



# Web Appendix

for:

## EUROPEAN PARLIAMENT: Should it have more power?

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**Published in:**

*Economic Policy*, 35, Fall 2002

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**PART I: RESULTS USING THE WEIGHTED COHESIONS INDEX**

In order to mitigate the effect of unanimity or high majority votes on our average cohesion index, we calculated a ‘weighted’ cohesion index. This is just our normal cohesion index (see the text) divided by twice the observed majority in the European Parliament. Thus, a vote with a narrow majority of 50% gets a weight of one, a unanimity vote gets a weight of ½ and weights decrease as the size of the majority increases. When computing the average of those weighted cohesion indices, we divide them by the average index a perfectly cohesive party would obtain so that a perfectly cohesive group would still get an average of 100%.

**TABLE A1: Mean weighted cohesion indices, 3<sup>rd</sup> and 4<sup>th</sup> parliaments**

| Parliament:     | PES           | EPP           | ELDR          | GR            | GAUL          | LEFT          | RAD           | ANTI-EU       | NA            |
|-----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| 3 <sup>rd</sup> | 0.85<br>(.26) | 0.83<br>(.28) | 0.75<br>(.30) | 0.81<br>(.29) | 0.79<br>(.33) | 0.79<br>(.38) | 0.82<br>(.40) | 0.64<br>(.44) | 0.74<br>(.40) |
| 4 <sup>th</sup> | 0.86<br>(.27) | 0.85<br>(.26) | 0.78<br>(.27) | 0.89<br>(.31) | 0.71<br>(.36) | 0.74<br>(.37) | 0.87<br>(.32) | 0.54<br>(.38) | 0.51<br>(.41) |

Notes: Figures in parentheses are standard deviations, not standard errors (see text). PES: Party of European Socialists ; EPP: European People’s Party - Christian Democrats & Conservatives ; ELDR: European Liberal, Democrat and Reform Party ; GR:Greens & allies; GAUL: Gaullists & allies; LEFT: Radical Left and Italian Communists & allies ; RAD: Radicals, regionalists & allies; ANTI-EU: Anti-Europeans; NA: Non-attached and Independents

| Parliament:     | F             | UK            | I             | IRL           | FIN           | S             | D             | GR            | NL            | E             | B             | P             | A             | DK            | L             |
|-----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| 3 <sup>rd</sup> | 0.45<br>(.28) | 0.63<br>(.31) | 0.57<br>(.29) | 0.63<br>(.34) | -             | -             | 0.56<br>(.28) | 0.68<br>(.31) | 0.60<br>(.28) | 0.68<br>(.23) | 0.51<br>(.28) | 0.63<br>(.29) | -             | 0.62<br>(.37) | 0.76<br>(.36) |
| 4 <sup>th</sup> | 0.41<br>(.30) | 0.72<br>(.20) | 0.53<br>(.27) | 0.53<br>(.32) | 0.53<br>(.30) | 0.47<br>(.32) | 0.56<br>(.30) | 0.57<br>(.30) | 0.57<br>(.27) | 0.57<br>(.30) | 0.47<br>(.26) | 0.53<br>(.29) | 0.54<br>(.30) | 0.50<br>(.38) | 0.62<br>(.35) |

F: France; UK: United Kingdom; I: Italy; IRL: Ireland; FIN: Finland; S: Sweden; D: Germany; GR: Greece; NL: Netherlands; E: Spain; B: Belgium; P: Portugal; A: Austria; DK: Denmark; L: Luxembourg.

The results are in Table A1. Two points are worth noting. First of all, the difference between cohesion of parties and of countries is now more pronounced compared to the un-weighted index (see text). The cohesion of countries is clearly lower whereas the cohesion of parties remains basically unchanged. Moreover, in contrast to Table 2, the cohesion of parties tends to be stronger in the fourth parliament as compared with the third whereas for countries, the opposite can be observed. The lower cohesion for countries shows that the latter picks up the effect of unanimity or near unanimity votes which has declined in the Fourth Parliament. This reinforces our basic result that voting is along party lines and not country lines.

**PART II: COHESION INDICES FOR DIVIDED VOTES**

Another way of addressing possible biases introduced by the frequency of near-unanimous votes is to look at cohesion for divided votes in the EP, i.e. votes where the effective majority was not close to 100%. The main text summarised the results; here we present the full results in Tables A2 and A3.

**Table A2. The Cohesion Index for Votes with lower majorities in the Third Parliament**

|         | Majority less than or equal than |      |       |      |       |      |       |      |       |      |       |      |       |      |       |      |
|---------|----------------------------------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
|         | 100%                             |      | 95%   |      | 90%   |      | 85%   |      | 80%   |      | 75%   |      | 70%   |      | 65%   |      |
|         | Mean                             | S.D. | Mean  | S.D. | Mean  | S.D. | Mean  | S.D. | Mean  | S.D. | Mean  | S.D. | Mean  | S.D. | Mean  | S.D. |
| PES     | 0.867                            | 0.21 | 0.829 | 0.23 | 0.801 | 0.25 | 0.777 | 0.26 | 0.760 | 0.28 | 0.768 | 0.28 | 0.782 | 0.27 | 0.791 | 0.26 |
| EPP     | 0.845                            | 0.22 | 0.805 | 0.24 | 0.776 | 0.26 | 0.758 | 0.27 | 0.757 | 0.26 | 0.768 | 0.26 | 0.786 | 0.24 | 0.806 | 0.23 |
| ELDR    | 0.770                            | 0.29 | 0.715 | 0.30 | 0.681 | 0.31 | 0.657 | 0.31 | 0.651 | 0.30 | 0.644 | 0.30 | 0.652 | 0.30 | 0.657 | 0.29 |
| GR      | 0.817                            | 0.24 | 0.789 | 0.24 | 0.793 | 0.23 | 0.803 | 0.23 | 0.802 | 0.23 | 0.806 | 0.23 | 0.810 | 0.23 | 0.798 | 0.23 |
| GAUL    | 0.798                            | 0.29 | 0.759 | 0.31 | 0.747 | 0.31 | 0.740 | 0.30 | 0.738 | 0.30 | 0.741 | 0.29 | 0.743 | 0.29 | 0.748 | 0.29 |
| LEFT    | 0.801                            | 0.33 | 0.756 | 0.35 | 0.746 | 0.35 | 0.759 | 0.35 | 0.767 | 0.35 | 0.788 | 0.33 | 0.787 | 0.33 | 0.780 | 0.33 |
| RAD     | 0.830                            | 0.35 | 0.790 | 0.37 | 0.782 | 0.38 | 0.781 | 0.38 | 0.791 | 0.37 | 0.797 | 0.37 | 0.806 | 0.37 | 0.788 | 0.38 |
| ANTI-EU | 0.640                            | 0.40 | 0.620 | 0.41 | 0.617 | 0.41 | 0.612 | 0.41 | 0.623 | 0.41 | 0.630 | 0.41 | 0.631 | 0.42 | 0.630 | 0.42 |
| NA      | 0.739                            | 0.36 | 0.724 | 0.36 | 0.716 | 0.37 | 0.715 | 0.37 | 0.711 | 0.37 | 0.711 | 0.37 | 0.708 | 0.37 | 0.704 | 0.37 |
| F       | 0.485                            | 0.33 | 0.370 | 0.28 | 0.322 | 0.26 | 0.297 | 0.25 | 0.289 | 0.25 | 0.282 | 0.25 | 0.272 | 0.24 | 0.256 | 0.24 |
| UK      | 0.696                            | 0.35 | 0.608 | 0.36 | 0.532 | 0.36 | 0.461 | 0.34 | 0.405 | 0.32 | 0.374 | 0.30 | 0.357 | 0.30 | 0.338 | 0.29 |
| I       | 0.626                            | 0.35 | 0.522 | 0.34 | 0.444 | 0.32 | 0.398 | 0.31 | 0.362 | 0.29 | 0.332 | 0.28 | 0.310 | 0.26 | 0.305 | 0.26 |
| IRE     | 0.659                            | 0.35 | 0.573 | 0.34 | 0.530 | 0.34 | 0.509 | 0.33 | 0.504 | 0.33 | 0.503 | 0.33 | 0.506 | 0.33 | 0.528 | 0.33 |
| D       | 0.620                            | 0.35 | 0.521 | 0.34 | 0.439 | 0.33 | 0.357 | 0.31 | 0.289 | 0.28 | 0.230 | 0.24 | 0.195 | 0.21 | 0.171 | 0.19 |
| GR      | 0.734                            | 0.35 | 0.656 | 0.36 | 0.588 | 0.37 | 0.519 | 0.37 | 0.456 | 0.36 | 0.410 | 0.34 | 0.383 | 0.33 | 0.368 | 0.33 |
| NL      | 0.660                            | 0.34 | 0.565 | 0.33 | 0.487 | 0.32 | 0.422 | 0.31 | 0.370 | 0.30 | 0.319 | 0.28 | 0.285 | 0.26 | 0.267 | 0.24 |
| E       | 0.733                            | 0.29 | 0.654 | 0.30 | 0.589 | 0.29 | 0.521 | 0.28 | 0.468 | 0.27 | 0.418 | 0.25 | 0.390 | 0.24 | 0.357 | 0.22 |
| B       | 0.565                            | 0.34 | 0.459 | 0.31 | 0.389 | 0.30 | 0.337 | 0.29 | 0.303 | 0.28 | 0.270 | 0.27 | 0.248 | 0.26 | 0.228 | 0.25 |
| P       | 0.682                            | 0.35 | 0.591 | 0.35 | 0.523 | 0.34 | 0.471 | 0.33 | 0.433 | 0.32 | 0.409 | 0.31 | 0.401 | 0.30 | 0.374 | 0.30 |
| DK      | 0.650                            | 0.38 | 0.571 | 0.38 | 0.528 | 0.38 | 0.514 | 0.38 | 0.510 | 0.38 | 0.498 | 0.38 | 0.484 | 0.38 | 0.468 | 0.38 |
| L       | 0.790                            | 0.35 | 0.736 | 0.38 | 0.687 | 0.39 | 0.637 | 0.40 | 0.596 | 0.41 | 0.566 | 0.40 | 0.543 | 0.40 | 0.517 | 0.40 |

Notes: "S.D." indicates standard deviation, which is much larger than the standard error (see text). Abbreviations given in Table A1.

**Table A3. The Cohesion Index for Votes with lower majorities in the Fourth Parliament.**

|         | Majority less than or equal than |      |       |      |       |      |       |      |       |      |       |      |       |      |       |      |
|---------|----------------------------------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
|         | 100%                             |      | 95%   |      | 90%   |      | 85%   |      | 80%   |      | 75%   |      | 70%   |      | 65%   |      |
|         | Mean                             | S.D. | Mean  | S.D. | Mean  | S.D. | Mean  | S.D. | Mean  | S.D. | Mean  | S.D. | Mean  | S.D. | Mean  | S.D. |
| PES     | 0.867                            | 0.20 | 0.847 | 0.21 | 0.825 | 0.22 | 0.797 | 0.24 | 0.787 | 0.25 | 0.793 | 0.26 | 0.812 | 0.25 | 0.841 | 0.23 |
| EPP     | 0.862                            | 0.19 | 0.843 | 0.20 | 0.825 | 0.21 | 0.802 | 0.23 | 0.796 | 0.23 | 0.800 | 0.23 | 0.810 | 0.22 | 0.834 | 0.20 |
| ELDR    | 0.798                            | 0.23 | 0.770 | 0.24 | 0.751 | 0.24 | 0.731 | 0.25 | 0.723 | 0.25 | 0.723 | 0.25 | 0.724 | 0.25 | 0.732 | 0.24 |
| GR      | 0.884                            | 0.22 | 0.876 | 0.22 | 0.886 | 0.21 | 0.893 | 0.20 | 0.898 | 0.20 | 0.901 | 0.20 | 0.907 | 0.19 | 0.910 | 0.19 |
| GAUL    | 0.717                            | 0.33 | 0.686 | 0.33 | 0.684 | 0.32 | 0.682 | 0.32 | 0.690 | 0.32 | 0.698 | 0.32 | 0.706 | 0.32 | 0.720 | 0.31 |
| LEFT    | 0.739                            | 0.31 | 0.716 | 0.32 | 0.720 | 0.31 | 0.731 | 0.31 | 0.748 | 0.30 | 0.762 | 0.30 | 0.765 | 0.30 | 0.771 | 0.30 |
| RAD     | 0.876                            | 0.25 | 0.862 | 0.26 | 0.850 | 0.27 | 0.841 | 0.27 | 0.846 | 0.27 | 0.850 | 0.27 | 0.851 | 0.27 | 0.856 | 0.27 |
| ANTI-EU | 0.556                            | 0.37 | 0.533 | 0.37 | 0.518 | 0.36 | 0.504 | 0.36 | 0.503 | 0.36 | 0.505 | 0.36 | 0.501 | 0.36 | 0.502 | 0.36 |
| NA      | 0.513                            | 0.38 | 0.491 | 0.38 | 0.488 | 0.38 | 0.483 | 0.38 | 0.495 | 0.38 | 0.500 | 0.39 | 0.508 | 0.39 | 0.515 | 0.39 |
| F       | 0.437                            | 0.33 | 0.375 | 0.31 | 0.354 | 0.30 | 0.340 | 0.29 | 0.332 | 0.29 | 0.330 | 0.29 | 0.316 | 0.29 | 0.299 | 0.28 |
| UK      | 0.760                            | 0.24 | 0.722 | 0.24 | 0.683 | 0.24 | 0.625 | 0.22 | 0.590 | 0.20 | 0.569 | 0.19 | 0.566 | 0.18 | 0.569 | 0.16 |
| I       | 0.571                            | 0.33 | 0.507 | 0.32 | 0.450 | 0.31 | 0.391 | 0.29 | 0.339 | 0.28 | 0.307 | 0.26 | 0.284 | 0.25 | 0.255 | 0.23 |
| IRE     | 0.550                            | 0.35 | 0.484 | 0.33 | 0.444 | 0.32 | 0.420 | 0.31 | 0.407 | 0.30 | 0.413 | 0.30 | 0.418 | 0.30 | 0.413 | 0.30 |
| FIN     | 0.570                            | 0.35 | 0.504 | 0.33 | 0.447 | 0.32 | 0.393 | 0.30 | 0.361 | 0.29 | 0.350 | 0.28 | 0.345 | 0.27 | 0.337 | 0.27 |
| S       | 0.493                            | 0.35 | 0.434 | 0.33 | 0.402 | 0.32 | 0.375 | 0.30 | 0.361 | 0.29 | 0.362 | 0.28 | 0.367 | 0.28 | 0.367 | 0.28 |
| D       | 0.635                            | 0.37 | 0.574 | 0.38 | 0.503 | 0.37 | 0.398 | 0.36 | 0.301 | 0.32 | 0.234 | 0.27 | 0.186 | 0.23 | 0.152 | 0.19 |
| GR      | 0.625                            | 0.35 | 0.568 | 0.35 | 0.509 | 0.35 | 0.424 | 0.34 | 0.359 | 0.32 | 0.314 | 0.30 | 0.287 | 0.30 | 0.252 | 0.27 |
| NL      | 0.619                            | 0.32 | 0.562 | 0.32 | 0.508 | 0.31 | 0.442 | 0.29 | 0.392 | 0.27 | 0.371 | 0.25 | 0.352 | 0.24 | 0.339 | 0.22 |
| E       | 0.634                            | 0.36 | 0.573 | 0.36 | 0.508 | 0.36 | 0.416 | 0.34 | 0.337 | 0.32 | 0.276 | 0.29 | 0.242 | 0.28 | 0.209 | 0.25 |
| B       | 0.516                            | 0.31 | 0.458 | 0.29 | 0.401 | 0.28 | 0.334 | 0.26 | 0.285 | 0.24 | 0.262 | 0.23 | 0.248 | 0.22 | 0.231 | 0.21 |
| P       | 0.576                            | 0.34 | 0.513 | 0.33 | 0.457 | 0.32 | 0.389 | 0.30 | 0.342 | 0.29 | 0.315 | 0.28 | 0.298 | 0.27 | 0.280 | 0.26 |
| A       | 0.591                            | 0.36 | 0.527 | 0.35 | 0.470 | 0.34 | 0.393 | 0.32 | 0.338 | 0.29 | 0.300 | 0.28 | 0.278 | 0.26 | 0.264 | 0.25 |
| DK      | 0.520                            | 0.38 | 0.468 | 0.37 | 0.435 | 0.37 | 0.404 | 0.36 | 0.390 | 0.35 | 0.391 | 0.35 | 0.395 | 0.35 | 0.391 | 0.35 |
| L       | 0.664                            | 0.38 | 0.613 | 0.39 | 0.553 | 0.39 | 0.471 | 0.38 | 0.403 | 0.37 | 0.362 | 0.35 | 0.329 | 0.34 | 0.316 | 0.33 |

