

Further Results on Daughters and Left-Wing Voting: Germany 1985-2002

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Abstract

This paper explores the international robustness of the finding in Oswald and Powdthavee (2005) that daughters make people more left-wing. Using the German Socioeconomic Panel from 1985 to 2002, the paper finds fairly strong corroborative evidence for the earlier result on British data. We measure left-wing political preferences here as expressed support for the Social Democratic Party rather than the Christian Union Party or Christian Social Democrats. For every daughter that a German man has, he is approximately 2.5% probability points more like to vote for the Left. The main result of Oswald and Powdthavee (2005) is replicated for the full sample, and for the male sub-sample.

Keywords: Voting; Germany; gender composition; daughters; political attitudes

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1. Introduction

Oswald and Powdthavee (2005) argued that children shape their parents' political preferences. That paper set out statistical evidence that having daughters pushes people to become more left-wing. Giving birth to sons, by contrast, makes people more likely to vote in a right-wing way. We argued that parents and social scientists were probably not aware of this phenomenon.

Our data were from Great Britain. We pointed out, however, that political parties and institutions vary from one nation to another, so that we could not be sure how far the results would generalize to other countries.

A number of researchers have studied evidence on the gender gap in political voting (though not the role of daughters). For the United States, for example, there is recent work by Edlund and Pande (2002), Norris (2004) and Box-Steffensmeier, De Boef and Lin (2004). Innovative research by Washington (2004) has shown that daughters influence their legislator fathers. Peresie (2005) finds strong gender effects in a legal setting. A valuable recent survey of the field is given in Lundberg (2005).

Our former paper laid out a theoretical framework in which, because

- there is pay discrimination against women, and
- females derive greater utility from public goods like community safety,

it is rational for women to be intrinsically more collectivist and left-wing than men. When compared to males, women prefer a larger supply of the public good and a greater tax rate on income. The reason is that their marginal utility from the first is relatively high and the tax penalty they face from the latter relatively low. As men acquire female children, say, those men gradually shift their political stance and become more sympathetic to the

'female' desire for a steeper income tax schedule and a larger amount of the public good.

2. Results for Germany

Using the German Socioeconomic Panel, we show below that a number of the results in Oswald and Powdthavee (2005) can be replicated.

Figures 1 and 2 draw upon longitudinal data on Germans' behaviour and political attitudes covering the years 1985 to 2002. 'Switchers' are especially interesting. The graph depicts those who change their stated affiliation from right-wing to left-wing and vice versa. As in Great Britain, those individuals who give birth to relatively large numbers of daughters are here more likely to tilt to the left politically. The results are statistically significant, even after adjusting the standard errors for clustering, at conventional confidence levels.

Following the econometric specifications in our earlier paper, Table 1 provides simple fixed-effect regression estimates. As in the earlier British specifications, the number of children is held constant, and a variable for the number of daughters then enters positively, and in a way statistically significantly different from zero, in the full sample and the male sub-sample. Results for women voters are here poorly defined. It is not possible to say why this is. It is likely that truly to understand this pattern some deeper knowledge of German politics than we have is required.

In the Male equation in Table 1, the coefficient on Number of Daughters implies that every additional daughter, ceteris paribus, makes a German male approximately 2.5% probability points more likely to vote for the SPD. Using logit estimation with fixed-effects, Table 2 confirms these general findings.

