Don't cry for me Britannia: The resilience of the European Union to Brexit

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Online appendix

This supplementary analysis contains, first, the results of the application of a procedural model to the DEU data. This complements the analysis of the data with a bargaining model, which is presented in the main text. In the second section, we present goodness-of-fit tests of the Exponential Random Graph Model (ERGM) presented in the main text.

A procedural model

In previous comparative assessments of the predictive accuracy of procedural models versus the bargaining model, we apply in the main text, the bargaining model performed significantly better in terms of predictive accuracy (Thomson et al., 2006). We are not, however, attempting to make accurate forecasts of decision outcomes in this study. Instead we are exploring the extent to which the United Kingdom (UK) was pivotal to the decision outcomes that were taken in the past according to the logic of the procedural model.

The concept of the pivotal position is central to all procedural models. For legislative proposals for which unanimous support in the Council is required, the pivotal position is the position of the state or states that are closest to the status quo, or reference point, as it is called in the DEU project. For legislative proposals to which qualified majority voting (QMV) is applied, the pivotal position refers to the location of the member state or states that turn a losing minority into a blocking minority when beginning to count states closest to the reference point and then moving further from that point until a blocking minority is reached. When QMV applies, the decision outcome predicted by the procedural model is located in the set of policies

that the actors on the pivotal position prefer to the reference point (Crombez, 1996). It is the position in that set that is preferred by the agenda setter (the Commission).

In the codecision procedure – which was adjusted and renamed the ordinary legislative procedure by the Lisbon Treaty – the Commission introduces a proposal that must be approved by both the Council and European Parliament (EP). In the version of the co-decision procedure defined in the Amsterdam Treaty, which applies to all of the co-decision cases examined here, the Council and EP formally have equal power as co-legislators. We take what is arguably the most literal interpretation of the treaty rules, namely that it is a bargaining game between the pivotal member state in the Council and the EP (Tsebelis and Garrett, 2000: 24-5). This does not, however, mean that the outcome is necessarily half way between the position of the Council pivot and the EP. The bargaining space ends when either the Council pivot or EP is indifferent between the possible decision outcome and the reference point.

We compared the forecasts of the procedural model applied to the DEU data with the UK included and without the UK. These comparisons indicate that the departure of the UK would generally not lead to a change in decision outcomes. The example in Figure 1 in the main text illustrates why this is the case. Since we are interested in the effects of Brexit in the future, we apply the Lisbon rules. Decisions taken by QMV need the approval of 55%of member states, 15 of 27 EU members, that make up 65% of the combined total of EU states' populations. To prevent a small number of large states from blocking a decision, the population criterion only applies if at least four member states are against adoption. If only three or fewer states oppose the adoption of a bill, the population criterion does not apply, even if these states have more than 35% of the EU's population. The 12 member states that supported the status quo by opposing the introduction of auctioning have less than 21% of the EU's population. In number, they are obviously also fewer than the required blocking minority of 13 states under the Lisbon rules. With the addition of the nine states located on position 20, however, this

group becomes a large blocking minority under the Lisbon rules. The actors located on position 20 are therefore pivotal. The bargaining game between these pivotal actors and the EP results in an outcome of 40 on the policy scale. This is the point at which this group is indifferent between the compromise proposed by the EP and the status quo. The location of the pivotal actors and the outcome is the same under the Lisbon rules with or without the UK as a member.

Table A.1 summarises the results of the application of the procedural model to all 111 issues to which it could be applied. The model could not be applied to all issues since some did not contain the so-called reference point, or disagreement outcome. The headline finding is that on the vast majority of cases, the exit of the UK would make no difference to decision outcomes according to the logic of the procedural model. On only 6% of the issues to which we could apply the procedural model (5 out of 111 issues) did the procedural model generate a different prediction with and without the UK as a member. Usually, the exclusion of the UK made no difference to the location of the pivotal position. In eight cases, the exclusion of the UK did change the location of the Council pivot, but had no effect on the predicted outcome. This was usually because the Commission (or the EP in the case of codecision) preferred the reference point. We also conducted an analysis (not shown in the table) using the old Nice rules. Again, in the vast majority of issues the predictions of the procedural model with and without the UK are identical.