Notes: “S.D.” indicates standard deviation, which is much larger than the standard error (see text). Abbreviations given in Table A1.

### **PART III: PARTY AND NATION COHESION BY ISSUE**

It is also interesting to look at the group cohesion data by focusing on the type of issue being voted on. The text reported the figures for the 3<sup>rd</sup> Parliament. For completeness, we report the figures for the 4<sup>th</sup> Parliament here.

**TABLE A4. Cohesion per issue in the Fourth Parliament**

|         | Foreign Policy | Internal Functioning | Agro-Fish | Industry & Technology | Banking & Finance | Drugs | Services | Human Beings | Security | Nature | Legal System |
|---------|----------------|----------------------|-----------|-----------------------|-------------------|-------|----------|--------------|----------|--------|--------------|
| PES     | 0.890          | 0.869                | 0.846     | 0.827                 | 0.903             | 0.734 | 0.956    | 0.901        | 0.886    | 0.878  | 0.807        |
| EPP     | 0.869          | 0.854                | 0.833     | 0.894                 | 0.887             | 0.798 | 0.895    | 0.857        | 0.924    | 0.850  | 0.879        |
| ELDR    | 0.835          | 0.779                | 0.790     | 0.818                 | 0.838             | 0.605 | 0.852    | 0.799        | 0.834    | 0.823  | 0.805        |
| GR      | 0.862          | 0.796                | 0.940     | 0.948                 | 0.866             | 0.800 | 0.894    | 0.938        | 0.844    | 0.978  | 0.918        |
| GAUL    | 0.671          | 0.659                | 0.719     | 0.767                 | 0.819             | 0.803 | 0.856    | 0.727        | 0.607    | 0.772  | 0.748        |
| LEFT    | 0.712          | 0.666                | 0.755     | 0.748                 | 0.679             | 0.591 | 0.598    | 0.839        | 0.739    | 0.826  | 0.818        |
| RAD     | 0.855          | 0.892                | 0.883     | 0.809                 | 0.888             | 0.819 | 0.948    | 0.886        | 0.852    | 0.889  | 0.892        |
| ANTI-EU | 0.587          | 0.611                | 0.550     | 0.459                 | 0.635             | 0.498 | 0.450    | 0.588        | 0.565    | 0.471  | 0.541        |
| NA      | 0.539          | 0.465                | 0.584     | 0.426                 | 0.486             | 0.544 | 0.593    | 0.600        | 0.525    | 0.407  | 0.563        |
| Mean CI | 0.819          | 0.805                | 0.806     | 0.806                 | 0.841             | 0.736 | 0.869    | 0.835        | 0.836    | 0.820  | 0.770        |
| F       | 0.417          | 0.391                | 0.508     | 0.480                 | 0.514             | 0.396 | 0.498    | 0.447        | 0.397    | 0.367  | 0.418        |
| UK      | 0.767          | 0.765                | 0.779     | 0.717                 | 0.816             | 0.641 | 0.864    | 0.744        | 0.772    | 0.748  | 0.693        |
| I       | 0.577          | 0.593                | 0.558     | 0.531                 | 0.704             | 0.543 | 0.533    | 0.542        | 0.636    | 0.489  | 0.599        |
| IRE     | 0.532          | 0.555                | 0.561     | 0.500                 | 0.656             | 0.464 | 0.493    | 0.630        | 0.496    | 0.458  | 0.546        |
| FIN     | 0.551          | 0.565                | 0.586     | 0.574                 | 0.523             | 0.497 | 0.602    | 0.579        | 0.573    | 0.624  | 0.561        |
| S       | 0.470          | 0.466                | 0.510     | 0.465                 | 0.415             | 0.625 | 0.667    | 0.546        | 0.401    | 0.647  | 0.429        |
| D       | 0.652          | 0.715                | 0.633     | 0.504                 | 0.702             | 0.393 | 0.674    | 0.596        | 0.643    | 0.566  | 0.665        |
| GR      | 0.622          | 0.654                | 0.649     | 0.543                 | 0.724             | 0.534 | 0.678    | 0.597        | 0.656    | 0.512  | 0.658        |
| NL      | 0.658          | 0.646                | 0.621     | 0.597                 | 0.589             | 0.503 | 0.658    | 0.563        | 0.654    | 0.609  | 0.653        |
| E       | 0.648          | 0.688                | 0.643     | 0.548                 | 0.706             | 0.550 | 0.673    | 0.597        | 0.649    | 0.514  | 0.685        |
| B       | 0.526          | 0.547                | 0.525     | 0.455                 | 0.560             | 0.408 | 0.598    | 0.501        | 0.516    | 0.455  | 0.520        |
| P       | 0.563          | 0.585                | 0.562     | 0.547                 | 0.673             | 0.440 | 0.601    | 0.550        | 0.617    | 0.514  | 0.619        |
| A       | 0.590          | 0.614                | 0.592     | 0.484                 | 0.772             | 0.468 | 0.661    | 0.586        | 0.557    | 0.626  | 0.541        |
| DK      | 0.521          | 0.451                | 0.550     | 0.524                 | 0.595             | 0.425 | 0.659    | 0.598        | 0.462    | 0.677  | 0.474        |
| L       | 0.687          | 0.715                | 0.655     | 0.586                 | 0.798             | 0.400 | 0.755    | 0.666        | 0.695    | 0.592  | 0.699        |

Notes: See Table A1 for abbreviations. Mean CI is the average Cohesion Index weighted by party size.

## PART IV: ANALYSIS OF VOTING BY COALITIONS OF PARTIES

While the EU is not a parliamentary system with a government and an opposition, it is interesting to see which parties vote together more often. Is there in particular a left-right pattern in coalition formation across votes? To answer this, we measured for each vote the intensity of support within a party group for a majority decision, i.e. the percentage of members who voted in favour of (against) the decision when it was adopted (refused) and when a majority of the group voted in favour (against). We call this the intensity of support.

The text reports the main features of our results, but here we provide details on the correlation coefficients of the intensity of support for bills across parties in Table A5. From the figures, one can clearly observe a positive correlation between left-wing parties, a positive correlation between right wing parties and no correlation or negative ones across the ideological spectrum. In the third parliament, votes of PES are mostly correlated with those of the LEFT and RAD and so are the votes of GR. Votes of EPP are mostly correlated with those of ELDR and two other right-wing political groups, GAUL and ANTI-EU. One thus has the broad left (socialists, Greens, Left and Radicals) on one side and the broad right on the other (conservatives, Gaullists, liberals and nationalists). Note however the very centrist role of the liberals whose votes are correlated to those of socialists but not to the other more left-wing parties. A similar picture emerges in the fourth parliament, except that now the votes of PES are more strongly correlated with the votes of GR and less with the LEFT. This reflects recent tendencies of socialist parties to move from labor parties to ‘rainbow-style’ parties. Note also that correlations are not ‘transitive’. Thus, PES votes are more correlated with those of GR and the latter more with those of LEFT. However, votes of PES are not more but less correlated with those of LEFT. This suggests that coalition formation is not one-dimensional, a point we pick up below when analyzing the dimensionality of coalition formation. Votes of EPP are now also more strongly correlated with GAUL and less with ELDR. The centrist position of the latter is confirmed. Note also that votes of GR are more correlated with those of LEFT, confirming tendencies towards rainbow coalitions on the left.

For comparison, Tables A6 and A7 show country correlation for the 3<sup>rd</sup> and 4<sup>th</sup> Parliaments. These figures do not show any specific pattern tending to suggest stable groups of coalitions. No negative correlation can be observed nor is there stronger correlation between specific groups of countries. The correlations pick up mostly the changes in the distribution of the size of the majority. Note that our measure of coalition formation (the correlation coefficients) are based on all votes. As already mentioned, for a large number of the EP votes, the observed majority is large. When selecting the votes with narrower majorities (e.g. for votes with majority less or equal to 70%) the results are reinforced.

**Table A5. Correlations of support intensity for bills in the 3<sup>rd</sup> and 4<sup>th</sup> Parliaments**

| Third Parliament  |      |      |             |             |             |             |             |             |      |
|-------------------|------|------|-------------|-------------|-------------|-------------|-------------|-------------|------|
|                   | PES  | EPP  | ELDR        | GR          | GAUL        | LEFT        | RAD         | ANTI-EU     | NA   |
| PES               | 1.00 | 0.24 | 0.29        | 0.21        | 0.14        | <b>0.52</b> | <b>0.34</b> | 0.08        | 0.12 |
| EPP               |      | 1.00 | <b>0.62</b> | -0.07       | <b>0.49</b> | 0.07        | 0.13        | <b>0.30</b> | 0.30 |
| ELDR              |      |      | 1.00        | 0.09        | <b>0.43</b> | 0.16        | 0.20        | 0.24        | 0.25 |
| GR                |      |      |             | 1.00        | -0.04       | <b>0.44</b> | <b>0.33</b> | 0.03        | 0.03 |
| GAUL              |      |      |             |             | 1.00        | 0.09        | 0.14        | <b>0.28</b> | 0.32 |
| LEFT              |      |      |             |             |             | 1.00        | <b>0.38</b> | 0.03        | 0.09 |
| RAD               |      |      |             |             |             |             | 1.00        | 0.08        | 0.12 |
| ANTI-EU           |      |      |             |             |             |             |             | 1.00        | 0.69 |
| NA                |      |      |             |             |             |             |             |             | 1.00 |
| Fourth Parliament |      |      |             |             |             |             |             |             |      |
|                   | PES  | EPP  | ELDR        | GR          | GAUL        | LEFT        | RAD         | ANTI-EU     | NA   |
| PES               | 1.00 | 0.03 | 0.25        | <b>0.29</b> | 0.04        | <b>0.29</b> | <b>0.39</b> | -0.01       | 0.04 |
| EPP               |      | 1.00 | <b>0.31</b> | -0.17       | <b>0.50</b> | -0.16       | 0.03        | 0.18        | 0.30 |
| ELDR              |      |      | 1.00        | 0.17        | <b>0.23</b> | 0.09        | 0.22        | 0.15        | 0.23 |
| GR                |      |      |             | 1.00        | -0.14       | <b>0.53</b> | <b>0.37</b> | 0.09        | 0.08 |
| GAUL              |      |      |             |             | 1.00        | 0.02        | 0.19        | <b>0.36</b> | 0.46 |
| LEFT              |      |      |             |             |             | 1.00        | <b>0.43</b> | 0.19        | 0.19 |
| RAD               |      |      |             |             |             |             | 1.00        | 0.14        | 0.23 |
| ANTI-EU           |      |      |             |             |             |             |             | 1.00        | 0.51 |
| NA                |      |      |             |             |             |             |             |             | 1.00 |

Notes: See Table A1 for abbreviation.

