

How the European Union Works: Theory and Empirical Evidence from the CAP

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How the European Union Works: Theory and Empirical Evidence from the CAP

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Background

The Common European Agricultural Policy (CAP) is the most important EU policy covering roughly 40% of the EU budget. Further, the EU is described as an unique political system in the literature of comparative politics (e.g. Hix, 1999). Hence, political economists expect that the political system of the EU influences agricultural policy outcomes, i.e. the CAP.

- ✓ Empirical evidence for extremely protectionist policy
- ✓ Reforms reduced the producer support after 1986

- ? Adequate theoretical explanation for observed protection patterns
- ? Sufficiency of the restaurant table effect to explain observed protection patterns (de Gorter et al., 1998)

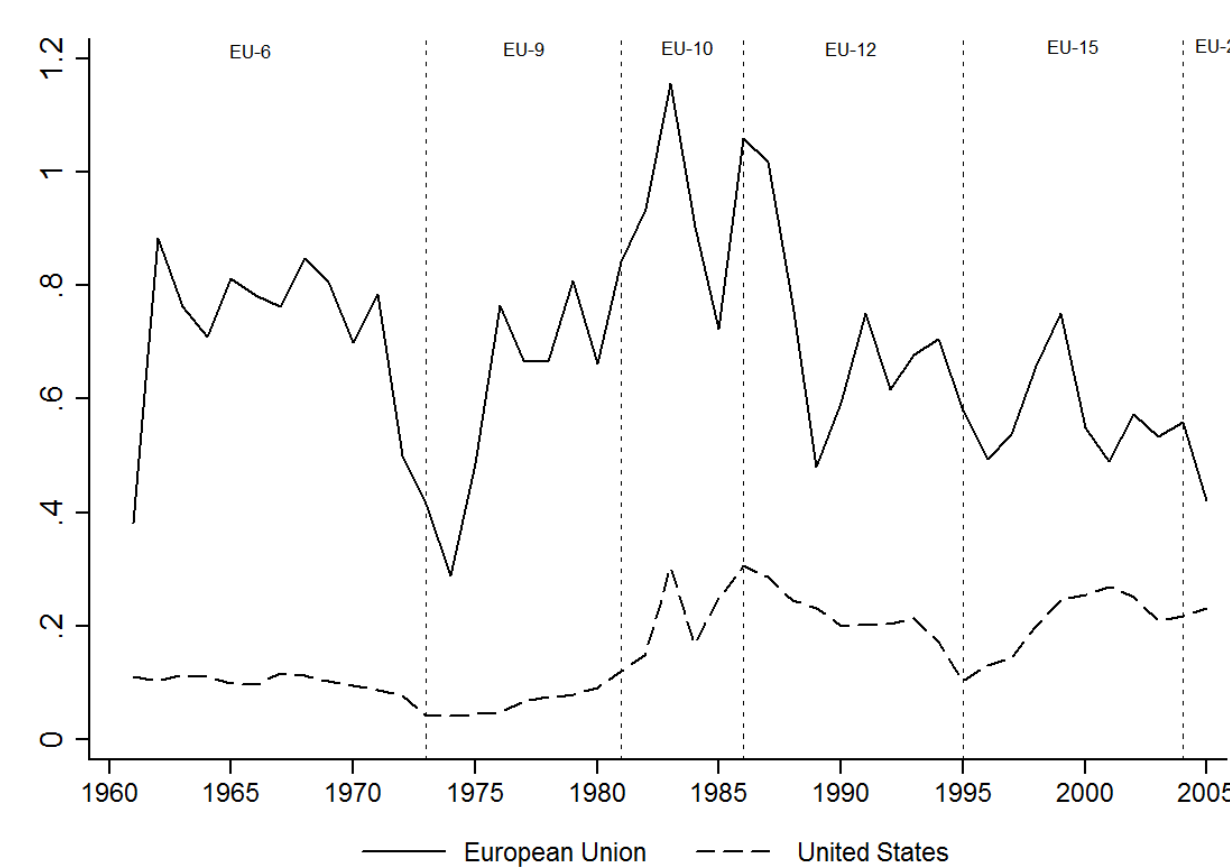


Figure 1: Nominal rates of assistance to the agricultural sector

Research Questions

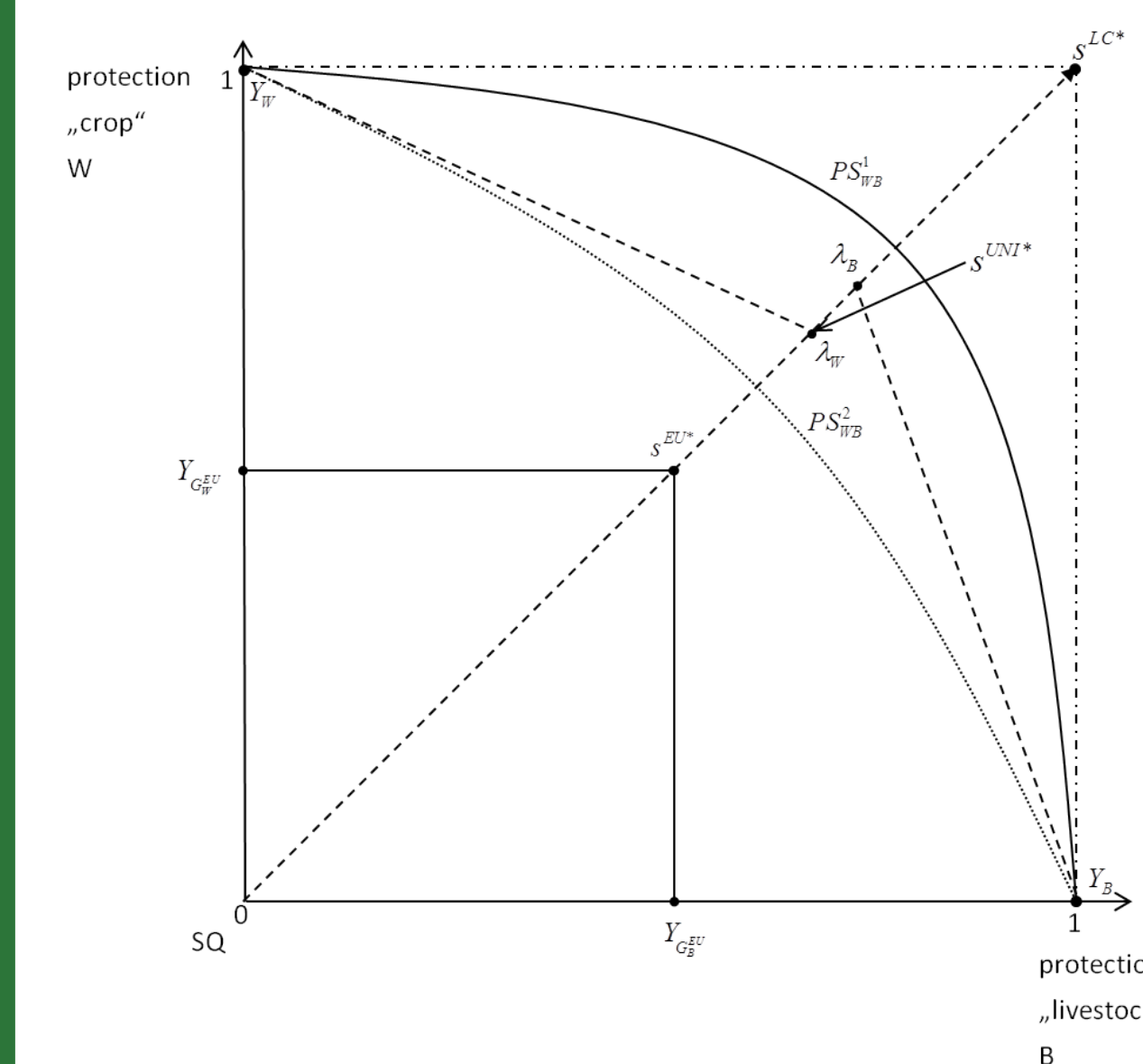
1. Beyond the restaurant table effect, which legislative bargaining procedures determine agricultural policies in the EU? Are these procedures able to explain the observed discrepancy in protection between the EU and the US theoretically?
2. What would be the impact of different constitutional reforms on agricultural protection in the EU?
3. How have the enlargements influenced the choice of legislative norms? And thereby, the protection level?
4. Which econometric model allows for a valid empirical assessment of our theoretical hypotheses?