3. Conclusion

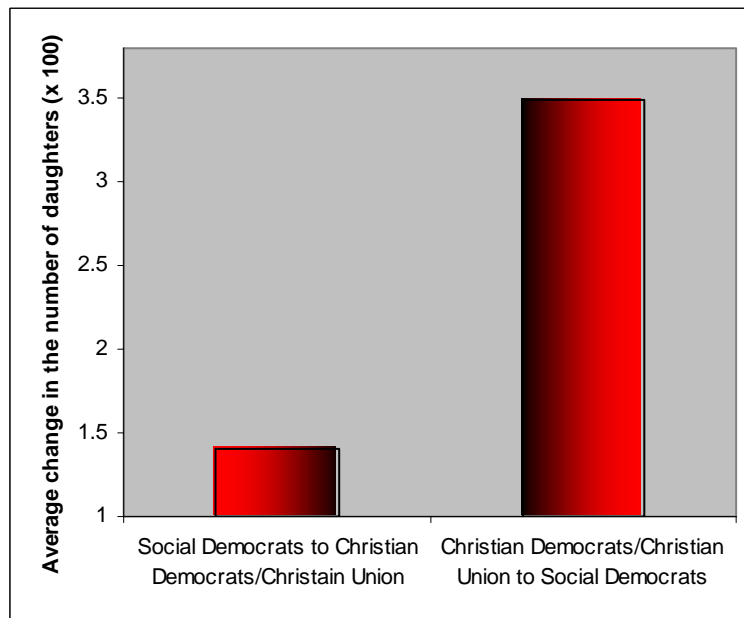
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from the German Socioeconomic Panel from 1985 to 2002, the paper finds fairly strong corroborative evidence for the earlier result. We treat leftwing political preferences as being expressed support for the Social Democratic Party rather than the Christian Union or Christian Social Democrats. For every daughter that a German man has, he is approximately 2.5% probability points more like to vote for the Left. The main (British) result of Oswald and Powdthavee (2005) is replicated for the full sample, and for the male sub-sample.

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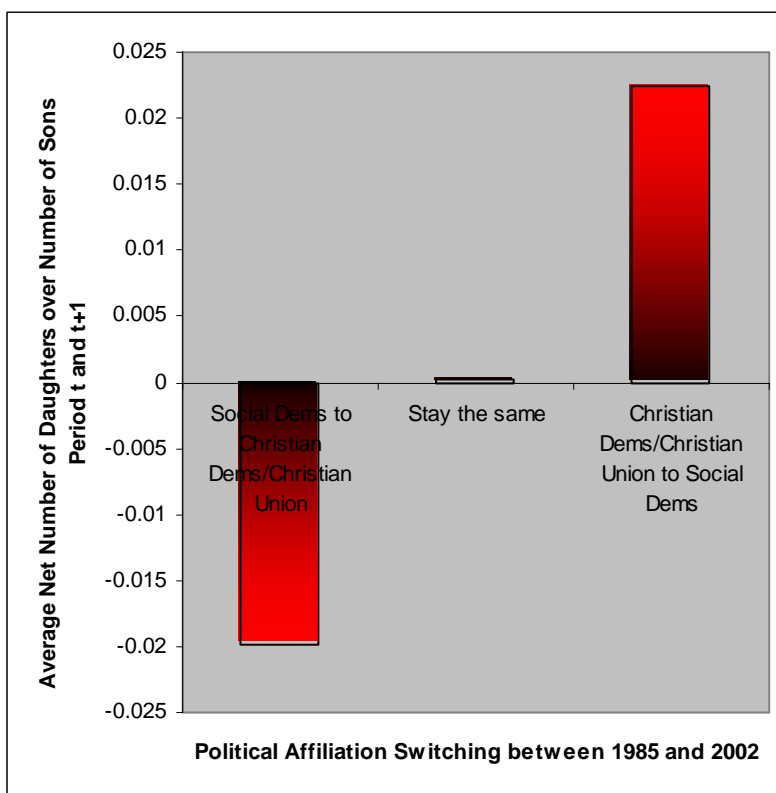
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Figure 1: Proportion of People Switching Political Party Affiliation and Change in the Number of Daughters from T to $T+1$: German Socio-Economic Panel Data (1985-2002)



Note: there were 638 switches from Social Democrats to Christian Democrats/Christian Union, and 660 from Christian Democrats/Christian Union to Social Democrats between T and $T+1$. The adjusted t -test statistics [p-value] for clustering by personal identification of whether the change in the number of daughters between the two groups is equal is -2.125 [0.034].

Figure 2: Political Party Affiliation Switching and Average Net Change in the Number of Daughters over the Number of Sons Between T and $T+1$



Note: there were 638 switches from Social Democrats to Christian Democrats/Christian Union, and 660 from Christian Democrats/Christian Union to Social Democrats between T and $T+1$. There were 47,202 observations that stayed the same. The adjusted t -test statistics [p-value] for clustering by personal identification of whether the change in the number of daughters over the number of sons between the two groups is equal is -2.299 [0.0217].