**Table A6. Correlations of intensity of majority support of countries in the Third Parliaments.**

| <i>Third Legislature</i> |      |      |      |      |     |   |      |      |      |      |      |      |   |      |      |
|--------------------------|------|------|------|------|-----|---|------|------|------|------|------|------|---|------|------|
|                          | F    | UK   | I    | IRL  | FIN | S | D    | GR   | NL   | E    | B    | P    | A | DK   | L    |
| F                        | 1.00 | 0.50 | 0.64 | 0.58 | -   | - | 0.62 | 0.51 | 0.60 | 0.55 | 0.67 | 0.55 | - | 0.52 | 0.47 |
| UK                       |      | 1.00 | 0.61 | 0.39 | -   | - | 0.64 | 0.50 | 0.64 | 0.64 | 0.60 | 0.57 | - | 0.56 | 0.48 |
| I                        |      |      | 1.00 | 0.41 | -   | - | 0.71 | 0.55 | 0.68 | 0.66 | 0.71 | 0.59 | - | 0.55 | 0.47 |
| IRL                      |      |      |      | 1.00 | -   | - | 0.51 | 0.43 | 0.55 | 0.43 | 0.53 | 0.42 | - | 0.39 | 0.39 |
| D                        |      |      |      |      |     |   | 1.00 | 0.59 | 0.79 | 0.72 | 0.73 | 0.61 | - | 0.63 | 0.58 |
| GR                       |      |      |      |      |     |   |      | 1.00 | 0.54 | 0.56 | 0.57 | 0.48 | - | 0.41 | 0.45 |
| NL                       |      |      |      |      |     |   |      |      | 1.00 | 0.66 | 0.77 | 0.61 | - | 0.60 | 0.52 |
| E                        |      |      |      |      |     |   |      |      |      | 1.00 | 0.65 | 0.63 | - | 0.50 | 0.48 |
| B                        |      |      |      |      |     |   |      |      |      |      | 1.00 | 0.61 | - | 0.58 | 0.50 |
| P                        |      |      |      |      |     |   |      |      |      |      |      | 1.00 | - | 0.54 | 0.39 |
| DK                       |      |      |      |      |     |   |      |      |      |      |      |      |   | 1.00 | 0.45 |
| L                        |      |      |      |      |     |   |      |      |      |      |      |      |   |      | 1.00 |

Notes: For abbreviations see Table A1.

**Table A7. Correlations of intensity of majority support of countries in the Fourth Parliaments.**

|            | <i>F</i> | <i>UK</i> | <i>I</i> | <i>IRL</i> | <i>FIN</i> | <i>S</i> | <i>D</i> | <i>GR</i> | <i>NL</i> | <i>E</i> | <i>B</i> | <i>P</i> | <i>A</i> | <i>DK</i> | <i>L</i> |
|------------|----------|-----------|----------|------------|------------|----------|----------|-----------|-----------|----------|----------|----------|----------|-----------|----------|
| <i>F</i>   | 1.00     | 0.30      | 0.63     | 0.57       | 0.34       | 0.18     | 0.43     | 0.48      | 0.36      | 0.50     | 0.54     | 0.56     | 0.30     | 0.35      | 0.44     |
| <i>UK</i>  |          | 1.00      | 0.46     | 0.34       | 0.58       | 0.53     | 0.58     | 0.40      | 0.52      | 0.50     | 0.47     | 0.49     | 0.46     | 0.51      | 0.52     |
| <i>I</i>   |          |           | 1.00     | 0.61       | 0.49       | 0.26     | 0.64     | 0.59      | 0.56      | 0.67     | 0.63     | 0.64     | 0.48     | 0.44      | 0.62     |
| <i>IRL</i> |          |           |          | 1.00       | 0.44       | 0.29     | 0.54     | 0.49      | 0.50      | 0.53     | 0.52     | 0.57     | 0.45     | 0.36      | 0.43     |
| <i>FIN</i> |          |           |          |            | 1.00       | 0.62     | 0.62     | 0.40      | 0.71      | 0.50     | 0.62     | 0.48     | 0.56     | 0.61      | 0.54     |
| <i>S</i>   |          |           |          |            |            | 1.00     | 0.43     | 0.26      | 0.47      | 0.33     | 0.39     | 0.33     | 0.48     | 0.56      | 0.31     |
| <i>D</i>   |          |           |          |            |            |          | 1.00     | 0.63      | 0.71      | 0.70     | 0.73     | 0.59     | 0.71     | 0.47      | 0.67     |
| <i>GR</i>  |          |           |          |            |            |          |          | 1.00      | 0.50      | 0.71     | 0.57     | 0.61     | 0.49     | 0.33      | 0.50     |
| <i>NL</i>  |          |           |          |            |            |          |          |           | 1.00      | 0.57     | 0.76     | 0.51     | 0.59     | 0.58      | 0.59     |
| <i>E</i>   |          |           |          |            |            |          |          |           |           | 1.00     | 0.63     | 0.68     | 0.51     | 0.37      | 0.58     |
| <i>B</i>   |          |           |          |            |            |          |          |           |           |          | 1.00     | 0.57     | 0.56     | 0.50      | 0.61     |
| <i>P</i>   |          |           |          |            |            |          |          |           |           |          |          | 1.00     | 0.47     | 0.42      | 0.55     |
| <i>A</i>   |          |           |          |            |            |          |          |           |           |          |          |          | 1.00     | 0.45      | 0.50     |
| <i>DK</i>  |          |           |          |            |            |          |          |           |           |          |          |          |          | 1.00      | 0.47     |
| <i>L</i>   |          |           |          |            |            |          |          |           |           |          |          |          |          |           | 1.00     |

Notes: For abbreviations see Table A1.

## PART V: COMPARISON WITH THE US CONGRASS

To provide a benchmark to our cohesion indices, we compared cohesion in the EP with cohesion in the US Congress. The comparison with the US is especially relevant because the US is a presidential system. The theories of democratic political regimes predict that elected representatives in a presidential system vote less cohesively than in a parliamentary system. Since the EU is not a parliamentary system (but not a presidential system either), its cohesion is not predicted to be as high as in parliamentary systems.

**TABLE A8. Cohesion in the US Congress.**

|           | <i>Democrats</i> | <i>Republicans</i> | <i>Congress</i> | <i>Relative cohesion of Democrats</i> | <i>Relative cohesion of Republicans</i> |
|-----------|------------------|--------------------|-----------------|---------------------------------------|---|
| 1991-92   | 0.76             | 0.67               | 0.45            | 1.67                                  | 1.48                                    |
| S.D.      | 0.28             | 0.30               | 0.31            |                                       |   |
| 1993-94   | 0.76             | 0.74               | 0.39            | 1.95                                  | 1.89                                    |
| S.D.      | 0.27             | 0.28               | 0.31            |                                       |   |
| 1995-96   | 0.68             | 0.83               | 0.37            | 1.84                                  | 2.25                                    |
| S.D.      | 0.29             | 0.25               | 0.31            |                                       |   |
| 1997-98   | 0.73             | 0.81               | 0.46            | 1.59                                  | 1.77                                    |
| S.D.      | 0.29             | 0.25               | 0.36            |                                       |   |
| 1999-2000 | 0.78             | 0.82               | 0.52            | 1.51                                  | 1.57                                    |
| S.D.      | 0.26             | 0.26               | 0.39            |                                       |   |

Notes: "S.D." stands for standard deviation. Source: Own calculations based on US Congress (House of Representatives) roll call votes made available by Keith Poole. (URL: <http://voteview.uh.edu/default.htm>).

The text reported the salient features of our findings. Here we provide more details. Table A8 gives the cohesion and relative cohesion index for the US Congress between 1991 and 2000. At first sight the cohesion among democrats and republicans in Congress appears lower than that of party groups in the EP. Indeed cohesion is usually in the 70% while it is in the 80% and higher for EP groups, and above 85% for the two main parties, the PES and EPP. However, votes are also much more polarized in the US Congress. If one looks at the relative cohesion indices (i.e. cohesion of parties relative to the cohesion of the legislature), then one finds that cohesion of parties in the US Congress is somewhat higher, on average above 1.7, whereas PES and EP have respectively a relative cohesion of 1.43 and 1.4 for the third Parliament and of 1.57 and 1.56 for the fourth Parliament. However, cohesion has been increasing in the EP whereas in the US Congress, it has been declining since 1996 and reached levels comparable to those of PES and EPP for the fourth Parliament. Cohesion in the EP and in the US Congress are thus quite comparable. It is overall reassuring to see that party cohesion in the EP is quite comparable to that observed in the House of the most mature presidential system in the world.

## **PART VI: DISCIPLINE INDEX FOR VARIOUS ISSUES**

The main text presents the discipline indices for voting on what might be thought of as the most nationalistic issue facing the EP, namely the cohesion and structural funds. Here we provide the discipline indices for several other major issues (see the text for how the votes were classified). Before turning to the figures, however, we provide some more information on how the votes were classified.

Each vote was classified into one of eleven broad issues using the title of the vote as reported in the Minutes of the plenary sessions. To give an example, the proposals on November 17, 1998 include ‘Employment in Europe’, ‘Social action programme 1998 - 2000’, ‘Clinical trials’, and ‘Combating fraud /Protection of Euro’ among many other issues. An additional category contains all votes (378 votes) that were difficult to classify. The categories were (the number of votes is given in parentheses):

- Foreign Policy (769)
- Internal Functioning and Policy (1528)
- Agriculture, Fishing and Food (888)
- Industry and Technology (523)
- Banking and Finance (313)
- Drugs and Dangerous Substances (169)
- Services (137)
- Human Beings (709)
- Security (368)
- Nature (433)
- Legal System (229)

Each large category was in turn divided in subclasses. A difficulty here is that a large number of votes can be classified in many different ways. For instance the last vote on ‘Combating Fraud’ can be classified in ‘Legal’ or in other categories such as ‘Security’. Another difficulty relies in the fact that many different issues and conflicts may be hidden under a same heading. As we will see below, even a particular voting sequence on one resolution or bill, entails many different issues and corresponding voting coalitions. With a very large number of votes, much of the noisiness related to vote-specific idiosyncrasies is filtered away. This is less the case with disaggregation into smaller number of votes, even under one homogeneous heading.

**TABLE A9. Discipline index for Foreign Policy.**

|     | PES   | EPP   | ELDR  | GR    | GAUL  | LEFT  | RAD   | ANTI-EU | NA    |
|-----|-------|-------|-------|-------|-------|-------|-------|---------|-------|
| F   | 92.60 | 93.45 | 92.32 | 96.83 | 91.73 | 95.57 | 93.47 | 92.27   | 85.63 |
|     | 41    | 21    | 12    | 19    | 33    | 9     | 14    | 15      | 14    |
| UK  | 92.64 | 91.53 | 98.42 | -     | -     | -     | 83.84 | 66.08   | 69.33 |
|     | 72    | 39    | 2     | 0     | 0     | 0     | 3     | 1       | 1     |
| I   | 93.62 | 95.12 | 92.62 | 96.07 | 92.41 | 93    | 79.03 | -       | 72.48 |
|     | 35    | 48    | 7     | 12    | 25    | 14    | 3     | 0       | 18    |
| IRL | 93.26 | 95.66 | 95.23 | 90.80 | 88.02 | 93.46 | -     | -       | -     |
|     | 2     | 4     | 2     | 3     | 11    | 2     | 0     | 0       | 0     |
| FIN | 98.29 | 95.98 | 90.37 | 98.51 | -     | 90.10 | -     | -       | -     |
|     | 6     | 9     | 10    | 1     | 0     | 4     | 0     | 0       | 0     |
| S   | 89.50 | 97.09 | 87.62 | 90.37 | -     | 73.68 | -     | -       | -     |
|     | 16    | 7     | 4     | 4     | 0     | 4     | 0     | 0       | 0     |
| D   | 96.54 | 97.66 | 93.02 | 91.18 | -     | -     | -     | 88.12   | 90.54 |
|     | 54    | 63    | 6     | 17    | 0     | 0     | 0     | 5       | 1     |
| GR  | 91.81 | 91.03 | -     | -     | 70.01 | 91.32 | -     | -       | -     |
|     | 21    | 17    | 0     | 0     | 3     | 5     | 0     | 0       | 0     |
| NL  | 96.92 | 98.14 | 96.49 | 91.91 | 77.28 | -     | -     | 82.46   | -     |
|     | 12    | 12    | 11    | 3     | 2     | 0     | 0     | 3       | 0     |
| E   | 97.28 | 97.02 | 87.87 | 79.51 | 100   | 93.51 | 94.21 | -       | 48.33 |
|     | 35    | 44    | 9     | 5     | 1     | 11    | 4     | 0       | 3     |
| B   | 94.83 | 97.87 | 94.75 | 98.48 | -     | -     | 95.72 | -       | 84.34 |
|     | 12    | 10    | 10    | 4     | 0     | 0     | 2     | 0       | 3     |
| P   | 95.31 | 87.66 | 94.45 | 69.55 | 89.33 | 91.17 | -     | -       | -     |
|     | 20    | 11    | 6     | 1     | 5     | 7     | 0     | 0       | 0     |
| A   | 96.02 | 94.57 | 96.54 | 95.51 | -     | -     | -     | -       | 88.36 |
|     | 11    | 12    | 2     | 1     | 0     | 0     | 0     | 0       | 12    |
| DK  | 89.51 | 92.10 | 94.62 | 65.31 | -     | 90.32 | -     | 73.32   | 59.26 |
|     | 6     | 7     | 8     | 1     | -     | 1     | -     | 4       | 1     |
| L   | 96.92 | 95.71 | 95.96 | -     | -     | -     | 75.29 | -       | -     |
|     | 3     | 3     | 4     | -     | -     | -     | 1     | -       | -     |

Notes: Figures are in %; see main text for definition of discipline index. Number of deputies present in the votes are below each discipline index. For abbreviations see Table A1.