Table A.1. The impact of Brexit on decision-making according to the procedural model

	Process		Outcome	
Period and procedure	Same pivot	Different pivot	Same outcome	Different outcome
QMV	95 (92%)	8 (8%)	98 (95%)	5 (5%)
Unan.	8 (100%)	0 (0%)	8 (100%)	0 (0%)
All	103 (93%)	8 (7%)	106 (95%)	5 (6%)

Note: Frequencies and percentages of issues. Based on Lisbon rules applied to the post-2004 issues in the DEU II dataset.

ERGM analysis and goodness-of-fit assessment

The goal of our ERGM analysis is to identify a model that captures how EU member states cooperate with each other, particularly given the coming disruption of Brexit. One way to assess the goodness-of-fit of our estimated models is to simulate new networks from the estimated coefficients and compare these simulated networks with our observed networks. We simulated 100 networks from model 6 in Table 1, and the comparisons with the observed network are presented in Figure A.1.

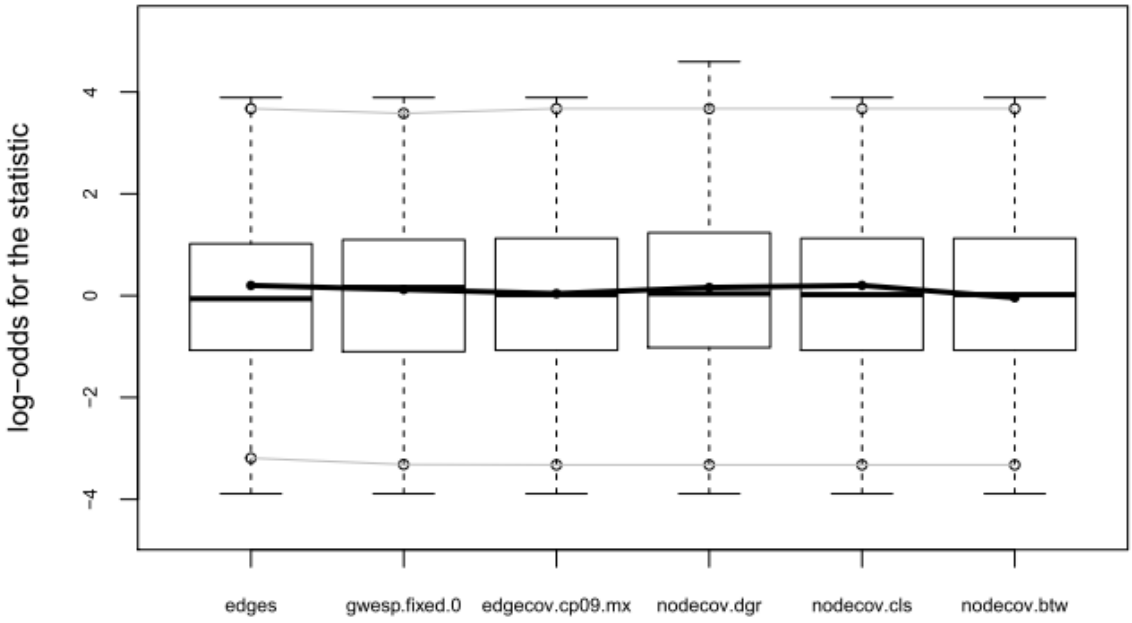

Figure A.1: Goodness-of-Fit of model 6 in Table 1

Overall, the simulated networks are indistinguishable from the observed network in terms of key statistics that are included in model 6. With respect to edges, geometrically weighted edge-wise shared partner distribution (GWESP), policy affinity, degree loss, closeness loss, and betweenness gain, the distributions of simulated networks fit closely to the

statistics derived from the observed network. This indicates that model 6 fits the data very well and captures the observed variation in ties that exist in the 2018 data.

References

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