**Table 1: The Effect of Daughters on the Probability of Being Affiliated with a Left-Wing Party:
(OLS with Individual Fixed Effects): German Panel 1985-2002**

	All		Men		Women	
Number of daughters	0.011	(0.004)	0.026	(0.006)	-0.007	(0.006)
Number of children						
1	-0.003	(0.004)	-0.011	(0.006)	0.006	(0.006)
2	0.005	(0.006)	-0.010	(0.009)	0.025	(0.009)
3	0.009	(0.009)	-0.018	(0.013)	0.043	(0.014)
4	0.008	(0.015)	-0.031	(0.020)	0.057	(0.022)
5	-0.048	(0.025)	-0.062	(0.035)	-0.023	(0.036)
6	-0.054	(0.040)	-0.103	(0.050)	-0.002	(0.070)
7	-0.027	(0.080)	-0.062	(0.091)	-0.004	(0.182)
8	-0.011	(0.261)	-0.050	(0.270)	NA	
9	NA		NA		NA	
10	NA		NA		NA	
11	-0.011	(0.124)	-0.026	(0.180)	0.007	(0.171)
Socio-demographic status						
Age	-0.000	(0.001)	-0.002	(0.002)	0.001	(0.002)
Age-squared/100	-0.002	(0.001)	-0.000	(0.002)	-0.004	(0.002)
log of real personal income	-0.003	(0.003)	-0.000	(0.005)	-0.005	(0.004)
Years of schooling	-0.002	(0.001)	0.005	(0.002)	0.001	(0.003)
Single	0.003	(0.007)	0.005	(0.010)	-0.004	(0.011)
Widowed	-0.006	(0.011)	-0.076	(0.020)	0.024	(0.013)
Divorced	-0.001	(0.007)	0.000	(0.010)	-0.000	(0.010)
Separated	-0.007	(0.009)	-0.000	(0.012)	-0.015	(0.012)
Over 18; not with parents	0.049	(0.032)	0.023	(0.038)	0.119	(0.062)
Employed full-time	-0.004	(0.003)	-0.007	(0.005)	-0.002	(0.004)
Disabled	0.008	(0.005)	0.014	(0.007)	-0.001	(0.008)
Regional dummies						
Schleswig-Hols.	-0.022	(0.031)	0.015	(0.045)	-0.060	(0.044)
Hamburg	-0.023	(0.036)	0.005	(0.050)	-0.052	(0.053)
Lower Saxony	-0.008	(0.031)	0.051	(0.042)	-0.077	(0.045)
Bremen	-0.055	(0.046)	0.040	(0.077)	-0.136	(0.057)
N-Rhein-Westfa.	-0.003	(0.026)	0.060	(0.037)	-0.070	(0.038)
Hessen	0.004	(0.031)	0.063	(0.044)	-0.057	(0.044)
R-Pfalz,Saarl.	-0.009	(0.031)	0.058	(0.045)	-0.067	(0.042)
Baden-Wuerttemb.	-0.038	(0.030)	0.024	(0.042)	-0.105	(0.043)
Bavaria	-0.008	(0.029)	0.043	(0.039)	-0.065	(0.044)
Berlin (East)	-0.093	(0.089)	0.056	(0.144)	-0.204	(0.113)
Mecklenburg-V.	-0.074	(0.092)	0.096	(0.144)	-0.201	(0.119)
Brandenburg	-0.034	(0.091)	0.144	(0.144)	-0.158	(0.119)
Saxony-Anhalt	-0.152	(0.097)	0.099	(0.153)	-0.361	(0.126)
Thuringen	-0.062	(0.109)	0.220	(0.184)	-0.255	(0.136)
Saxony	-0.233	(0.095)	0.008	(0.149)	-0.435	(0.122)
Residence (East/West)						
East German	0.061	(0.088)	-0.092	(0.140)	0.166	(0.113)
Constant	0.622	(0.098)	0.555	(0.118)	0.578	(0.130)
Year dummies	Yes		Yes		Yes	
N	74,380		39,727		34,653	
Within R-squared	0.011		0.014		0.012	

Note: standard errors are in parentheses. Outcome variable: Support Left-Wing Party - 0 = Christian Union; Christian Social Democrats, 1 = Social Democrats. Reference groups are Married, Berlin, West Germany. The age within the sample is 65 and under.

