Guns Yield Butter? An Exploration of Defense Spending Preferences

Appendix

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Overview of Additional Models

This *Appendix* contains additional models that were referenced—though not presented—in the manuscript.

Alternative Measures of Military Expenditures

In Table A.1 I replicate Model 1 with two alternative measures of military spending that account for the size of the economy (*Military Expenditures as a % of GDP*) and total population (*Military Expenditures Per Capita*). The results echo those found in the manuscript. Neither measure is statistically different from zero. Most importantly, support for government-financed job creation positively conditions the relationship between health and defense spending.

Exclude Cold War Surveys

I also exclude the six Cold War surveys (all surveys from Module I of the ISSP) from the three models to make sure that the results are not driven by the unique security circumstances at the time. Models 6-8 in Table A.2 replicate Models 1-3 from the manuscript. The key substantive findings are the same; the coefficient for health spending is negative (for those respondents who oppose government-financed job creation), and the interaction is statistically significant and positive. These results suggest that the difference in relative preferences that I found in the manuscript is not an artifact of the Cold War.

Table A.1: Ordered Logit Results for the Relationship between Social and Defense Spending Preferences: Alternative Measures of Military Expenditures

	Model 4	Model 5
Health Spending	-0.0156	-0.0168
	(0.0106)	(0.0105)
Create Jobs	-0.396***	-0.401***
	(0.0465)	(0.0460)
Health Spending×Create Jobs	0.102***	0.102***
	(0.0119)	(0.0118)
Cut Government Spending	0.0333***	0.0316***
	(0.00929)	(0.00923)
Male	-0.0531***	-0.0529***
	(0.00799)	(0.00794)
Age	0.00658***	0.00666***
	(0.000241)	(0.000240)
Unemployed	0.00204	0.00144
	(0.0194)	(0.0193)
College	-0.255***	-0.252***
	(0.0114)	(0.0114)
Military Expenditures Per Capita	0.0000171	
	(0.0000288)	
Military Expenditures as a % of GDP		-0.00911
		(0.00589)
GDP Per Capita Growth$_{t-1}$	-0.0112***	-0.00983**
	(0.00317)	(0.00309)
US ΔExpenditures$_{t-1}$	0.00368	0.00309
	(0.00210)	(0.00212)
US Alliance	0.180***	0.194***
	(0.0176)	(0.0193)
US Δ US Alliance	0.0328***	0.0320***
	(0.00253)	(0.00262)
Hostile MIDs 6 Months Prior	0.0694***	0.0588***
	(0.0118)	(0.0120)
Constant	1.737***	1.727***
	(0.0481)	(0.0476)
Observations	71,407	72,315
Surveys	58	59
Country Fixed Effects	Yes	Yes

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ (two-tailed). Defense spending ranges from 1 ("much less") to 5 ("much more").

Table A.2: Ordered Logit Results for the Relationship between Social and Defense Spending Preferences: No Cold War Surveys

	Model 6	Model 7	Model 8
Health Spending	-0.0162	-0.142***	-0.000437
	(0.0111)	(0.0395)	(0.0116)
Create Jobs	-0.430***	-0.413*	-0.428***
	(0.0488)	(0.175)	(0.0510)
Health Spending×Create Jobs	0.109***	0.108*	0.107***
	(0.0124)	(0.0465)	(0.0129)
Cut Government Spending	0.0225*	-0.136***	0.0234*
	(0.00972)	(0.0411)	(0.0100)
Male	-0.0489***	0.0140	-0.0536***
	(0.00834)	(0.0346)	(0.00860)
Age	0.00667***	0.00512***	0.00682***
	(0.000252)	(0.00104)	(0.000260)
Unemployed	0.000735	-0.153	-0.0108
	(0.0202)	(0.113)	(0.0205)
College	-0.239***	-0.395***	-0.221***
	(0.0118)	(0.0444)	(0.0122)
Military Expenditures	-8.34e-13	9.07e-11***	-1.73e-10***
	(2.36e-12)	(6.15e-12)	(1.19e-11)
GDP Per Capita Growth$_{t-1}$	-0.0154***	-1.306***	-0.00517
	(0.00321)	(0.0901)	(0.00325)
US Δ Expenditures	0.00537*		-0.0125***
	(0.00218)		(0.00232)
US Alliance	0.151***		0.320***
	(0.0179)		(0.0203)
US Δ Expenditures $\times$ US Alliance	0.0251***		0.0451***
	(0.00272)		(0.00286)
Hostile MIDs 6 Months Prior	0.0621***		0.0751***
	(0.0119)		(0.0130)
Constant	1.760***	2.877***	1.729***
	(0.0501)	(0.219)	(0.0528)
Observations	65,677	3,783	61,894
Surveys	53	3	50
Country Fixed Effects	Yes	No	Yes

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ (two-tailed). Defense spending ranges from 1 ("much less") to 5 ("much more").

Other Welfare Categories

Tables A.3-A.5 replicate Models 1-3 from the manuscript with three prominent measures of social spending: education (Table A.3), pensions (Table A.4) and unemployment (Table A.5). Unlike health spending, the relationship is not competitive for those who oppose government-financed job creation; the coefficients for spending are positive, rather than negative. Most importantly, the coefficients for the interactions are positive (in all models) and statistically significant at the 95% level (or higher) for both education and pensions. The interaction for unemployment, on the other hand, is not statistically significant. However, the positive coefficient suggests that support for government-financed job creation positively conditions the effects of unemployment support on defense spending, albeit to a much smaller extent (and with greater uncertainty).

