

**Technical details:** This part of the appendix describes the calculation of the different bargaining models. The Nash Bargaining solution is the product of the actors' differences between their ideal and their disagreement points. We assume that the reference point is the disagreement point of all actors. To use a spatial setup for the analysis of bargaining situations is, however, dangerous, as some actors might expect negative utilities in those situations where actors occupy positions to the left and right of the reference point.

In all models presented in this article, we assume that the EU actors value efficient decision making highly. In other words, we use the standard assumption of bargaining models that all actors benefit from reaching a collective agreement. We therefore operationalize each player's disagreement value as a function of what she can expect to achieve without co-operation. The disagreement value reflects each player's capability to avoid the worst-case scenario in case no agreement is reached; the capability in itself is assumed to be a function of each player's relative bargaining strength. Accordingly, the disagreement value is defined as

$$D_i = (1 - c_i) * g_i, \text{ where } g_i = ip_i \text{ if } ip_i \geq 50, \text{ else } g_i = 100 - ip_i \quad (\text{A-1})$$

with  $c_i = 1/\text{number of actors}$ ,  $g_i$  standing for the worst case scenario of this actor and  $ip_i$  being his ideal position on that particular issue (see Schneider et al. 2007) <sup>1</sup>. Our operationalization of  $c$  implies that all actors hold the same chance of being lucky, i.e. they receive a good or bad unilateral result in case no agreement is reached.

All models in of this paper were calculated in GAUSS (Version 3.2). We used the Constraint Optimisation (CO) module which offers not only the various technical

parameters to be set by the user (iteration, algorithm, step length etc.) and is able to solve a broad range of non-linear optimisation problems under linear or non-linear constraints.

All models calculated for this paper used the Newton algorithm, although other algorithms have been tested and did not deliver significantly different results. As a starting vector for the optimisation routine, we used the mean for all of the models. The results that we present in the main text do not depend on the starting value.

## Illustration

We illustrate in this part of the web-appendix how well the different model predicted outcomes within one decision making case. The copyright directive (COM (97)628), a very contentious proposal which took three years to negotiate, serves as an example. The Commission introduced this proposal in order to tackle piracy over the internet, particularly the downloading of music for no fee through the help of providers like Napster. The harmonisation of the national legislation in this domain rendered it possible for the EU and its member states to ratify treaties of the World Intellectual Property Organisation (WIPO) which strengthen international standards of copyright protection.

The proposal activated the cleavage between consumer and producer interests which plays an important role in decision making on the internal market (Zimmer, Schneider and Dobbins 2005). Artists are obviously interested in maximising revenues from the sale of their works; they equally campaign for legal provisions that enable them to control the usage of their products. Consumers, conversely, would like to minimize the fees that they have to pay in order to access to protected works.<sup>2</sup> The Commission opted for a relatively producer-friendly version and found therein the support of varying coalitions of member states. In the interviews that the third author of this article conducted in Brussels, one described the discussions as “one of the most intensely lobbied proposals in recent years”.<sup>3</sup> The committee of permanent representatives – sometimes better-known under its acronym COREPER – debated it around ten times.

In the European Parliament, more than 200 amendments were introduced in the Legal Committee in order to change the proposed legislation. Appeals by movie actress Sophia Loren, Italian singer Eros Ramazotti and other artists had preceded the parliamentary debates. The Council unanimously adopted the directive on April 9, 2001

after three years of bickering. The final compromise allows consumers to download material for private use, but leaves it to individual countries to decide about "fair" compensatory payments for copies for private use. Although the harmonisation at the European level was not complete, Commissioner Bolkestein, responsible for internal market issues, was delighted about this crucial agreement.<sup>4</sup> Because the European Parliament only adopted few amendments proposed by its Legal Committee, the Council and the Parliament could avoid the conciliation process of the codecision procedure.<sup>5</sup>

Figure 1 lists the three issues that were particularly contentious during the parliamentary debates. We depict the positions of the member states, the Commission, the Parliament, the reference point and the final outcome. The predictions of the different models appear in bold. Note that the reference point (the outcome that would have been adopted in case of disagreement) is always at 0. All actors wanted to move beyond this position on the first issue, while some actors favoured it in the other two cases.