**TABLE A10. Discipline index for votes on Internal Functioning.**

|     | PES   | EPP   | ELDR  | GR    | GAUL  | LEFT  | RAD   | ANTI-EU | NA    |
|-----|-------|-------|-------|-------|-------|-------|-------|---------|-------|
| F   | 91.09 | 89.84 | 86.59 | 98.15 | 94.05 | 92.88 | 96.30 | 89.95   | 88.02 |
|     | 41    | 21    | 13    | 19    | 33    | 9     | 14    | 15      | 14    |
| UK  | 95.72 | 88.27 | 96.82 | -     | -     | -     | 90.86 | 66.39   | 73.05 |
|     | 72    | 39    | 2     | -     | -     | -     | 3     | 1       | 1     |
| I   | 94.76 | 94.88 | 92.94 | 95.80 | 82.74 | 92.72 | 95.85 | -       | 64.05 |
|     | 35    | 48    | 7     | 13    | 26    | 14    | 3     | -       | 18    |
| IRL | 97.32 | 95.46 | 91.20 | 87.39 | 89.89 | 83.67 | -     | -       | -     |
|     | 2     | 4     | 2     | 3     | 11    | 2     | -     | -       | -     |
| FIN | 97.86 | 94.56 | 88.16 | 93.21 | -     | 70.34 | -     | -       | -     |
|     | 6     | 9     | 10    | 1     | -     | 4     | -     | -       | -     |
| S   | 89.06 | 97.54 | 87.21 | 77.50 | -     | 68.08 | -     | -       | -     |
|     | 16    | 7     | 4     | 4     | -     | 4     | -     | -       | -     |
| D   | 94.84 | 97.53 | 89.70 | 94.03 | -     | -     | -     | 92.64   | 87.04 |
|     | 54    | 64    | 6     | 17    | -     | -     | -     | 5       | 1     |
| GR  | 93.79 | 96.37 | -     | -     | 88.68 | 85.53 | -     | -       | -     |
|     | 21    | 17    | -     | -     | 3     | 5     | -     | -       | -     |
| NL  | 96.80 | 96.53 | 95.44 | 95.04 | 75.61 | -     | -     | 79.58   | -     |
|     | 12    | 12    | 11    | 3     | 2     | -     | -     | 3       | -     |
| E   | 96.19 | 93.99 | 89.87 | 79.99 | 92.73 | 94.48 | 93.02 | -       | 74.47 |
|     | 35    | 44    | 9     | 5     | 1     | 11    | 4     | -       | 3     |
| B   | 95.07 | 95.69 | 91.94 | 97.43 | -     | -     | 84.06 | -       | 86.19 |
|     | 12    | 10    | 10    | 4     | -     | -     | 2     | -       | 3     |
| P   | 94.49 | 89.52 | 88.02 | 76.43 | 83.05 | 87.04 | -     | -       | -     |
|     | 20    | 12    | 6     | 1     | 5     | 8     | -     | -       | -     |
| A   | 94.23 | 96.39 | 96.09 | 94.91 | -     | -     | -     | -       | 80.28 |
|     | 11    | 12    | 2     | 1     | -     | -     | -     | -       | 12    |
| DK  | 86.64 | 95.69 | 93.63 | 60.23 | -     | 65.85 | -     | 81.80   | 56.48 |
|     | 6     | 7     | 8     | 1     | -     | 1     | -     | 4       | 1     |
| L   | 96.31 | 93.61 | 91.50 | -     | -     | -     | 86.46 | -       | -     |
|     | 3     | 3     | 4     | -     | -     | -     | 1     | -       | -     |

Notes: See Table A9.

**TABLE A11. Discipline index for votes on Agro-Fish**

|     | PES   | EPP   | ELDR  | GR    | GAUL  | LEFT  | RAD   | ANTI-EU | NA    |
|-----|-------|-------|-------|-------|-------|-------|-------|---------|-------|
| F   | 84.55 | 82.75 | 82.95 | 97.87 | 94.22 | 85.01 | 95.42 | 90.18   | 92.14 |
|     | 41    | 21    | 12    | 19    | 33    | 9     | 14    | 15      | 14    |
| UK  | 93    | 81.64 | 94.70 | -     | -     | -     | 94.10 | 70.12   | 70.91 |
|     | 72    | 39    | 2     | -     | -     | -     | 3     | 1       | 1     |
| I   | 93.99 | 93.64 | 83.30 | 95.03 | 78.01 | 86.91 | 83.14 | -       | 76.38 |
|     | 35    | 48    | 7     | 12    | 25    | 14    | 3     | -       | 18    |
| IRL | 88.25 | 91.34 | 89.77 | 91.24 | 89.55 | 86.50 | -     | -       | -     |
|     | 2     | 4     | 2     | 3     | 11    | 2     | -     | -       | -     |
| FIN | 98.80 | 92.22 | 93.21 | 98.91 | -     | 78.52 | -     | -       | -     |
|     | 6     | 9     | 10    | 1     | -     | 4     | -     | -       | -     |
| S   | 93.85 | 96.23 | 94.31 | 97.80 | -     | 78.08 | -     | -       | -     |
|     | 16    | 7     | 4     | 4     | -     | 4     | -     | -       | -     |
| D   | 94.87 | 97.05 | 83.49 | 97.23 | -     | -     | -     | 90.61   | 72.97 |
|     | 54    | 62    | 6     | 17    | -     | -     | -     | 5       | 1     |
| GR  | 90.93 | 93.61 | -     | -     | 89.82 | 94.61 | -     | -       | -     |
|     | 21    | 17    | -     | -     | 3     | 5     | -     | -       | -     |
| NL  | 97.54 | 96.83 | 95.45 | 98.89 | 81.45 | -     | -     | 62.02   | -     |
|     | 12    | 12    | 11    | 3     | 2     | -     | -     | 3       | -     |
| E   | 92    | 91.81 | 85.88 | 78.44 | 93.75 | 93.98 | 91.24 | -       | 77.50 |
|     | 35    | 44    | 9     | 5     | 1     | 11    | 4     | -       | 3     |
| B   | 93.02 | 95.14 | 83.05 | 99.10 | -     | -     | 97.45 | -       | 90.43 |
|     | 12    | 10    | 10    | 4     | -     | -     | 2     | -       | 3     |
| P   | 88.91 | 86.21 | 78.12 | 77.08 | 88.02 | 87.97 | -     | -       | -     |
|     | 19    | 11    | 6     | 1     | 5     | 7     | -     | -       | -     |
| A   | 97.66 | 92.47 | 96.20 | 99.72 | -     | -     | -     | -       | 80.38 |
|     | 11    | 12    | 2     | 1     | -     | -     | -     | -       | 12    |
| DK  | 92.91 | 95.05 | 91.93 | 63.89 | -     | 84.21 | -     | 61.36   | 60.47 |
|     | 6     | 7     | 8     | 1     | -     | 1     | -     | 4       | 1     |
| L   | 92.12 | 94.60 | 81.30 | -     | -     | -     | 91.40 | -       | -     |
|     | 3     | 3     | 3     | -     | -     | -     | 1     | -       | -     |

Notes: See Table A9.

**TABLE A12. Discipline index for votes on Industry and Technology**

|     | PES   | EPP   | ELDR  | GR    | GAUL  | LEFT  | RAD   | ANTI-EU NA |       |
|-----|-------|-------|-------|-------|-------|-------|-------|------------|-------|
| F   | 87.01 | 88.27 | 92.80 | 98.07 | 94.73 | 80.59 | 91.83 | 86.53      | 86.82 |
|     | 40    | 21    | 11    | 18    | 31    | 9     | 14    | 15         | 14    |
| UK  | 93.31 | 90.69 | 95.80 | -     | -     | -     | 89.75 | 73.79      | 53.33 |
|     | 72    | 39    | 2     | -     | -     | -     | 3     | 1          | 1     |
| I   | 90.45 | 92.94 | 93.87 | 99.03 | 90.57 | 92.86 | 83.63 | -          | 66.33 |
|     | 35    | 48    | 7     | 11    | 25    | 14    | 3     | -          | 18    |
| IRL | 91.34 | 89.68 | 89.74 | 96.46 | 86.86 | 83.95 | -     | -          | -     |
|     | 2     | 4     | 2     | 3     | 11    | 2     | -     | -          | -     |
| FIN | 95.47 | 94.27 | 95.33 | 98.64 | -     | 91.94 | -     | -          | -     |
|     | 6     | 9     | 10    | 1     | -     | 4     | -     | -          | -     |
| S   | 92.40 | 99.27 | 85.92 | 98.02 | -     | 93.17 | -     | -          | -     |
|     | 16    | 7     | 4     | 4     | -     | 4     | -     | -          | -     |
| D   | 92.98 | 96.36 | 84.57 | 95.83 | -     | -     | -     | 86.87      | 82.76 |
|     | 54    | 63    | 6     | 17    | -     | -     | -     | 5          | 1     |
| GR  | 94.48 | 96.25 | -     | -     | 85.61 | 86.77 | -     | -          | -     |
|     | 21    | 17    | -     | -     | 3     | 5     | -     | -          | -     |
| NL  | 94.53 | 93.74 | 95.37 | 98.92 | 83.84 | -     | -     | 67.99      | -     |
|     | 12    | 12    | 11    | 3     | 2     | -     | -     | 3          | -     |
| E   | 95.32 | 95.35 | 90.15 | 85.77 | 100   | 95.27 | 96.76 | -          | 70.83 |
|     | 35    | 44    | 8     | 5     | 1     | 11    | 4     | -          | 3     |
| B   | 91.94 | 96.39 | 89.39 | 99.06 | -     | -     | 91.61 | -          | 88.25 |
|     | 12    | 10    | 10    | 4     | 0     | -     | 2     | -          | 3     |
| P   | 96.11 | 84.14 | 88.32 | 75.61 | 92.33 | 92.58 | -     | -          | -     |
|     | 20    | 12    | 6     | 1     | 5     | 8     | -     | -          | -     |
| A   | 90.02 | 88.24 | 77.87 | 98.96 | -     | -     | -     | -          | 59.85 |
|     | 11    | 12    | 2     | 1     | -     | -     | -     | -          | 12    |
| DK  | 93.97 | 96.99 | 95.43 | 94.12 | -     | 93.33 | -     | 54.06      | 86.67 |
|     | 6     | 7     | 8     | 1     | -     | 1     | -     | 4          | 1     |
| L   | 63.03 | 96.40 | 71.31 | -     | -     | -     | 78.35 | -          | -     |
|     | 3     | 3     | 3     | -     | -     | -     | 1     | -          | -     |

Notes: See Table A9.

**TABLE A13. Discipline index for votes on Banking and Finance**

|     | PES   | EPP   | ELDR  | GR    | GAUL  | LEFT  | RAD   | ANTI-EU | NA    |
|-----|-------|-------|-------|-------|-------|-------|-------|---------|-------|
| F   | 93.45 | 89.29 | 91.61 | 98.53 | 95.62 | 91.43 | 94.46 | 88.31   | 85.72 |
|     | 41    | 21    | 11    | 18    | 33    | 9     | 14    | 15      | 14    |
| UK  | 94.26 | 84.80 | 98.93 | -     | -     | -     | 95.69 | 80.65   | 75.86 |
|     | 72    | 39    | 2     | -     | -     | -     | 3     | 1       | 1     |
| I   | 93.91 | 91.17 | 96.19 | 92.23 | 92.18 | 86.66 | 100   | -       | 72.94 |
|     | 35    | 48    | 7     | 12    | 25    | 14    | 3     | -       | 18    |
| IRL | 96.51 | 96.55 | 93.15 | 93.24 | 92.84 | 87.86 | -     | -       | -     |
|     | 2     | 4     | 2     | 3     | 11    | 2     | -     | -       | -     |
| FIN | 98.89 | 95.97 | 93.38 | 88.06 | -     | 79.95 | -     | -       | -     |
|     | 6     | 9     | 9     | 1     | -     | 3     | -     | -       | -     |
| S   | 85.96 | 96.92 | 89.86 | 86.81 | -     | 77.87 | -     | -       | -     |
|     | 16    | 7     | 4     | 4     | -     | 4     | -     | -       | -     |
| D   | 97.40 | 97.96 | 89.86 | 88.68 | -     | -     | -     | 93.59   | 100   |
|     | 54    | 62    | 6     | 17    | -     | -     | -     | 5       | 1     |
| GR  | 93.95 | 94.50 | -     | -     | 81.38 | 91.24 | -     | -       | -     |
|     | 21    | 17    | -     | -     | 3     | 5     | -     | -       | -     |
| NL  | 97.54 | 95.24 | 96.26 | 99.24 | 81.90 | -     | -     | 77.45   | -     |
|     | 12    | 12    | 11    | 3     | 2     | -     | -     | 3       | -     |
| E   | 93.72 | 98.04 | 88.18 | 86.93 | 95.65 | 91.15 | 98.57 | -       | 79.17 |
|     | 35    | 44    | 8     | 5     | 1     | 11    | 4     | -       | 3     |
| B   | 94.42 | 97.22 | 93.77 | 98.62 | -     | -     | 93.83 | -       | 88.64 |
|     | 12    | 10    | 10    | 4     | -     | -     | 2     | -       | 3     |
| P   | 94.42 | 95.44 | 92.56 | 59.15 | 89.07 | 94.27 | -     | -       | -     |
|     | 20    | 11    | 6     | 1     | 5     | 7     | -     | -       | -     |
| A   | 98.23 | 95.47 | 100   | 97.22 | -     | -     | -     | -       | 79.23 |
|     | 11    | 12    | 2     | 1     | -     | -     | -     | -       | 12    |
| DK  | 88.69 | 96.47 | 94.59 | 51.43 | -     | 100   | -     | 80.70   | 42.31 |
|     | 6     | 7     | 8     | 1     | -     | 1     | -     | 4       | 1     |
| L   | 94.16 | 92.91 | 96.77 | -     | -     | -     | 80    | -       | -     |
|     | 3     | 3     | 3     | -     | -     | -     | 1     | -       | -     |

Notes: See Table A9.

