Eliciting Substance from 'Hot Air': Financial Market Responses to EU Summit Decisions on European Defense

Forthcoming in ***International Organization***

January 15, 2010

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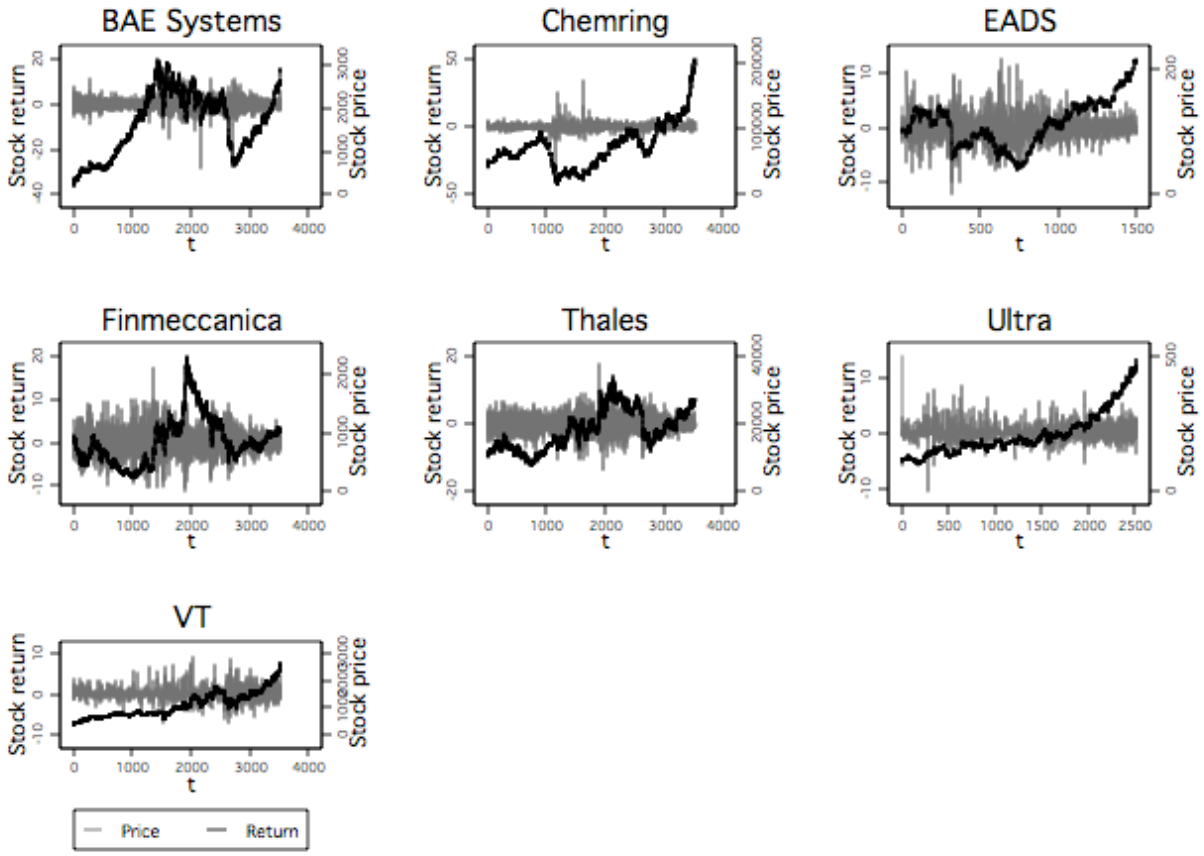
Web Appendix

This appendix contains additional results, which are not reported in detail in the paper due to space constraints.

Stationarity

First, figure 1 plots the price and return series for those defense firms we use in our paper. Already a visual inspection suggests that the price series (black solid line) are likely to be trend-dominated. Unit root tests bear out this impression (these tests are part of the do-file included in the replication archive).