Issue 1 concerned the protection of the rights of both groups, consumers and right holders, with respect to the transfer of protected work over the Internet. The reference point refers to the option that right holders have full options to protect their work. Most member states agreed with the Commission on the extreme position 100 that there should be a balance between the rights of consumers and the right holders. Yet, another camp on position 50 advanced a more producer-friendly position. The compromise that was finally chosen and that coincides with the position of the European Parliament gave the artists and their agents the right to introduce measures that prevent "extensive" copying for private use<sup>6</sup>.

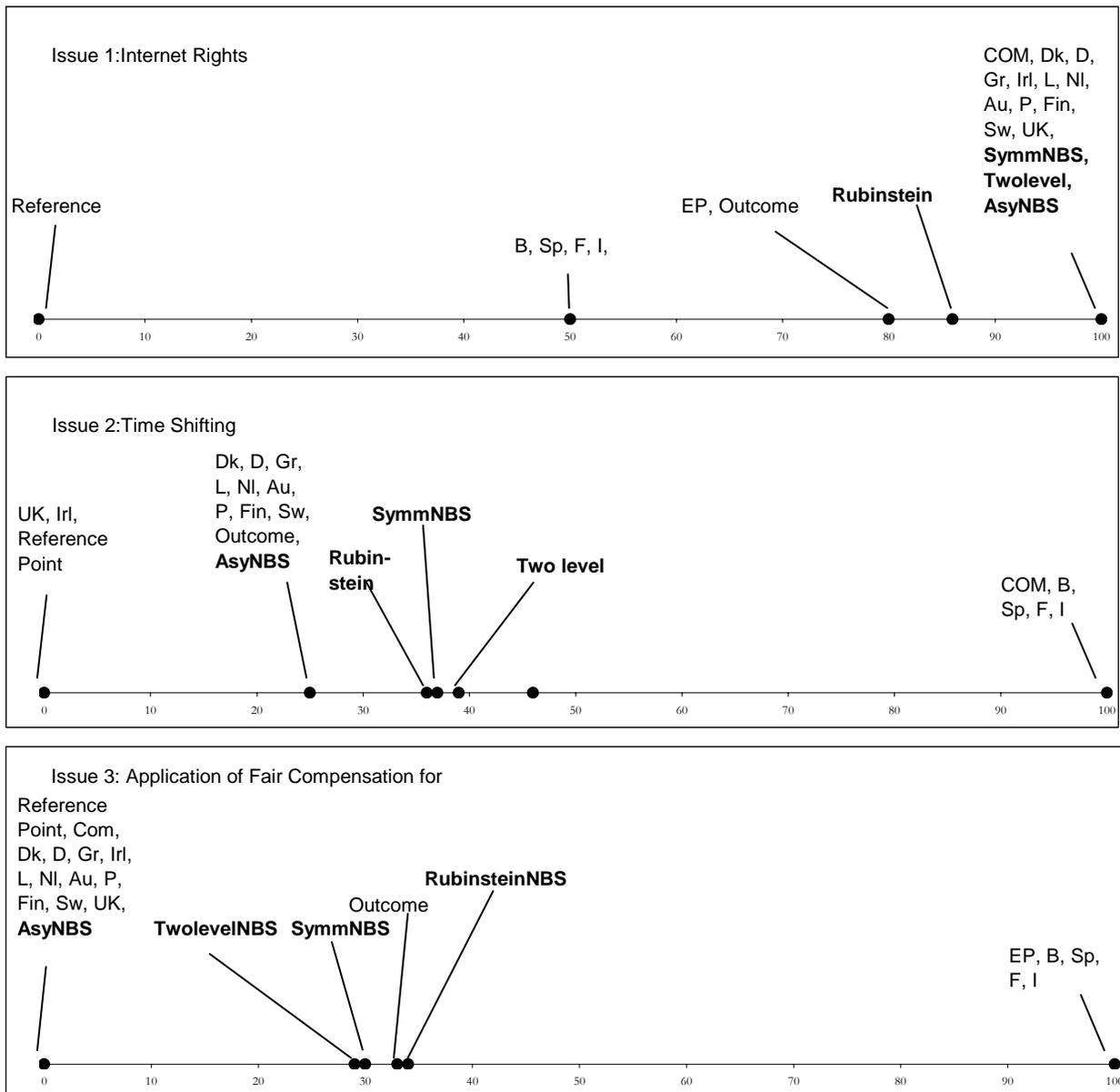
The second issue mainly related to the videoing of television programmes and the question of "time shifting". The member states, the Commission and Parliament disagreed whether or not consumers should be allowed to copy protected works and watch or listen

