0.852*** (0.0513)	0.849*** (0.0513)
Education (y-hat)	0.799*** (0.0892)	0.474*** (0.0820)	0.587*** (0.0815)	0.437*** (0.0790)	0.421*** (0.0740)	0.422*** (0.0739)
Age (y-hat)	1.025*** (0.0862)	0.800*** (0.0791)	0.800*** (0.0788)	0.720*** (0.0762)	0.703*** (0.0714)	0.714*** (0.0714)
Self-assessed social position (y-hat)	0.761*** (0.0815)	0.459*** (0.0750)	0.573*** (0.0745)	0.431*** (0.0722)	0.395*** (0.0677)	0.386*** (0.0677)
EU Positional		3.593*** (0.0677)		2.387*** (0.0742)	1.322*** (0.0739)	1.337*** (0.103)
EU Valence			3.868*** (0.0712)	2.666*** (0.0783)	1.431*** (0.0790)	1.675*** (0.106)
Party Id.					3.625*** (0.112)	3.632*** (0.112)
Positional Economy					1.153*** (0.0762)	1.161*** (0.0763)
Positional Immigration					1.111*** (0.0687)	1.128*** (0.0703)
Pro-EU vs Anti-EU (1=Anti-EU)						0.0297 (0.0490)
<i>Interaction terms</i>						
Anti-EU * EU positional						-0.0366 (0.140)
Anti-EU * EU valence						-0.529*** (0.147)

Country fixed effects

Country (1=France)	-0.269*** (0.0558)	-0.349*** (0.0511)	-0.349*** (0.0509)	-0.378*** (0.0493)	-0.206*** (0.0466)	-0.227*** (0.0482)
Intercept	2.922*** (0.0426)	2.939*** (0.0390)	2.937*** (0.0389)	2.943*** (0.0376)	2.636*** (0.0365)	2.623*** (0.0422)
<i>N</i>	14810	14810	14810	14810	14810	14810
<i>R</i> ²	0.044	0.197	0.203	0.255	0.346	0.347

Standard errors in parentheses. Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

We also performed the same regression models separately for each country, i.e. France and Italy. Also in this case, results seem to be in line with main findings presented in the manuscript. In particular, while we do not find any evidence of a significant interaction between party credibility on the EU positional issue and party type, our results show that the EU valence issue rewarded Europhile parties significantly more than Eurosceptic ones. This result is particularly strong in Italy, while it is weaker in France (although still significant from a statistical point of view). Results of these models are depicted in Table C2.

Table C2 – Linear (OLS) regressions for each country

	Italy	France
Main effects		
EU Positional	1.489*** (0.151)	1.196*** (0.141)
EU Valence	1.553*** (0.154)	1.701*** (0.148)
Party Id.	3.268*** (0.174)	3.821*** (0.149)
Positional Economy	1.190*** (0.101)	1.154*** (0.116)
Positional Immigration	1.115*** (0.101)	1.105*** (0.0981)
Gender (y-hat)	0.782** (0.266)	0.473* (0.194)
Church attendance (y-hat)	0.862*** (0.0641)	0.827*** (0.0852)
Education (y-hat)	0.292** (0.111)	0.523*** (0.0990)
Age (y-hat)	0.836*** (0.0844)	0.378** (0.134)
Self-assessed social position (y-hat)	0.360*** (0.0943)	0.435*** (0.0973)

Pro-EU vs Anti-EU (1=Anti-EU)	-0.203** (0.0660)	0.302*** (0.0744)
Interaction effects		
Anti-EU * EU positional	-0.0489 (0.197)	0.0371 (0.202)
Anti-EU * EU valence	-0.542** (0.205)	-0.418* (0.216)
Intercept	2.564*** (0.0546)	2.491*** (0.0488)
<i>N</i>	8623	6187
<i>R</i> ²	0.293	0.413

Standard errors in parentheses. Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table C3 replicates the regression models presented in the manuscript using original party credibilities (coded as 0-1 dummy variable, with 1=Party credible to achieve the goal) rather than relative party credibilities (as now in the manuscript). Empirical findings, although somehow different compared to the ones presented in the manuscript, do not invalidate our main conclusions. First, consistently with the results shown in the manuscript, we find that the EU valence issue is electorally more rewarding for Europhile parties, compared to Eurosceptic ones. This result lends strong support to Hp2a of the manuscript. Furthermore, contrarily to what we have shown in the main text, results also show a significant interaction between party credibility on the EU positional issue and party type. Specifically, when using original party credibilities, results tend to confirm Hp2b, according to which Eurosceptic parties, compared to Europhile ones, are more likely to be rewarded on their credibility on the EU positional issue. Overall, these results do not put into question the main findings presented in the manuscript and in fact they reinforce our argument about the role of the EU valence issue voting. Accordingly, our main conclusions are in general consistent with the results of these regression models.