Table A.3: Ordered Logit Results for the Relationship between Social (Education) and Defense Spending Preferences

	Model 9	Model 10	Model 11
Education Spending	0.0366***	-0.0627	0.0489***
	(0.0109)	(0.0348)	(0.0115)
Create Jobs	-0.272***	-0.524**	-0.243***
	(0.0467)	(0.164)	(0.0489)
Education Spending×Create Jobs	0.0682***	0.143***	0.0590***
	(0.0122)	(0.0418)	(0.0128)
Cut Government Spending	0.0339***	-0.223***	0.0447***
	(0.00926)	(0.0378)	(0.00954)
Male	-0.0536***	0.0357	-0.0606***
	(0.00796)	(0.0320)	(0.00822)
Age	0.00701***	0.00512***	0.00724***
	(0.000241)	(0.000962)	(0.000250)
Unemployed	0.00866	-0.195	0.0147
	(0.0194)	(0.103)	(0.0198)
College	-0.270***	-0.371***	-0.257***
	(0.0114)	(0.0407)	(0.0119)
Military Expenditures	-1.55e-13	1.42e-12**	5.48e-13
	(1.45e-13)	(5.28e-13)	(8.74e-13)
GDP Per Capita Growth$_{t-1}$	-0.00675*	-0.149***	-0.00162
	(0.00317)	(0.0419)	(0.00319)
US Δ Expenditures$_{t-1}$	0.00305		-0.0100***
	(0.00211)		(0.00229)
US Alliance	0.183***		0.213***
	(0.0176)		(0.0178)
US Δ Expenditures $\times$ US Alliance	0.0334***		0.0468***
	(0.00252)		(0.00274)
Hostile MIDs 6 Months Prior	0.0618***		0.119***
	(0.0116)		(0.0125)
Observations	71,750	4,422	67,362
Surveys	59	4	55
Country Fixed Effects	Yes	No	Yes

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ (two-tailed). Defense spending ranges from 1 ("much less") to 5 ("much more").

Table A.4: Ordered Logit Results for the Relationship between Social (Pensions) and Defense Spending Preferences

	Model 12	Model 13	Model 14
Pensions Spending	0.104***	0.129***	0.100***
	(0.0112)	(0.0361)	(0.0118)
Create Jobs	-0.281***	-0.379**	-0.283***
	(0.0454)	(0.143)	(0.0481)
Pensions Spending×Create Jobs	0.0697***	0.0960*	0.0693***
	(0.0123)	(0.0414)	(0.0130)
Cut Government Spending	0.0295**	-0.183***	0.0379***
	(0.00929)	(0.0383)	(0.00958)
Male	-0.0448***	0.0453	-0.0517***
	(0.00799)	(0.0323)	(0.00825)
Age	0.00571***	0.00498***	0.00588***
	(0.000244)	(0.000962)	(0.000253)
Unemployed	-0.00417	-0.187	0.000623
	(0.0195)	(0.105)	(0.0198)
College	-0.224***	-0.292***	-0.213***
	(0.0115)	(0.0415)	(0.0120)
Military Expenditures	-1.17e-13	1.75e-12**	2.22e-13
	(1.46e-13)	(5.33e-13)	(8.73e-13)
GDP Per Capita Growth$_{t-1}$	-0.00761*	-0.174***	-0.00278
	(0.00317)	(0.0422)	(0.00318)
US Δ Expenditures$_{t-1}$	0.00227		-0.0101***
	(0.00211)		(0.00230)
US Alliance	0.181***		0.209***
	(0.0176)		(0.0178)
US Δ Expenditures $\times$ US Alliance	0.0337***		0.0467***
	(0.00253)		(0.00275)
Hostile MIDs 6 Months Prior	0.0691***		0.125***
	(0.0117)		(0.0126)
Observations	71,382	4,363	67,052
Surveys	59	4	55
Country Fixed Effects	Yes	No	Yes

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ (two-tailed). Defense spending ranges from 1 ("much less") to 5 ("much more").

Table A.5: Ordered Logit Results for the Relationship between Social (Unemployment) and Defense Spending Preferences

	Model 15	Model 16	Model 17
Unemployment Spending	0.0784***	0.0576	0.0807***
	(0.00985)	(0.0372)	(0.0102)
Create Jobs	-0.0457	-0.157	-0.0362
	(0.0318)	(0.128)	(0.0329)
Unemployment Spending×Create Jobs	0.00855	0.0520	0.00390
	(0.0107)	(0.0420)	(0.0110)
Cut Government Spending	0.0438***	-0.187***	0.0533***
	(0.00936)	(0.0383)	(0.00965)
Male	-0.0526***	0.0278	-0.0589***
	(0.00802)	(0.0322)	(0.00828)
Age	0.00655***	0.00469***	0.00677***
	(0.000243)	(0.000965)	(0.000251)
Unemployed	-0.0381	-0.235*	-0.0316
	(0.0196)	(0.104)	(0.0200)
College	-0.246***	-0.348***	-0.233***
	(0.0115)	(0.0412)	(0.0120)
Military Expenditures	-2.55e-13	1.34e-12*	-6.15e-13
	(1.46e-13)	(5.32e-13)	(8.77e-13)
GDP Per Capita Growth$_{t-1}$	-0.00934**	-0.145***	-0.00446
	(0.00319)	(0.0422)	(0.00321)
US Δ Expenditures$_{t-1}$	0.00608**		-0.00660**
	(0.00212)		(0.00230)
US Alliance	0.172***		0.202***
	(0.0177)		(0.0178)
US Δ Expenditures $\times$ US Alliance	0.0307***		0.0443***
	(0.00254)		(0.00275)
Hostile MIDs 6 Months Prior	0.0574***		0.110***
	(0.0117)		(0.0126)
Observations	70,850	4,362	66,521
Surveys	59	4	55
Country Fixed Effects	Yes	No	Yes

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ (two-tailed). Defense spending ranges from 1 ("much less") to 5 ("much more").