to them later. The position of the United Kingdom and Ireland at position 0 was that the directive should allow them to keep the practice of using copied protected works at a later time.

However, the other camp headed by the French government at position 100 demanded that right-holders should be substantially compensated for this practice. The outcome is closer to the consumer-friendly British position than to the latter preference. The final decision was that right-holders should be offered a "fair level" of compensation, an option that could also be purely virtual in some cases as rather symbolic null compensations were also permitted.<sup>7</sup>

The third contentious question was how this "fair compensation" principle should be implemented in light of approximately 15 exceptions to the directive. These exemptions referred for instance to copying for educational purposes or for use by handicapped persons. The one extreme position 0 was that the "fair compensation" principle should not apply to any of the exceptions, whereas the other producer-friendly position 100 would have allowed to make it applicable for up to approximately 15 exceptions. The final decision was that member states would have to introduce the compensatory scheme for a couple of exceptions and to new exceptions created by national law. The negotiation result on this issue is again a compromise between the differing national regulations in this policy field<sup>8</sup>.

**Figure 1:** Preferences, model predictions on the three conflictive issues within the copyright directive



As Figure 1 shows, the predictive accuracy of the competing four models differs across the three issues of the copyright directive. The multilateral version of the Stähler-Rubinstein model is the most precise model on the first and third issue, but the asymmetric version of the NBS offers a precise point prediction on the second issue. Note that the predictions do not differ greatly within this proposal. This is particularly the case for the third issue where only two options were taken in the beginning and where a compromise closer to the

reference point than to the other extreme position was finally chosen. Yet, the asymmetric NBS, which predicts one of the extreme positions, errs considerably on this issue.

Table A1: Calculation of Domestic Constraints for the Two-Level NBS<sup>ix</sup>

Member state (government period for which values were calculated in brackets)	Left-Right Position of Government, Benoit and Laver (2005)	Left-Right Position of EU-Committee, Benoit and Laver (2005)	EU-Authority Position of Government, Benoit and Laver (2005)	EU-Authority Position of EU-Committee, Benoit and Laver (2005)	Distance Executive-Committee on the Left-Right-dimension, Benoit and Laver (2005)	Distance Executive-Committee on the EU-Authority Dimension, Benoit and Laver (2005)	Power of EU-Committee on a scale from 0 to 6	Final value, Left-Right Value * Power of EU-Committee, Absolute Value	Final value, EU-Authority * Power of EU-Committee, Absolute Value
<b>Austria (2000-2003)</b>	15.84	12.57	12.85	11.00	3.27	1.85	6	19.64	11.13
<b>Belgium (1999-2002)</b>	8.76	8.24	7.91	6.87	0.52	1.04	2	1.04	2.09
<b>Denmark (2001 – 2005)</b>	15.12	9.70	6.45	8.23	5.42	-1.78	6	32.52	10.656
<b>Finland (1999-2003)</b>	10.77	10.87	8.04	9.12	-0.1	-1.08	5	0.49	5.39
<b>France<sup>x</sup> (1997-2000)</b>	7.89	10.84	6.14	9.20	-2.94	-3.06	2	5.89	6.12
<b>Germany (1998-2002)</b>	8.11	10.24	7.82	9.21	-2.13	-1.39	5	10.64	6.94
<b>Greece (2000-2004)</b>	10.44	12.33	5.88	6.90	-1.89	-1.02	2	3.78	2.04
<b>Ireland<sup>xi</sup> (1997-2002)</b>	13.49	12.71	10.39	9.93	0.78	0.46	4	3.12	1.83
<b>Italy (2001-2005)</b>	16.2	12.1	14.87	10.00	4.10	4.87	2	8.21	9.75
<b>Luxembourg (1999-2004)</b>	13.36	7.64	8	4.57	5.72	3.43	4	22.87	13.71
<b>Netherlands (1998 – 2002)</b>	12.04	11.17	9.45	8.77	0.87	0.68	4	3.48	2.71