Research Objectives

- a. Develop a spatial model of political decision-making in the EU that considers endogenous political preferences and political exchange to
 - explain why agricultural protection in EU member countries exceeds systematically their counterfactual, unobserved protection level under national forms of government, i.e. parliamentarism or presidentialism.
 - identify the impact of different cooperative legislative bargaining procedures on agricultural protection in the EU
 - show that agricultural policy outcomes vary systematically across informal legislative bargaining procedures with the number of EU member countries
 - identify institutional drivers of agricultural policy reform in the EU
- b. Support the theoretical hypotheses about the impact of the EU political system on agricultural protection with an econometric analysis that addresses issues arising from the use of time-series cross-section data

Theoretical Model

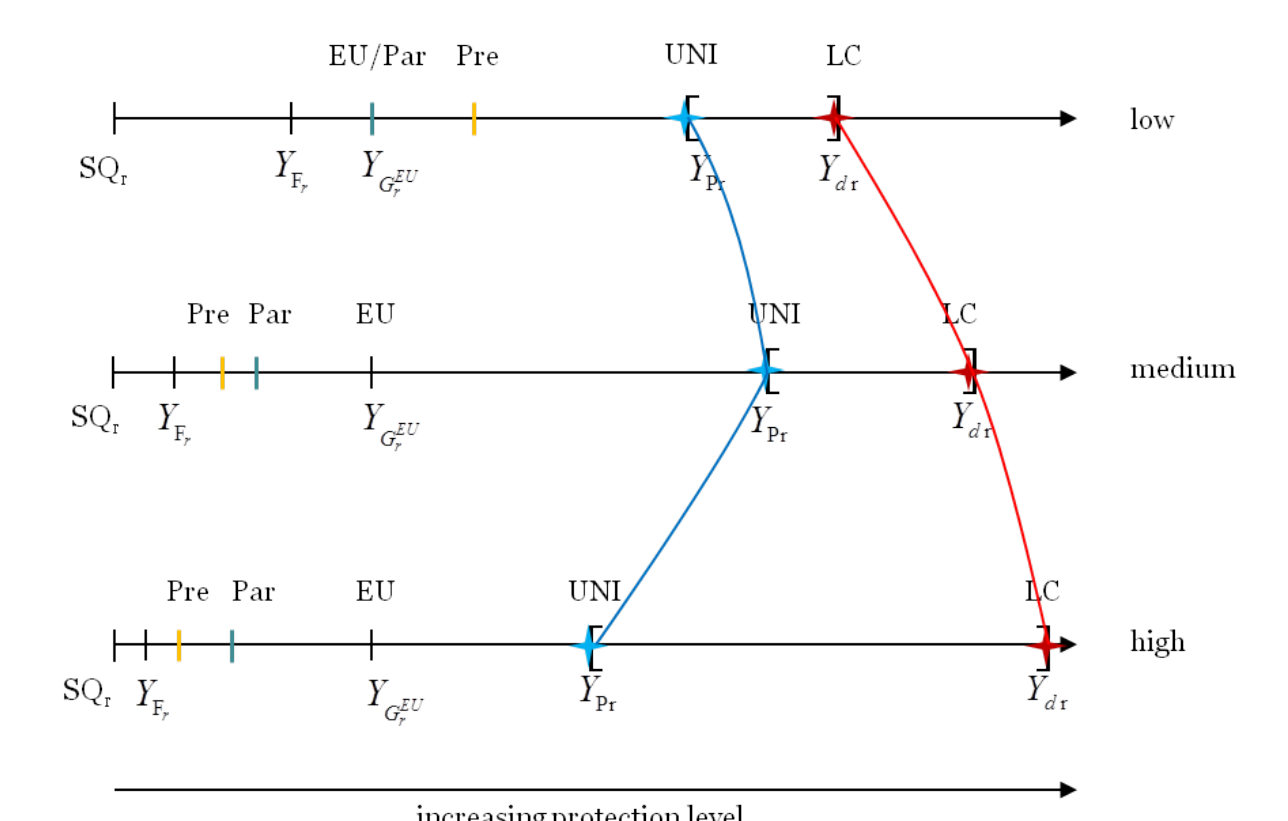
Cooperative legislative bargaining in the EU



The agricultural policy outcome ...