Table C3 – Linear (OLS) regressions with country intercept and original (dummy) party credibilities

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Main effects						
Gender (y-hat)	1.011*** (0.190)	0.741*** (0.174)	0.762*** (0.172)	0.656*** (0.167)	0.497** (0.155)	0.497** (0.155)
Church attendance (y-hat)	0.977*** (0.0619)	0.897*** (0.0569)	0.873*** (0.0563)	0.851*** (0.0545)	0.793*** (0.0508)	0.794*** (0.0508)
Education (y-hat)	0.799*** (0.0892)	0.453*** (0.0821)	0.587*** (0.0811)	0.422*** (0.0787)	0.411*** (0.0733)	0.415*** (0.0733)
Age (y-hat)	1.026*** (0.0861)	0.879*** (0.0791)	0.901*** (0.0783)	0.840*** (0.0758)	0.798*** (0.0706)	0.797*** (0.0706)
Self-assessed social position (y-hat)	0.761*** (0.0815)	0.400*** (0.0752)	0.525*** (0.0742)	0.356*** (0.0720)	0.313*** (0.0671)	0.315*** (0.0672)
EU Positional		3.604*** (0.0684)		2.358*** (0.0738)	1.248*** (0.0736)	1.092*** (0.0956)

EU Valence			4.057*** (0.0726)	2.898*** (0.0791)	1.629*** (0.0793)	1.813*** (0.106)
Party Id.					3.730*** (0.109)	3.720*** (0.109)
Positional Economy					1.310*** (0.0776)	1.304*** (0.0777)
Positional Immigration					1.137*** (0.0719)	1.129*** (0.0734)
Pro-EU vs Anti-EU (1=Anti-EU)						0.0140 (0.0529)
Interaction terms						
Anti-EU * EU positional						0.359* (0.139)
Anti-EU * EU valence						-0.369* (0.148)
Intercept	2.785*** (0.0950)	2.160*** (0.0277)	2.209*** (0.0511)	1.966*** (0.0271)	1.758*** (0.0499)	1.754*** (0.0550)
Var. Comp. Country level	0.1285 (0.0703)	0.0000002 (0.0001)	0.0611 (0.0411)	0.0000002 (0.0001)	0.060 (0.0389)	0.053 (0.0373)
Var. Comp. Ind. Level	3.346 (0.0194)	3.073 (0.0179)	3.042 (0.0177)	2.943 (0.0171)	2.741 (0.0159)	2.740 (0.0159)
<i>N</i>	14810	14810	14810	14810	14810	14810
<i>R</i> ²	0.044	0.194	0.210	0.260	0.359	0.359

Standard errors in parentheses. Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Finally, in Table C4 we replicated the models from 2 to 6 of Table 2 of the manuscript, using the traditional voting intention item instead of the PTVs as a dependent variable. Thus, the dataset has been stacked by party, based on respondents' voting intentions (operationalized first as a set of party-specific dummies, each reporting whether or not the respondent is intended to vote for the party). We then used binary logistic regression (with country fixed effects) to estimate the effects of party credibilities on the (stacked) vote intentions. Results, once again, are robust.

Table C4: Binary logistic regressions. DV: (stacked) vote intentions

	Model 2 of manuscript	Model 3 of manuscript	Model 4 of manuscript	Model 5 of manuscript	Model 6 of manuscript
Main effects					
EU Positional	2.889*** (0.224)		1.982*** (0.274)	1.191*** (0.205)	1.329*** (0.082)
EU Valence		2.980*** (0.0906)	2.085*** (0.0127)	1.384*** (0.230)	1.557*** (0.206)
Party Id.				3.432**	3.453**

				(1.125)	(1.083)
Positional Economy			1.366*** (0.305)		1.357*** (0.301)
Positional Immigration			0.885*** (0.0568)		0.812*** (0.0911)
Gender (y-hat)	2.865*** (0.723)	2.500*** (0.616)	2.853*** (0.502)	2.610*** (0.668)	2.472*** (0.626)
Church attendance (y-hat)	1.525*** (0.213)	1.829*** (0.329)	1.590*** (0.456)	1.404* (0.712)	1.431* (0.633)
Education (y-hat)	2.833 (1.992)	3.951* (1.672)	2.028 (2.122)	2.134 (3.011)	2.224 (3.114)
Age (y-hat)	2.395*** (0.590)	2.477** (0.850)	2.336** (0.750)	2.215*** (0.265)	2.157*** (0.226)
Self-assessed social position (y-hat)	1.536** (0.587)	2.299*** (0.104)	1.501*** (0.0525)	1.982*** (0.0978)	2.127*** (0.179)
Country (1=France)	-0.302*** (0.0144)	-0.324*** (0.0173)	-0.316*** (0.0177)	0.174 (0.141)	0.112 (0.0948)
Pro-EU vs Anti-EU (1=Anti-EU)					0.428 (0.318)
Interaction terms					
Anti-EU * EU positional					-0.118 (0.414)
Anti-EU * EU valence					-0.229** (0.0697)
Country fixed effects					
Country (1=France)	-0.302*** (0.0144)	-0.324*** (0.0173)	-0.316*** (0.0177)	0.174 (0.141)	0.112 (0.0948)
Intercept	-6.584*** (0.180)	-6.948*** (0.496)	-6.718*** (0.299)	-7.477*** (0.219)	-7.697*** (0.440)
<i>N</i>	13342	13342	13342	13342	13342
Pseudo <i>R</i> ² (McFadden)	0.268	0.273	0.348	0.510	0.512

Robust standard errors in parentheses. Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$