**TABLE A14. Discipline index for votes on Drugs**

|     | PES   | EPP   | ELDR  | GR    | GAUL  | LEFT  | RAD   | ANTI-EU NA |       |
|-----|-------|-------|-------|-------|-------|-------|-------|------------|-------|
| F   | 88.95 | 82.97 | 81.71 | 99.32 | 94.08 | 90.03 | 94.79 | 90.44      | 96.10 |
|     | 40    | 20    | 11    | 18    | 32    | 9     | 14    | 15         | 14    |
| UK  | 91.11 | 82.23 | 92.09 | -     | -     | -     | 86.52 | 77.05      | 85.71 |
|     | 72    | 39    | 2     | -     | -     | -     | 3     | 1          | 1     |
| I   | 88.03 | 91.72 | 86.40 | 98.29 | 90.12 | 91.54 | 98.15 | -          | 77.41 |
|     | 35    | 47    | 7     | 12    | 25    | 14    | 3     | -          | 17    |
| IRL | 80.07 | 92.59 | 88.12 | 74.23 | 86.70 | 95.45 | -     | -          | -     |
|     | 2     | 4     | 2     | 3     | 11    | 2     | -     | -          | -     |
| FIN | 87.83 | 86.46 | 80.56 | 96.49 | -     | 59.72 | -     | -          | -     |
|     | 6     | 9     | 9     | 1     | -     | 3     | -     | -          | -     |
| S   | 63.32 | 75.63 | 72.53 | 74.09 | -     | 40.97 | -     | -          | -     |
|     | 16    | 7     | 4     | 4     | -     | 4     | -     | -          | -     |
| D   | 93.67 | 94.55 | 87.37 | 93.83 | -     | -     | -     | 89.46      | 62.50 |
|     | 54    | 62    | 6     | 17    | -     | -     | -     | 5          | 1     |
| GR  | 82.70 | 92.50 | -     | -     | 90.43 | 85.40 | -     | -          | -     |
|     | 21    | 17    | -     | -     | 3     | 5     | -     | -          | -     |
| NL  | 97.34 | 95.57 | 87.86 | 98.43 | 57.85 | -     | -     | 63.21      | -     |
|     | 12    | 12    | 11    | 3     | 2     | -     | -     | 3          | -     |
| E   | 90.96 | 92.84 | 78.24 | 86.26 | 100   | 95.43 | 96.43 | -          | 33.33 |
|     | 35    | 44    | 8     | 5     | 1     | 11    | 4     | -          | 3     |
| B   | 94.18 | 94.27 | 82.92 | 99.38 | -     | -     | 92.24 | -          | 93.27 |
|     | 12    | 10    | 10    | 4     | -     | -     | 2     | -          | 3     |
| P   | 89.86 | 82.14 | 76.17 | 100   | 96.14 | 84.52 | -     | -          | -     |
|     | 19    | 11    | 6     | 1     | 5     | 7     | -     | -          | -     |
| A   | 92.49 | 87.08 | 84.34 | 96.08 | -     | -     | -     | -          | 77.67 |
|     | 11    | 12    | 2     | 1     | -     | -     | -     | -          | 12    |
| DK  | 95.14 | 95.95 | 76.26 | 70.83 | -     | 75    | -     | 72.27      | 84.21 |
|     | 6     | 7     | 8     | 1     | -     | 1     | -     | 4          | 1     |
| L   | 97.18 | 92.65 | 95.45 | -     | -     | -     | 82.35 | -          | -     |
|     | 3     | 3     | 3     | -     | -     | -     | 1     | -          | -     |

Notes: See Table A9.

**TABLE A15. Discipline index for votes on Services**

|     | PES   | EPP   | ELDR  | GR    | GAUL  | LEFT  | RAD   | ANTI-EU NA |       |
|-----|-------|-------|-------|-------|-------|-------|-------|------------|-------|
| F   | 96.34 | 92.16 | 88.79 | 99.21 | 98.12 | 88.86 | 99.59 | 86.84      | 95.99 |
|     | 41    | 21    | 11    | 18    | 31    | 9     | 14    | 14         | 14    |
| UK  | 99.37 | 89.95 | 91.18 | -     | -     | -     | 98.78 | 75.86      | 72.73 |
|     | 72    | 39    | 2     | -     | -     | -     | 2     | 1          | 1     |
| I   | 96.30 | 92.44 | 95.46 | 95.06 | 97.31 | 95.52 | 97.73 | -          | 84.77 |
|     | 34    | 47    | 7     | 12    | 25    | 13    | 3     | -          | 18    |
| IRL | 100   | 97.86 | 85.05 | 95.83 | 90.75 | 88.89 | -     | -          | -     |
|     | 2     | 4     | 2     | 3     | 11    | 2     | -     | -          | -     |
| FIN | 100   | 97.21 | 99.32 | 100   | -     | 93.33 | -     | -          | -     |
|     | 6     | 9     | 9     | 1     | -     | 3     | -     | -          | -     |
| S   | 92.08 | 97.24 | 96.66 | 80.60 | -     | 90.74 | -     | -          | -     |
|     | 14    | 7     | 4     | 4     | -     | 4     | -     | -          | -     |
| D   | 98.30 | 99    | 87.14 | 96.96 | -     | -     | -     | 72.39      | 81.82 |
|     | 54    | 62    | 6     | 16    | -     | -     | -     | 5          | 1     |
| GR  | 98.06 | 97.61 | -     | -     | 79.32 | 93    | -     | -          | -     |
|     | 21    | 17    | -     | -     | 3     | 5     | -     | -          | -     |
| NL  | 96.49 | 96.45 | 98.59 | 100   | 72.44 | -     | -     | 75.50      | -     |
|     | 12    | 12    | 11    | 3     | 2     | -     | -     | 3          | -     |
| E   | 97.46 | 99    | 86.19 | 82.59 | 100   | 97.27 | 100   | -          | 100   |
|     | 35    | 44    | 8     | 5     | 1     | 11    | 3     | -          | 3     |
| B   | 98.20 | 98.98 | 94.45 | 100   | -     | -     | 95    | -          | 94.93 |
|     | 12    | 10    | 10    | 4     | -     | -     | 1     | -          | 3     |
| P   | 95.50 | 83.47 | 84.60 | 53.85 | 90    | 91.19 | -     | -          | -     |
|     | 19    | 11    | 6     | 1     | 5     | 7     | -     | -          | -     |
| A   | 99.04 | 97.97 | 97.79 | 100   | -     | -     | -     | -          | 91.19 |
|     | 11    | 12    | 2     | 1     | -     | -     | -     | -          | 12    |
| DK  | 94.53 | 97.74 | 98.01 | -     | -     | 50    | -     | 75.28      | 66.67 |
|     | 6     | 7     | 8     | -     | -     | 1     | -     | 4          | 1     |
| L   | 98.66 | 98.55 | 95.12 | -     | -     | -     | 100   | -          | -     |
|     | 3     | 3     | 3     | -     | -     | -     | 1     | -          | -     |

Notes: See Table A9.

**TABLE A16. Discipline index for votes on Human Beings**

|     | PES   | EPP   | ELDR  | GR    | GAUL  | LEFT  | RAD   | ANTI-EU NA |       |
|-----|-------|-------|-------|-------|-------|-------|-------|------------|-------|
| F   | 95.49 | 92.99 | 88.69 | 98.63 | 92.77 | 96.91 | 97.17 | 93.29      | 91.16 |
|     | 41    | 21    | 13    | 19    | 33    | 9     | 14    | 15         | 14    |
| UK  | 96.38 | 90    | 97.04 | -     | -     | -     | 91.84 | 75.63      | 71.60 |
|     | 72    | 39    | 2     | -     | -     | -     | 3     | 1          | 1     |
| I   | 96.32 | 93.91 | 90.66 | 94.87 | 85.65 | 97.17 | 61.26 | -          | 77.95 |
|     | 35    | 48    | 7     | 13    | 25    | 14    | 3     | -          | 18    |
| IRL | 96.33 | 96.69 | 90.98 | 90.84 | 90.64 | 91.74 | -     | -          | -     |
|     | 2     | 4     | 2     | 3     | 11    | 2     | -     | -          | -     |
| FIN | 98.99 | 90.58 | 94.44 | 98.10 | -     | 95.06 | -     | -          | -     |
|     | 6     | 9     | 10    | 1     | -     | 4     | -     | -          | -     |
| S   | 93.72 | 95.13 | 82.27 | 96.39 | -     | 86.07 | -     | -          | -     |
|     | 16    | 7     | 4     | 4     | -     | 4     | -     | -          | -     |
| D   | 97.57 | 96.88 | 88.10 | 96.53 | -     | -     | -     | 93.75      | 76.56 |
|     | 54    | 64    | 6     | 17    | -     | -     | -     | 5          | 1     |
| GR  | 97.63 | 96.50 | -     | -     | 87.62 | 95.73 | -     | -          | -     |
|     | 21    | 17    | -     | -     | 3     | 5     | -     | -          | -     |
| NL  | 97.35 | 94.27 | 95.28 | 98.45 | 84.03 | -     | -     | 86.05      | -     |
|     | 12    | 12    | 11    | 3     | 2     | -     | -     | 3          | -     |
| E   | 97.67 | 95.80 | 89.12 | 87.74 | 100   | 97.21 | 90.40 | -          | 17.78 |
|     | 35    | 44    | 9     | 5     | 1     | 11    | 4     | -          | 3     |
| B   | 96.26 | 95.41 | 94.05 | 99.53 | -     | -     | 93.84 | -          | 90.37 |
|     | 12    | 10    | 10    | 4     | -     | -     | 2     | -          | 3     |
| P   | 97.49 | 89.98 | 85.48 | 85.31 | 91.69 | 94.60 | -     | -          | -     |
|     | 20    | 11    | 6     | 1     | 5     | 7     | -     | -          | -     |
| A   | 91.93 | 94.18 | 91.54 | 98.69 | -     | -     | -     | -          | 76.22 |
|     | 11    | 12    | 2     | 1     | -     | -     | -     | -          | 12    |
| DK  | 96    | 95.59 | 92.12 | 73.53 | -     | 88.10 | -     | 52.72      | 48.65 |
|     | 6     | 7     | 8     | 1     | -     | 1     | -     | 4          | 1     |
| L   | 98.18 | 96.39 | 81.49 | -     | -     | -     | 89.66 | -          | -     |
|     | 3     | 3     | 4     | -     | -     | -     | 1     | -          | -     |

Notes: See Table A9.

**TABLE A17. Discipline index for votes on Security**

|     | PES   | EPP   | ELDR  | GR    | GAUL  | LEFT  | RAD   | ANTI-EU NA |       |
|-----|-------|-------|-------|-------|-------|-------|-------|------------|-------|
| F   | 92.93 | 93.78 | 88.73 | 99.66 | 93.53 | 93.90 | 96.13 | 88.60      | 90.75 |
|     | 40    | 21    | 11    | 19    | 30    | 9     | 14    | 15         | 13    |
| UK  | 94.40 | 95.37 | 99.03 | -     | -     | -     | 89.63 | 75.68      | 76.47 |
|     | 72    | 39    | 2     | -     | -     | -     | 3     | 1          | 1     |
| I   | 98.84 | 95.64 | 96.51 | 96.65 | 75.47 | 96.54 | 96.58 | -          | 74.70 |
|     | 35    | 47    | 7     | 12    | 25    | 14    | 3     | -          | 18    |
| IRL | 97.07 | 97.03 | 92.96 | 84.19 | 83.64 | 91.41 | -     | -          | -     |
|     | 2     | 4     | 2     | 3     | 11    | 2     | -     | -          | -     |
| FIN | 98.69 | 92.78 | 93.88 | 98.88 | -     | 83.34 | -     | -          | -     |
|     | 6     | 9     | 9     | 1     | -     | 3     | -     | -          | -     |
| S   | 89.12 | 97.49 | 87.25 | 79.82 | -     | 74.78 | -     | -          | -     |
|     | 15    | 7     | 4     | 4     | -     | 3     | -     | -          | -     |
| D   | 96.04 | 97.65 | 94.31 | 95.96 | -     | -     | -     | 95.15      | 97.37 |
|     | 54    | 63    | 6     | 17    | -     | -     | -     | 5          | 1     |
| GR  | 98.45 | 98.70 | -     | -     | 90.65 | 93.60 | -     | -          | -     |
|     | 21    | 17    | -     | -     | 3     | 5     | -     | -          | -     |
| NL  | 97.61 | 98.94 | 97.79 | 98.84 | 81.21 | -     | -     | 81.48      | -     |
|     | 12    | 12    | 11    | 3     | 2     | -     | -     | 3          | -     |
| E   | 97.49 | 96.66 | 90.78 | 86.07 | 100   | 96.54 | 92.41 | -          | 70.83 |
|     | 35    | 44    | 9     | 5     | 1     | 11    | 4     | -          | 3     |
| B   | 94.64 | 98.11 | 94.60 | 99.06 | -     | -     | 87.39 | -          | 87.46 |
|     | 12    | 10    | 10    | 4     | -     | -     | 2     | -          | 3     |
| P   | 97.83 | 95.01 | 91.78 | 76.67 | 83.63 | 91.51 | -     | -          | -     |
|     | 19    | 11    | 6     | 1     | 5     | 7     | -     | -          | -     |
| A   | 93.62 | 95.70 | 97.62 | 97.73 | -     | -     | -     | -          | 88.12 |
|     | 11    | 12    | 2     | 1     | -     | -     | -     | -          | 12    |
| DK  | 94.59 | 95.97 | 92.90 | 51.52 | -     | -     | -     | 75.49      | 80    |
|     | 6     | 7     | 8     | 1     | -     | -     | -     | 4          | 1     |
| L   | 94.65 | 97.15 | 99.55 | -     | -     | -     | 95.20 | -          | -     |
|     | 3     | 3     | 3     | -     | -     | -     | 1     | -          | -     |

Notes: See Table A9.