<b>Member state (government period for which values were calculated in brackets)</b>	<b>Left-Right Position of Government, Benoit and Laver (2005)</b>	<b>Left-Right Position of EU-Committee, Benoit and Laver (2005)</b>	<b>EU-Authority Position of Government, Benoit and Laver (2005)</b>	<b>EU-Authority Position of EU-Committee, Benoit and Laver (2005)</b>	<b>Distance Executive-Committee on the Left-Right-dimension, Benoit and Laver (2005)</b>	<b>Distance Executive-Committee on the EU-Authority Dimension, Benoit and Laver (2005)</b>	<b>Power of EU-Committee on a scale from 0 to 6</b>	<b>Final value, Left-Right Value * Power of EU-Committee, Absolute Value</b>	<b>Final value, EU-Authority * Power of EU-Committee, Absolute Value</b>
<b>Portugal (1999-2002)</b>	8.67	9.04	6.7	7.81	-0.37	-1.11	2	0.75	2.23
<b>Spain (2000-2004)</b>	16.99	12.21	12.61	9.94	4.78	2.67	2	9.56	5.33
<b>Sweden (1998-2002)</b>	8.3	10.43	8.68	9.96	-2.13	-1.286	4	8.52	5.13
<b>United Kingdom (1997-2002)</b>	10.95	11.94	10.02	11.47	-0.99	-1.46	2	1.99	2.91

## References:

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- Schneider, G.; Finke, D.; Baltz, K. 2007. With a little help from the state: interest intermediation in the domestic pre-negotiations of EU legislations', *Journal of European Public Policy* 14(3): 444–59.
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## Notes

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- <sup>1</sup> Our logic of defining the disagreement point is similar to the minimal utility point solution concept of Felsenthal and Diskin (1982).
- <sup>2</sup> Agence Europe, Bulletin Quotidien, Nr. 7898, 08/02/2001
- <sup>3</sup> One MEP claimed that 300 lobbyists followed the whole debate closely (Agence Europe, Bulletin Quotidien, Nr. 7903, 15/02/2001).
- <sup>4</sup> Agence Europe, Bulletin Quotidien, Nr. 7734, 09/06/2000
- <sup>5</sup> Agence Europe, Bulletin Quotidien, Nr. 7903, 15/02/2001
- <sup>6</sup> All actors attached a salience of 80 to this issue except for the EP(70).
- <sup>7</sup> The following level of salience has been attached to this second issue : Swed = 50; Bel, Ire = 55 ; Com, DK, NL = 70; UK = 90; All other actors: 60.
- <sup>8</sup> The delegation of Sweden showed the highest level of salience on that third issue, namely 80, whereas France, Ireland, UK, and the EP had a saliency level of 70, the Commission of 60, and the remaining states a level of 50.

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<sup>ix</sup> For missing values of parties we imputed the values by using the "impute" procedure of Stata.

<sup>x</sup> In the case of France we used the question whether parties oppose (=1) or favour (=20) an expanded and stronger EU, because values for the EU-authority question were not available.

<sup>xi</sup> In the case of Ireland we used the question whether parties oppose (=1) or favour (=2) an expanded and stronger EU, because values for the EU-authority question were not available.