Table 2: The Effect of Daughters on the Probability of Being Affiliated with a Left-Wing Party (Logit with Individual Fixed Effects): German Panel 1985-2002

	All		Men		Women	
Number of daughters	0.275	(0.104)	0.652	(0.141)	-0.178	(0.162)
Number of children						
1	-0.054	(0.106)	-0.172	(0.147)	0.093	(0.159)
2	0.095	(0.158)	-0.212	(0.213)	0.542	(0.249)
3	0.218	(0.232)	-0.434	(0.316)	1.028	(0.363)
4	0.165	(0.351)	-0.599	(0.462)	1.215	(0.561)
5	-1.251	(0.641)	-1.268	(0.870)	-1.115	(1.015)
6	-0.850	(1.072)	-2.333	(1.278)	0.395	(1.987)
Socio-demographic status						
Age	-0.025	(0.031)	-0.075	(0.044)	0.027	(0.044)
Age-squared/100	-0.031	(0.033)	0.027	(0.048)	-0.092	(0.048)
log of real personal income	-0.088	(0.068)	0.010	(0.108)	-0.126	(0.090)
Years of schooling	0.091	(0.044)	0.143	(0.053)	0.011	(0.081)
Single	0.038	(0.188)	0.154	(0.246)	-0.092	(0.307)
Widowed	-0.044	(0.259)	-0.928	(0.417)	0.481	(0.358)
Divorced	-0.073	(0.177)	0.056	(0.241)	-0.132	(0.273)
Separated	-0.210	(0.217)	-0.005	(0.324)	-0.392	(0.307)
Over 18; not with parents	1.446	(1.117)	0.826	(1.203)	NA	
Employed full-time	-0.112	(0.079)	-0.120	(0.120)	-0.059	(0.108)
Disabled	0.230	(0.129)	0.407	(0.167)	0.019	(0.212)
Regional dummies						
Schleswig-Hols.	-0.838	(0.733)	0.307	(1.244)	-1.452	(1.331)
Hamburg	-0.015	(1.123)	0.990	(2.008)	-0.301	(1.772)
Lower Saxony	-0.076	(0.866)	1.958	(1.395)	-2.093	(1.777)
Bremen	-0.784	(1.098)	2.167	(1.770)	-3.580	(1.975)
N-Rhein-Westfa.	0.327	(0.809)	2.146	(1.255)	-2.048	(1.636)
Hessen	-0.130	(0.705)	0.978	(0.939)	-2.092	(1.526)
R-Pfalz,Saarl.	-0.115	(0.861)	1.376	(1.347)	-2.247	(1.549)
Baden-Wuerttemb.	-1.100	(0.724)	0.410	(1.102)	-3.369	(1.557)
Bavaria	-0.545	(0.729)	0.007	(0.897)	-2.182	(1.708)
Berlin (East)	-0.869	(1.450)	-0.869	(1.450)	-1.837	(1.899)
Mecklenburg-V.	-1.099	(1.953)	-1.099	(1.953)	-1.516	(2.971)
Brandenburg	0.778	(1.582)	0.778	(1.582)	NA	
Saxony-Anhalt	-1.100	(1.808)	-1.100	(1.808)	NA	
Thuringen	NA		NA		NA	
Saxony	-2.462	(1.614)	-2.462	(1.614)	-4.486	(2.143)
Residence (East/West)						
East German	0.406	(1.363)	-21.996	(1.528)	0.600	(1.691)
Year dummies	Yes		Yes		Yes	
N	13,524		7,606		5,918	
Number of group	2,131		1,186		945	

Note: standard errors are in parentheses.