**TABLE A18. Discipline index for votes on Nature**

|     | PES   | EPP   | ELDR  | GR    | GAUL  | LEFT  | RAD   | ANTI-EU NA |       |
|-----|-------|-------|-------|-------|-------|-------|-------|------------|-------|
| F   | 94.79 | 83.55 | 83.03 | 98.75 | 96.02 | 94.69 | 95.86 | 80.95      | 91.97 |
|     | 40    | 21    | 12    | 19    | 33    | 9     | 14    | 15         | 14    |
| UK  | 97.31 | 84.16 | 95.90 | -     | -     | -     | 94.14 | 67.14      | 68    |
|     | 72    | 39    | 2     | -     | -     | -     | 3     | 1          | 1     |
| I   | 93.26 | 91.29 | 73.07 | 98.53 | 89.97 | 95.57 | 85.28 | -          | 78.86 |
|     | 35    | 46    | 7     | 12    | 25    | 14    | 3     | -          | 18    |
| IRL | 99.19 | 94    | 88.39 | 91.92 | 85.48 | 93.13 | -     | -          | -     |
|     | 2     | 4     | 2     | 3     | 11    | 2     | -     | -          | -     |
| FIN | 95.45 | 91.92 | 97.67 | 99.50 | -     | 95.92 | -     | -          | -     |
|     | 6     | 9     | 10    | 1     | -     | 4     | -     | -          | -     |
| S   | 90.02 | 98.79 | 95.69 | 99.33 | -     | 97.26 | -     | -          | -     |
|     | 16    | 7     | 4     | 4     | -     | 4     | -     | -          | -     |
| D   | 94.85 | 96.81 | 89.84 | 97.52 | -     | -     | -     | 88.21      | 75.68 |
|     | 54    | 62    | 6     | 17    | -     | -     | -     | 5          | 1     |
| GR  | 93.79 | 94.93 | -     | -     | 87.49 | 95.76 | -     | -          | -     |
|     | 21    | 17    | -     | -     | 3     | 5     | -     | -          | -     |
| NL  | 95.85 | 97.01 | 93.29 | 99.45 | 84.04 | -     | -     | 71.54      | -     |
|     | 12    | 12    | 11    | 3     | 2     | -     | -     | 3          | -     |
| E   | 92.50 | 90.90 | 83.21 | 91.01 | 100   | 95.87 | 97.61 | -          | 85.71 |
|     | 35    | 44    | 9     | 5     | 1     | 11    | 4     | -          | 3     |
| B   | 95.85 | 96.63 | 82.17 | 99.30 | -     | -     | 95.56 | -          | 83.58 |
|     | 12    | 10    | 10    | 4     | -     | -     | 2     | -          | 3     |
| P   | 95.56 | 85.65 | 88.64 | 91.30 | 92.05 | 94.75 | -     | -          | -     |
|     | 19    | 11    | 6     | 1     | 5     | 7     | -     | -          | -     |
| A   | 93.83 | 89.52 | 98.23 | 100   | -     | -     | -     | -          | 68.40 |
|     | 11    | 12    | 2     | 1     | -     | -     | -     | -          | 12    |
| DK  | 93.90 | 94.86 | 93.14 | 88.89 | -     | 92.59 | -     | 71.25      | 76.92 |
|     | 6     | 7     | 8     | 1     | -     | 1     | -     | 4          | 1     |
| L   | 97.60 | 95.04 | 93.56 | -     | -     | -     | 88.52 | -          | -     |
|     | 3     | 3     | 3     | -     | -     | -     | 1     | -          | -     |

Notes: See Table A9.

**TABLE A19. Discipline index for votes on Legal System**

|     | PES   | EPP   | ELDR  | GR    | GAUL  | LEFT  | RAD   | ANTI-EU NA |       |
|-----|-------|-------|-------|-------|-------|-------|-------|------------|-------|
| F   | 93.80 | 90.92 | 92.12 | 97.91 | 93.60 | 94.61 | 97.86 | 92.15      | 97.50 |
|     | 39    | 21    | 12    | 18    | 31    | 9     | 14    | 15         | 14    |
| UK  | 90.80 | 85.17 | 95.42 | -     | -     | -     | 92.32 | 70.48      | 25    |
|     | 71    | 39    | 2     | -     | -     | -     | 2     | 1          | 1     |
| I   | 93.45 | 94.20 | 92.29 | 94.87 | 84.79 | 95.87 | 98.32 | -          | 65.62 |
|     | 34    | 46    | 7     | 11    | 25    | 14    | 3     | -          | 17    |
| IRL | 86.86 | 95.59 | 91.54 | 94.42 | 89.39 | 94.23 | -     | -          | -     |
|     | 2     | 4     | 2     | 3     | 11    | 2     | -     | -          | -     |
| FIN | 93.21 | 93.68 | 93.54 | 98.90 | -     | 97.81 | -     | -          | -     |
|     | 6     | 9     | 9     | 1     | -     | 3     | -     | -          | -     |
| S   | 47.94 | 83.26 | 62.85 | 92.93 | -     | 93.77 | -     | -          | -     |
|     | 13    | 7     | 4     | 4     | -     | 4     | -     | -          | -     |
| D   | 91.16 | 97.96 | 90.70 | 95.39 | -     | -     | -     | 88.05      | 91.30 |
|     | 54    | 62    | 6     | 16    | -     | -     | -     | 5          | 1     |
| GR  | 94.28 | 94.35 | -     | -     | 95.18 | 92.62 | -     | -          | -     |
|     | 21    | 17    | -     | -     | 3     | 5     | -     | -          | -     |
| NL  | 92.41 | 96.86 | 95.14 | 97.94 | 79.46 | -     | -     | 89.31      | -     |
|     | 12    | 12    | 10    | 2     | 2     | -     | -     | 3          | -     |
| E   | 94.92 | 97.53 | 80.92 | 85.92 | 100   | 96.50 | 96.71 | -          | 50    |
|     | 35    | 44    | 8     | 5     | 1     | 11    | 3     | -          | 2     |
| B   | 89    | 98.01 | 91.58 | 98.76 | -     | -     | 90.48 | -          | 95.30 |
|     | 12    | 10    | 10    | 4     | -     | -     | 1     | -          | 3     |
| P   | 94.49 | 89.26 | 95.78 | 53.06 | 94.90 | 96.61 | -     | -          | -     |
|     | 18    | 11    | 6     | 1     | 5     | 7     | -     | -          | -     |
| A   | 72    | 93.69 | 84.26 | 100   | -     | -     | -     | -          | 83.55 |
|     | 11    | 12    | 2     | 1     | -     | -     | -     | -          | 12    |
| DK  | 91.81 | 94.73 | 95.89 | 73.33 | -     | 87.50 | -     | 80.07      | 69.57 |
|     | 6     | 7     | 8     | 1     | -     | 1     | -     | 4          | 1     |
| L   | 91.04 | 93.74 | 64.95 | -     | -     | -     | 90    | -          | -     |
|     | 3     | 3     | 3     | -     | -     | -     | 1     | -          | -     |

Notes: See Table A9.

**PART VII: The Poole-Rosenthal Spatial Model**

In section 3 of the paper, we present results from the so-called spatial model of voting. Here we provide details on the precise statistical techniques used.

The spatial model assumes that each legislator  $i$  ( $i=1, \dots, p$ ) has an ideal position or bliss point ( $x_i$ ) on different dimensions of a multi-dimensional policy space with  $s$  denoting the number of policy dimensions ( $k=1, \dots, s$ ). It also assumes that in this space each roll call vote  $j$  ( $j=1, \dots, q$ ) is represented by two points ( $z_{j,yes}$  and  $z_{j,no}$ ) corresponding to the policy consequences of the voting outcomes (i.e. the ‘yes’ and ‘no’

outcomes). The legislator’s utility has two components, a deterministic and a stochastic component. For example, legislator  $i$ ’s utility when voting on roll call  $j$  can be represented by

$$u(x_i, z_j) = f(\mathbf{d}(x_i, z_j)) + \mathbf{e}_{ij}$$

where  $\mathbf{d}(x_i, z_j)$  is the distance between the ideal point of legislator and the vote outcome.

The first term on the right-hand side of this equation, the deterministic component of the utility, is a negative function of the distance between the legislator’s ideal point and the ‘yes’ and ‘no’ outcomes of the vote. Therefore, the legislator is assumed to choose the vote (yes or no) closest to his or her ideal point alternative. The second term on the right-hand side of the equation is the stochastic component or the error term. It is a random variable and captures the effect of idiosyncratic ‘shock’ specific to legislator  $i$  when voting on roll call  $j$ , (i.e. the omitted attributes affecting the legislator’s choice). There is a big debate among political scientist about whether the method purely picks up legislators’ preferences or whether party pressures are also picked up in the analysis. We need not be concerned with that question here as we are using the Poole and Rosenthal methodology mainly to scale voting behavior in a multi-dimensional space.

To estimate the spatial model, one must define a specific functional form for the deterministic component of the utility function and a probability distribution for the error term. Poole and Rosenthal (1997) have developed a procedure called NOMINATE to estimate the spatial model of roll call voting. NOMINATE postulates a bell-shape utility function for the deterministic part of the utility and a logit distribution for the error component.

$$u(x_i, z_j) = \mathbf{b} \cdot e^{-\sum_{k=1}^s (x_{ik} - z_{jk})^2} + \mathbf{e}_{ij}$$

where  $\mathbf{b}$  is a constant common to all legislators and acts as a signal-to-noise ratio. More specifically, the utility of legislator  $i$  voting “yes” on roll call  $j$  is given by (the utility of voting “no” is defined similarly)

$$U_{ij,yes} \equiv u(x_i, z_{j,yes}) = \mathbf{b} \cdot e^{-\sum_{k=1}^s (x_{ik} - z_{jk,yes})^2} + \mathbf{e}_{ij,yes}$$

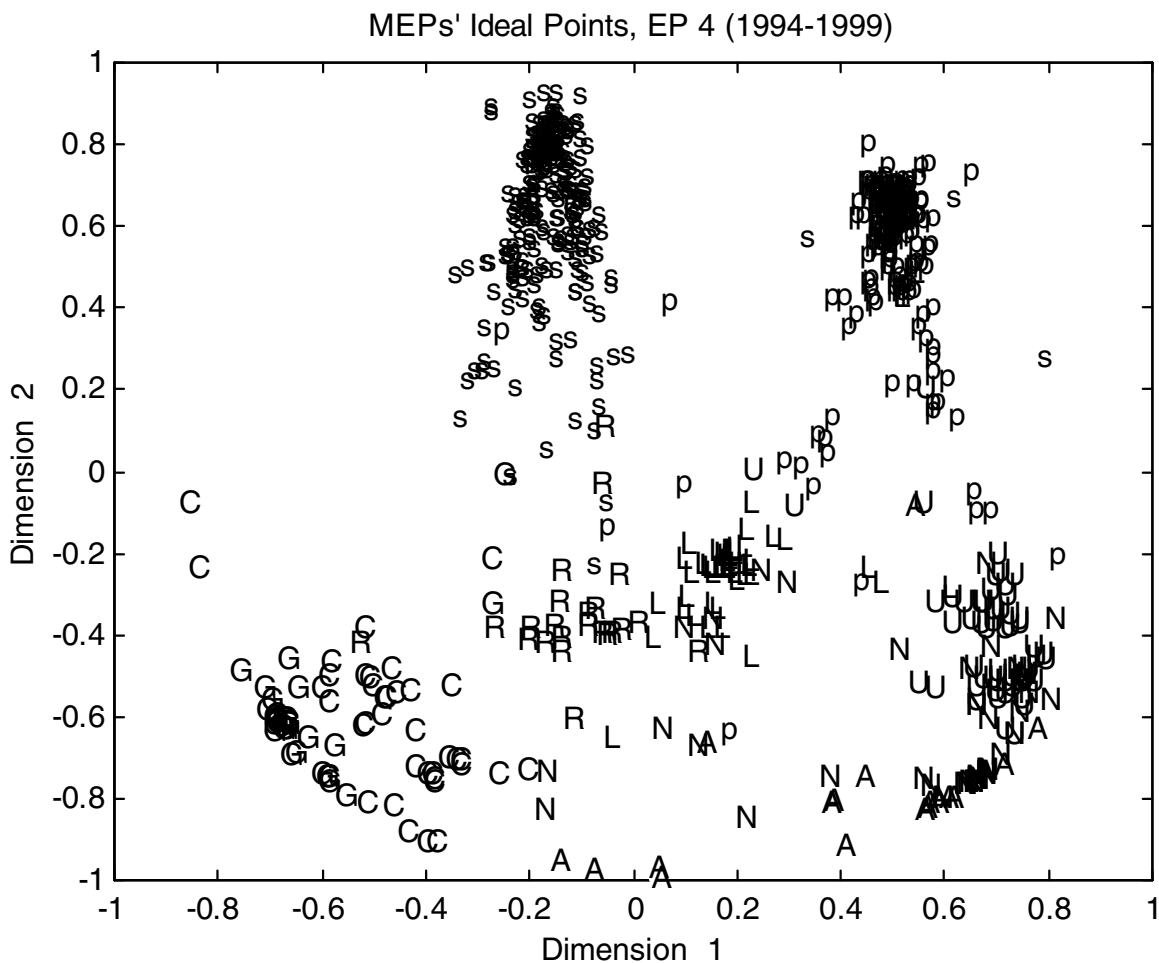
A rational legislator  $i$  will vote “yes” on roll call  $j$  if and only if  $U_{ij,yes} > U_{ij,no}$ . To simplify it is assumed that ties are zero-probability events. Given the assumption that the error terms have a logit distribution, one can compute the probability of voting “yes” and “no”. Assuming moreover that the error terms are independently distributed, the likelihood function is given by the product of probabilities. Then after computing the starting values, by using an optimization algorithm one can estimate the parameters of the model (i.e. the ideal points, the constant and the “yes” and “no” outcomes of roll call votes). Given that there are a large number of parameters to be estimated and the utility

function is bell-shaped, it uses a three-step estimation algorithm.<sup>1</sup> As far as the interpretation of dimensions are concerned, NOMINATE is very similar to standard factor models.