- s^{EU*} results, if legislators follow the consultation procedure
- s^{LC*} results, if Council members grant each other mutual agenda setting power over the policy dimension they prefer most (Luxembourg Compromise)
- s^{UNI*} results from a two step common proposal procedure that corresponds to Weingast's universalism

Comparison of policy outcomes under different governmental regimes



- the colored stars and bars denote agricultural policy outcomes under different legislative bargaining procedures
- the blue line marks the pattern of agricultural protection under Weingast's universalism
- the red line marks the pattern of agricultural protection under the Luxembourg Compromise

Data and Estimation Strategy

Data: Anderson and Valenzuela (2008), databases of the World Bank and the FAO, a country-time interaction effect (EU) denoting EU membership and a time-member state interaction effect indicating institutional reform after 1986 (LC).

Sample: 58 democracies between 1961-2005 (TSCS data)

Strategy: i) To ensure a valid empirical analysis of joining the EU, we employ a dynamic two-way fixed effect model (DFE):

$$NRA_{i,t} = \alpha + \rho NRA_{i,t-1} + \beta x_{i,t} + \varphi_t + \xi_i + \epsilon_{i,t},$$

with the subscripts i denoting countries and t years.

ii) We use a pure cross-section approach to analyze the impact of EU-institutions on the level of agricultural protection:

$$\overline{NRA}_i = \alpha + \beta \bar{x}_i + \nu EU_i + \lambda Protec_i^+ + \epsilon_i, \quad (1)$$

where \overline{NRA}_i denotes the mean of agricultural protection over a specific period, \bar{x}_i denotes the set of the same controls as above averaged over a specific period and ϵ_i is an error term. The dummy $Protec_i^+$ cares for unobserved country heterogeneity which is detected via a cross-validation experiment with pooled dynamic OLS regressions (Stone, 1974).

Results

	DFE	EU-6	EU-9	EU-12	EU-15	EU-25
α	-.466** (.237)	-.156 (.242)	.229 (.178)	.040 (.130)	.024 (.109)	.047 (.107)
NRA_{t-1}	.630*** (.040)					
gdppc1n	.125** (.058)	.267** (.131)	.015 (.069)	.159 (.100)	.044 (.077)	.047 (.080)
compad	-.048 (.046)	.890* (.530)	-.014 (.299)	-.063 (.188)	-.206 (.130)	-.105 (.120)
factorend	.016 (.093)	-.558** (.247)	-.423** (.196)	-.417** (.186)	-.436** (.184)	-.324** (.160)
budget	.001 (.040)	-.756 (.977)	.640*** (.239)	.024 (.180)	-.052 (.126)	-.069 (.098)
tax_agri	-.001*** (.0005)	-.007** (.003)	-.008*** (.002)	-.007** (.003)	-.004 (.002)	-.005** (.003)
empl	-.121** (.058)	.186 (.210)	-.097 (.101)	-.061 (.106)	-.183* (.096)	-.139 (.090)
EU	.137*** (.032)	.173 (.185)	.324** (.144)	.228 (.145)	.085 (.103)	.020 (.093)
LC	-.090** (.037)					
urround	-.086* (.045)					
Protec ⁺			2.485*** (.244)	2.580*** (.241)	1.688*** (.174)	1.473*** (.186)
# obs.	1487	21	30	49	57	57
# countries	58	21	30	49	57	57
R^2	.604	.716	.955	.867	.843	.817

Notes: Cluster-robust standard errors are given in parantheses for model 1, robust standard errors are given in parantheses for model 2-6. * indicates significance at the 10 percent level, ** indicates significance at the 5 percent level, and *** indicates significance at the 1 percent level.

Conclusion

- a. Agricultural policy outcomes depend systematically on legislative bargaining procedures
 - b. They vary for each bargaining procedure with the number of EU member countries
 - c. EU enlargements drive legislators' incentives to adopt specific cooperative legislative bargaining procedures
- ⇒ Our theory does not only predict higher protection levels for countries, if they join the EU, but also the specific dynamic development of agricultural protection.
- ⇒ An empirical analysis using time-series cross-section data and a dynamic two way fixed effects model supports our hypotheses.

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