Figure A1: Stock prices and returns of European defense firms



We log-differenced the raw price data to obtain continuously compounded returns (grey solid line). Non-convergence of the sample mean does not seem to be an issue any longer.

Results from Phillips-Perron tests which we report in table A1 soundly reject the null hypotheses of non-stationarity. In addition, we used the panel unit root test developed by Im, Pesaran and Shin (2003).[1] Since this test is only applicable with data in which all time series are of equal length, we reduced the sample accordingly. The resulting t-statistic, which is approximately normally distributed, is 34.30. Therefore, we can reject the null of non-stationarity.

[1] Kyung So Im, M. Hashem Pesaran, and Yongcheol Shin. 2003. Testing for Unit Roots in Heterogeneous Panels. Journal of Econometrics 115: 53-74.

Table A1: Results from non-parametric (Phillips-Perron) unit root tests

Variable	Test statistic
BAE stock return	-52.17***
Chemring stock return	-33.48***
EADS stock return	-50.56***
Finmeccanica stock return	-54.34***
Thales stock return	-60.47***
Ultra stock return	-44.90***
VT stock return	-49.42***
EU bond (Δ)	-40.71***
Euro-Dollar exchange rate (Δ)	56.65***
Interest rate (Δ)	-88.16***
Summit info bef	-7.10***
Summit info after	-6.01***

Test statistic shown. Models include constant. ***, **, and * denote statistical significance at the .01, .05 and .10 level, respectively, applying MacKinnon critical t-values.

Robustness

In order to assess the robustness of our results to using different measures of government's ideal policies, we re-estimated all models using the standard left-right measure from the Comparative Party Manifesto Project (1) and the classification by Schmidt taken from the comparative political data set 1960-2005.[2] This five scale measure (govparty) distinguishes between ideologically different cabinet compositions and ranges from "hegemony of right-wing (and centre) parties" (1) to "hegemony of social-democratic and other left parties" (5). The results are shown in table A2. Clearly, the effect of good summits remains significant and largely unchanged in magnitude.

[2] Schmidt 1992; Armingeon et al. 2008.

Table A2: Robustness: Regressions of abnormal defense firm returns (AR[-1,5]) and abnormal defense sector returns (AAR[-1,5]) during EU summits, 1993-2005

	(1)	(2)	(3)	(4)
Dependent variable	AR	AR	AAR	AAR
Measure of government's ideal policy	on left-right dimension	Schmidt-index	on left-right dimension	Schmidt-index
Def agenda	-.285 (.196)	-.296 (.195)	-.273 (.191)	-.275 (.193)
Def good news	.450** (.198)	.413** (.200)	.411* (.214)	.381* (.218)
Summit info bef	-.005 (.019)	-.003 (.019)	-.005 (.019)	-.003 (.019)
Summit info after	.019 (.013)	.019 (.013)	-.025* (.013)	.025* (.013)
Election	.802* (.409)	.863** (.407)	.852** (.332)	.919*** (.318)
Referendum	-.303 (.233)	-.273 (.234)	-.526** (.241)	-.499** (.232)
Extra summit	.436* (.221)	.382* (.227)	.529* (.310)	.484 (.314)
Defense expenditure (European average)	.009 (.076)	.131 (.095)	.124* (.072)	.151* (.086)
Policy position GE	.004 (.009)	-.051 (.048)	.001 (.010)	-.042 (.069)
Policy position FR	.018 (.009)	.041 (.066)	.025 (.037)	.047 (.059)
Policy position GB	-.012 (.008)	.139** (.059)	-.014 (.009)	.141* (.075)
Constant	-4.347 (3.241)	-6.607 (4.556)	-5.420* (3.109)	-7.565* (4.121)
R^2	.02	.01	.09	.09
Prob	.003	.003	.016	.023
N	1554	1554	222	222

Cell entries are generalized least squares estimates with random effects and Huber/White (heteroskedasticity robust) standard errors. ***, **, and * denote statistical significance at the .01, .05 and .10 level, respectively.