## PART VIII. DETAILED RESULTS FROM THE SPATIAL ANALYSIS

In the text we report the main results from Noury (2002). For completeness, we here provide more detailed results from the spatial analysis.

**FIGURE A1. The ideal positions of MEPs on a two-dimensional space.**



Notes: Symbols representing MEPs are as follows: 's'= PES, 'p'=EPP, 'L'=ELDR, 'G'=GR, 'C'=LEFT, 'U'=GAUL, 'R'=RAD, 'A'=ANTI-EU, 'N'=NA. Source: Noury (2002)

<sup>1</sup> Note that in the EP there are thousands of parameters to be estimated as there are 626 MEP and more than 2700 votes in each legislature.

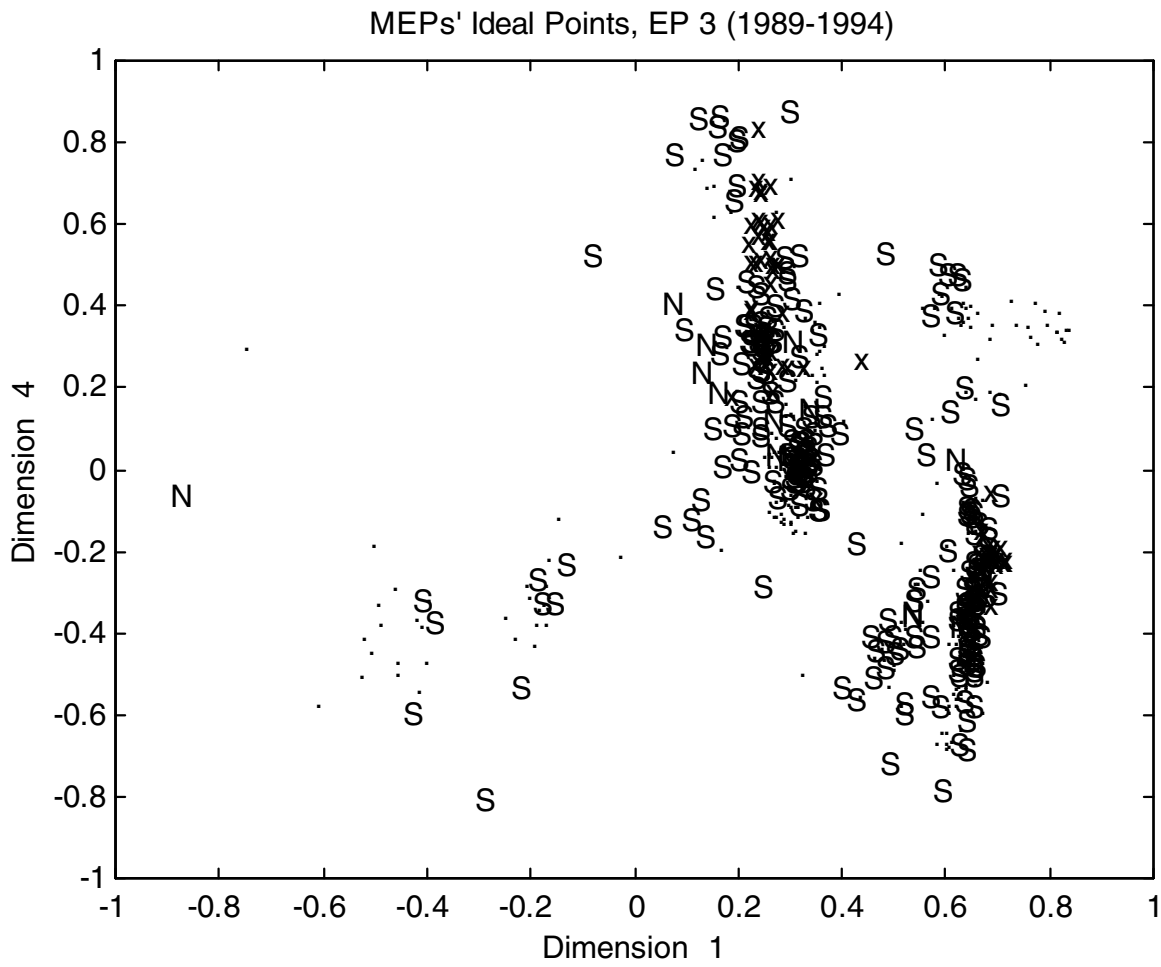
Different statistical criteria that measure the goodness-of-fit of the estimates suggest that there are at least two dimensions to the EU policy space. The first dimension that predicts correctly about 90% of MEP votes can easily be interpreted as the traditional left-right dimension. All left-wing parties (PES, GR, LEFT) are located on the left-hand side of the space, whereas right-wing parties (EPP, ELDR, GAUL) are on the opposite side. The second dimension adds only 2% more correct vote prediction and can also easily be interpreted as related to European integration. Parties in favour of European integration are located on the upper part of the space whereas anti-Europeans are located on the lower part.

Figure A1 gives the scaling of individual MEPs in this two-dimensional space for the fourth Parliament. It is quite telling and shows clearly the left-right divide in the first dimension and the pro-anti European on the second dimension with the pro-integration PES and EPP on top and the anti-integration LEFT and GR on the LEFT and the ANTI-EUR and GAUL on the right. Note the pivotal position of the liberals in the centre of the political spectrum.

Higher dimensions than those first two not only explain a negligible fraction of votes but they are not easily interpretable. This is particularly the case for the third parliament. For the fourth parliament however, we find a third and fourth dimensions that have a sensible interpretation, though still remaining unimportant, i.e. predicting only respectively 0.8 and 1.2% more correct votes. In these dimensions MEPs from Nordic countries tend to be in opposition with Southern European MEPs.

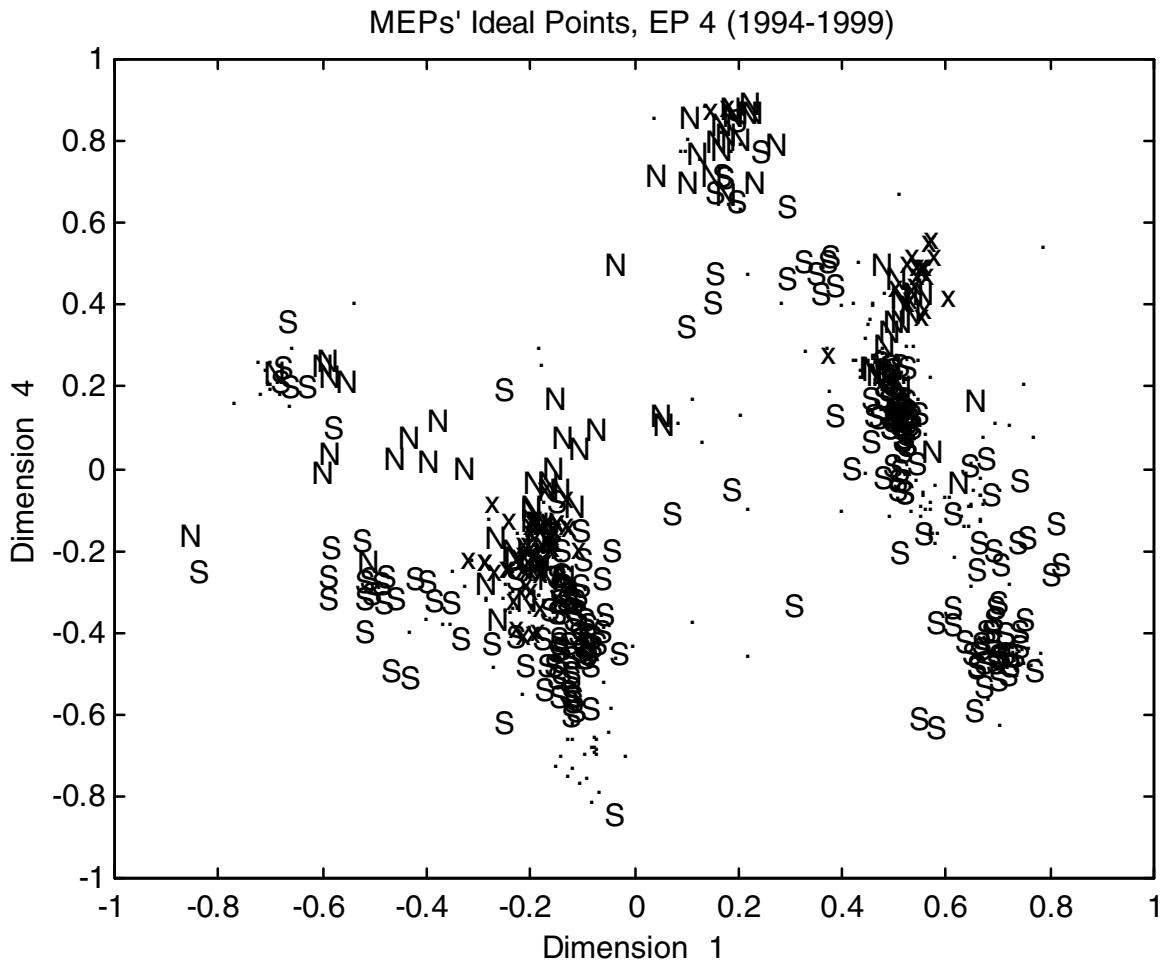
Figure A2 and A3 plot the first and fourth dimension for the third and the fourth parliament. MEPs from Nordic countries (Sweden, Finland, Denmark) are indicated with an ‘N’, MEPs from the poorer and Southern countries with an ‘S’ (Spain, Portugal, Greece, Ireland and Italy), MEPs from the UK with an ‘X’ and MEPs from all other countries with a dot. The projection for the Third Parliament does not show any particular sorting of MEPs in the North-South dimension whereas the Third Parliament clearly does show such a sorting with Nordic MEPs in the top and Southern MEPs below. Thus, enlargement to Nordic countries did lead to the crystallization of a North-South dimension. This dimension is however very modest compared to the left-right dimension. While the latter correctly predicts 90% of votes, the former adds a mere 1.2% to the fit measured by correct classification scores.

**FIGURE A2. The first and fourth dimensions, 3<sup>rd</sup> Parliament.**



Notes: Symbols representing MEPs as follows: 'S'= Southern MEPs, 'N'=Northern MEPs, 'x'=UK Members.  
'.'=other Members

FIGURE A3. The first and fourth dimensions, 4<sup>th</sup> Parliament.



Notes: Symbols representing MEPs as follows: 'S'= Southern MEPs, 'N'=Northern MEPs, 'x'=UK Members.  
'.'=other Members

## **PART IX. Votes of Censure on the Santer Commission.**

The EP has always had the right to censure the Commission but it is only in recent years, under the Santer commission, that it has tried to use that right.

The first attempt at bringing the Commission down was in relation with the BSE or mad cow disease in February 1997. After voting a resolution very critical of the Commission's attitude towards the BSE crisis in August 1996, the EP reconvened in February to discuss the results of the official inquiry of the Commission's handling of the BSE crisis. A resolution was tabled supported by PES, EPP, ELDR, GR and GAUL. The resolution instructs the Commission to follow up seriously the conclusions of the Committee by November and threatens otherwise with a vote of censure after that. The resolution was adopted by near unanimity (422 for, 49 against and 48 abstentions). The vote of the motion had been put on the agenda before the vote of censure proposed by Belgian socialist Happart. The vote of censure nevertheless attracted a surprising 117 votes in favor, 326 votes against and 15 abstentions. This was nevertheless a very split vote without a majority in any group or country coming up in favor. However, there was a substantial support for the motion, with ELDR and LEFT voting more or less one to one in favor while PES, EPP and GR voted more or less one to three in favor. Note that 15 out of 47 U.K. representatives voted in favor. Only the deputies from Luxemburg voted against out of solidarity with Santer.

Things became much more serious in January 1999 with the Cresson-Marin crisis, following the reports of mismanagement and diversion of funds in the offices of these two socialist Commissioners. The occasion was the refusal of discharge of the 1996 budget by the Parliament because of those scandals. Two resolutions were on the table, one put forward by EPP (Martens), ELDR (Cox) and GR (Aelvoet), the other one was put forward by the socialists, the left and the radicals. The former explicitly asked for the resignation of Cresson and Marin, the latter called for a committee of experts to examine questions of fraud and calls for changes in the administrative culture of the Commission and other measures. The first vote taken was on a request of GR to vote on the motion of censure before voting on the various resolutions. The Greens (Telkämper) argued that the vote was the most important one and that votes on the resolutions first would divide the EP. The socialists (Green) spoke against by invoking past procedural experience, as in the BSE motion of censure. The motion was rejected by 429 votes against 99 and 14 abstentions. The Greens voted *en bloc* in favor, the non affiliated and anti-Europeans voted with big majority in favor and LEFT voted the motion with a narrow majority. It was rejected by a large majority of members of other parties. By contrast, one sees that there is no clear pattern in the country votes. A majority of all country groups rejected the motion, following roughly the pattern of the EP as a whole.

**Table A20 Vote on a Green resolution of voting the motion of censure before resolutions on discharge of the 1996 budget.***By Party*

|             | PES | EPP | ELDR | GR | GAUL | LEFT | RAD | ANTI-EU | NA | Eur. Parl. |
|-------------|-----|-----|------|----|------|------|-----|---------|----|------------|
| Yes         | 25  | 3   | 1    | 20 | 2    | 15   | 3   | 13      | 17 | 99         |
| No          | 166 | 154 | 39   | 0  | 36   | 8    | 12  | 4       | 10 | 429        |
| Abs         | 2   | 2   | 1    | 2  | 1    | 4    | 1   | 1       | 0  | 14         |
| No of votes | 193 | 159 | 41   | 22 | 39   | 27   | 16  | 18      | 27 | 542        |

*By Country*

|             | F  | UK | I  | IRL | FIN | S  | D  | GR | NL | E  | B  | P  | A  | DK | L | Eur. Parl. |
|-------------|----|----|----|-----|-----|----|----|----|----|----|----|----|----|----|---|------------|
| Yes         | 24 | 5  | 5  | 2   | 1   | 7  | 30 | 5  | 1  | 1  | 7  | 3  | 6  | 2  | 0 | 99         |
| No          | 41 | 76 | 59 | 12  | 13  | 13 | 56 | 13 | 25 | 54 | 18 | 20 | 13 | 10 | 6 | 429        |
| Abs         | 2  | 0  | 2  | 0   | 0   | 1  | 0  | 2  | 2  | 3  | 0  | 0  | 2  | 0  | 0 | 14         |
| No of votes | 67 | 81 | 66 | 14  | 14  | 21 | 86 | 20 | 28 | 58 | 25 | 23 | 21 | 12 | 6 | 542        |

Notes: For abbreviations see Table A1.

The first resolution (asking explicitly for the resignation) was then put to vote paragraph by paragraph and was rejected in 10 votes. The pattern of those votes (available from the authors) was quite clear. The ELDR, GR and EPP voted in favor with support from others except for PES and RAD who were able to block the votes by a narrow majority. In some votes LEFT sided with PES. The country pattern of votes is less clear but nevertheless somewhat indicative. A narrow majority of deputies in all countries voted in favor but a majority of MEPs from the UK, Italy, Greece, Spain and Luxemburg voted against. This probably mostly reflected the party composition of votes except for Spain and Luxemburg where solidarity with Marin and Santer played a role. There was no French solidarity vote with Cresson. The Italian and Greek votes may indicate a different political culture where the criticisms to Cresson and Marin seemed benign and more part of the day-to-day “realistic” administrative culture in those countries.

The second resolution was then put to vote in three steps. Here the party composition of the vote was substantially different. A majority coalition voted in favor with the PES, LEFT, RAD and GAUL. The EPP was split and so were the liberals. Here again, the country composition reflects mostly the party composition but also with a Mediterranean support and a Nordic opposition. The results can be seen in table A21.

After the adoption of this resolution and an intervention by Santer, the vote on the motion of censure then took place. Leaders of party groups expressed the position of their group. Martens, representing EPP said that EPP deputies should vote with their conscience, de facto not imposing any discipline. Cox for ELDR, Aelvoet for GR, Bonde for ANTI-EU unambiguously called for censure. Patsy for GAUL announced a split vote from his group with the French supporting censure and the Italian, Irish and Portuguese against. Puerta for the LEFT announced that a majority of their group would vote the censure. Lalumière for RAD announced they would vote against. The votes followed

exactly the announcements of the group leaders but cohesion was less than perfect in the case of the liberals. The motion was voted down with a narrow majority. The results of the vote can be seen in table A22.

**TABLE A21. Vote on the resolution on “improving the financial management of the Commission”**

|             | <i>PES</i> | <i>EPP</i> | <i>ELDR</i> | <i>GR</i> | <i>GAUL</i> | <i>LEFT</i> | <i>RAD</i> | <i>ANTI-EU</i> | <i>NA</i> | <i>Eur. Parl.</i> |
|-------------|------------|------------|-------------|-----------|-------------|-------------|------------|----------------|-----------|-------------------|
| Yes         | 174        | 67         | 4           | 2         | 35          | 12          | 13         | 1              | 11        | 319               |
| No          | 3          | 89         | 7           | 18        | 2           | 9           | 2          | 11             | 16        | 157               |
| Abs         | 1          | 7          | 30          | 3         | 3           | 3           | 1          | 6              | 0         | 54                |
| No of votes | 178        | 163        | 41          | 23        | 40          | 24          | 16         | 18             | 27        | 530               |

By Country

|             | <i>F</i> | <i>UK</i> | <i>I</i> | <i>IRL</i> | <i>FIN</i> | <i>S</i> | <i>D</i> | <i>GR</i> | <i>NL</i> | <i>E</i> | <i>B</i> | <i>P</i> | <i>A</i> | <i>DK</i> | <i>L</i> | <i>Eur. Parl.</i> |
|-------------|----------|-----------|----------|------------|------------|----------|----------|-----------|-----------|----------|----------|----------|----------|-----------|----------|-------------------|
| Yes         | 35       | 61        | 58       | 10         | 5          | 7        | 18       | 11        | 13        | 57       | 8        | 19       | 6        | 5         | 6        | 319               |
| No          | 23       | 16        | 5        | 2          | 6          | 11       | 53       | 3         | 4         | 1        | 13       | 4        | 15       | 1         | 0        | 157               |
| Abs         | 5        | 3         | 3        | 2          | 4          | 3        | 3        | 6         | 12        | 1        | 4        | 1        | 0        | 7         | 0        | 54                |
| No of votes | 63       | 80        | 66       | 14         | 15         | 21       | 74       | 20        | 29        | 59       | 25       | 24       | 21       | 13        | 6        | 530               |

Notes: For abbreviations see Table A1.

**TableA22. Vote on the motion of censure for the commission.**

|             | <i>PES</i> | <i>EPP</i> | <i>ELDR</i> | <i>GR</i> | <i>GAUL</i> | <i>LEFT</i> | <i>RAD</i> | <i>ANTI-EU</i> | <i>NA</i> | <i>Eur. Parl.</i> |
|-------------|------------|------------|-------------|-----------|-------------|-------------|------------|----------------|-----------|-------------------|
| Yes         | 38         | 69         | 32          | 24        | 14          | 18          | 4          | 16             | 17        | 232               |
| No          | 157        | 72         | 9           | 0         | 26          | 4           | 13         | 2              | 10        | 293               |
| Abs         | 2          | 21         | 0           | 0         | 2           | 0           | 2          | 0              | 0         | 27                |
| No of votes | 197        | 162        | 41          | 24        | 42          | 22          | 19         | 18             | 27        | 552               |

By Country

|             | <i>F</i> | <i>UK</i> | <i>I</i> | <i>IRL</i> | <i>FND</i> | <i>SW</i> | <i>D</i> | <i>GR</i> | <i>NL</i> | <i>E</i> | <i>B</i> | <i>P</i> | <i>AST</i> | <i>DK</i> | <i>L</i> | <i>Eur. Parl.</i> |
|-------------|----------|-----------|----------|------------|------------|-----------|----------|-----------|-----------|----------|----------|----------|------------|-----------|----------|-------------------|
| Yes         | 39       | 20        | 9        | 3          | 3          | 13        | 86       | 6         | 13        | 1        | 14       | 5        | 11         | 9         | 0        | 232               |
| No          | 28       | 57        | 58       | 11         | 9          | 6         | 6        | 11        | 8         | 52       | 8        | 19       | 10         | 4         | 6        | 293               |
| Abs         | 6        | 3         | 0        | 0          | 3          | 2         | 0        | 3         | 7         | 0        | 3        | 0        | 0          | 0         | 0        | 27                |
| No of votes | 73       | 80        | 67       | 14         | 15         | 21        | 92       | 20        | 28        | 53       | 25       | 24       | 21         | 13        | 6        | 552               |

Notes: For abbreviations see Table A1.

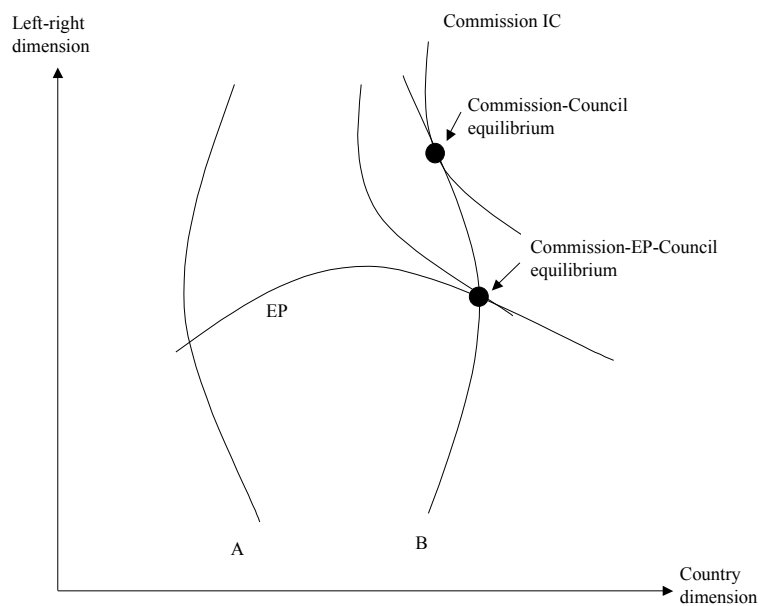
All in all, we see with one of the most dramatic voting sessions in the history of the EP that party group politics played the dominant role. Nevertheless, party discipline was clearly lower than is the case in normal parliamentary politics. One should emphasize that this dramatic example is not one where the traditional left-right dimension is expected to emerge. Thus, the Greens and the Liberals are generally very strongly supportive of transparency and clean government, which is much less the case for the socialists. Country interests nevertheless did not play a substantial role except probably

for the MEPs from Luxemburg and to a smaller extent the MEPs from Spain and Italy. MEPs from Italy voted with large majorities against all motions showing apparent distaste for this kind of public criticism of mismanagement of funds. Note that no country solidarity from France was observed.

## PART X. A MODEL OF WHY MEPS VOTE ALONG IDEOLOGICAL LINES

We suggest here a simple explanation based on the fact that the majority hurdles in the Council are higher than in the EP (qualified majority or unanimity vs. simple majority most of the time). Figure A3 give us an example to do the analysis.

**Figure A3. A model of MEP’s motives**



Assume that the policy space has two dimensions: the country dimension on the horizontal axis and the left-right dimension on the vertical axis. Start first with a situation where there is only the commission and the Council. The Council is assumed to be composed of 2 countries or coalitions of countries: A and B. The curves in the figure represent the indifference curves of the reservation utilities of A and B in the policy space. The space between those 2 indifference curves represents the locus of decisions that improve the utility of A and B. Assume that the preferences of the Commission are

such that its utility increases as policies move to the North-East. In the figure, the commission maximizes therefore its utility by proposing a policy that is tangent to the reservation utility of B. Since the commission has agenda-setting power, that proposal is also the Commission-Council equilibrium depicted in the figure.

Introduce now the EP and assume that the EP can veto a proposal of the Commission before it goes to the Council. The commission's proposals must thus now get approval by both the EP and the Council. It is reasonable to assume that if the EP votes along country lines, the indifference curves of country delegations will be similar (not necessarily the same) to those in the Council. Assume to simplify that A and B are represented 50-50 in the EP. In that case, the previous Commission-Council equilibrium can still go through because it gets the approval of A. Even if the indifference curve of B were somewhat different in the EP than in the Council, it does not matter since the vote of A is sufficient to pass the EP voting hurdle. The reservation utilities in the Council are thus the binding constraint. In other words, the EP has no influence over decision-making when it forms coalitions of countries because the majority hurdle in the Council is higher than in the EP. Assume however that voting takes place along party lines. In that case, Figure 7 shows one possible form for the reservation utility of a majority in the EP (with utility increasing as policy moves to the South of the Figure) along party lines. The EP is now in power to veto the previous equilibrium. The commission must therefore take into account the preferences of a majority in the EP along the left-right dimension. We then have a new equilibrium, the ‘Commission-EP-Council’ equilibrium. The EP can thus influence the legislative process when coalitions are formed along party lines rather than along country lines.

Note that the very simple reasoning behind the Figure is consistent with a high occurrence of unanimity voting in the EP. MEPs form coalitions so as to weigh in the decision-making process via the majorities that form on precise bills. The reasoning also suggests that party cohesion should be stronger in cases where the EP has legislative power compared to the votes where it can exercise no power. In other words, national party delegations have an incentive to create cohesive supranational party groups to mobilize MEPs to vote according to agreed party lines. If MEPs vote purely according to their policy preferences, voting behaviour should not be necessarily more cohesive in cases where the EP has legislative powers. We will test this prediction in the text.

If the above reasoning is true, does it mean that in the absence of supermajorities in the Council, the EP might vote along country lines? If this were the case, we should

observe MEPs vote along country lines in cases where the EP has no power. As the votes where the EP has real power are less numerous than the others, the results of section 3 where party cohesion is stronger than country cohesion do suggest that ideological divisions in the EP are deeper than divisions between countries.