

# EU Conciliation Committee: Council 56 vs. Parliament 6\*

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## Abstract

This paper analyzes bargaining between the European Parliament (EP) and the Council of Ministers (CM) in the Conciliation Committee with the aim of evaluating both institutions' power in the European Union's codecision procedure. In contrast to studies which use conventional power indices, both institutions are assumed to act strategically and differences in their internal decision mechanisms are taken into account. Predicted bargaining outcomes are shown to exhibit a robust bias towards the legislative status quo. Making identical preference assumptions for members of CM and EP, CM turns out to be on average much more conservative because of its internal qualified majority rule. Status quo bias therefore makes CM by an order of magnitude more influential than EP, despite a seemingly symmetric position. EU enlargement under the rules of the Treaty of Nice renders EP almost irrelevant, while lowering the vote threshold in CM would increase both institutions' constructive influence.

**Keywords:** European Union codecision procedure, Conciliation Committee, bargaining, spatial voting, decision procedures

**JEL codes:** C70, C78, D70, D72

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# 1 Introduction

Quantitative studies on influence in the European Union (EU) have traditionally concentrated on the *intra-institutional* balance of power in the EU's main decision-making bodies: Some studies evaluate national and/or political parties' influence in the European Parliament (EP)<sup>1</sup>, the bulk of the literature investigates the distribution of power in the Council of Ministers (CM).<sup>2</sup> Although it is at least an equally important element of institutional design and the future EU, the *inter-institutional* balance of power has received much less attention.<sup>3</sup>

A probable first reason for this is the slower frequency of corresponding reforms: In contrast to voting weights in CM or seats in EP, EU enlargements do not *per se* require any change to inter-institutional decision rules. The last major adjustment took place in 1997 (Treaty of Amsterdam); the European Convention headed by Mr. Giscard d'Estaing did not propose any substantial reform concerning inter-institutional decision-making. A likely second reason, though, has been a lack of appropriate analytical tools. Notably, standard power measures applied in intra-institutional analysis are not able to capture procedural and strategic aspects of power which are crucial to inter-institutional decision-making (see Garrett and Tsebelis 1999 on this point).

This paper tries to both make a methodological contribution and to shed new light on inter-institutional power in EU decision-making. It is the first to apply the new framework for power measurement of Napel and Widgrén (2004) in a real-world context. The framework generalizes the measurement ideas underlying e.g. the Banzhaf or Shapley-Shubik indices to non-cooperative models and preference-based strategic interaction. Thus the major limitations of traditional indices are overcome.

We confine our analysis to the relationship between CM and EP, the two key legislative bodies of the EU. The main goal is to investigate the hypothesis that the EU has – constitutionally speaking – moved towards a bicameral model which is *balanced* in the sense that the explicitly intergovernmental chamber, CM, and the more federalist chamber, EP, have equal influence on decisions (see e.g. Tsebelis and Garrett 2000). For that purpose, we concentrate on the *codecision procedure* as defined in Article 251 of the EC Treaty. It accounts for roughly half of the EU's legislative acts, including decisions on the internal market, the European Regional Development Fund, transport, education and research, health, consumer protection and the environment.

The codecision procedure is initiated by a Commission policy proposal that is submitted simultaneously to EP and CM. First, EP can approve the proposal or replace it with an

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<sup>1</sup>See Nurmi (1998) and references therein. Noury and Roland (2002) show that members of EP (MEP) vote more along party than country lines, making EP a truly supranational European body. Note that if MEPs voted purely according to their nationality, EP would be powerless in the sense that it did little more than rubber-stamping the decisions of the Council in view of the latter's more restrictive majority requirement (see Bindseil and Hantke 1997 on this argument).

<sup>2</sup>See e.g. Widgrén (1994) or Laruelle and Widgrén (1998) and references therein for the earlier literature, and Baldwin et al. (2001), Felsenthal and Machover (2001), Leech (2002), or Barr and Passarelli (2003) for recent contributions.

<sup>3</sup>A recent comprehensive study on alternatives for future of the EU is Berglöf et al. (2003).

amended version of its own. Then, CM either approves the proposal on the table or initiates a second stage of decision-making by making amendments.<sup>4</sup> This new proposal – CM’s ‘common position’ in EU parlance – is either approved by EP or, again, amended. If in the latter case CM does not accept EP’s proposal,<sup>5</sup> the *Conciliation Committee* represents the final chance to – within six weeks time, extendable by two weeks – implement a change to the status quo. The Committee is composed of all members of CM and an EP delegation of the same size; it is co-chaired by an EP Vice-President and the Minister holding the Council Presidency without fixed negotiation protocol. The Commission does not have a formal role in the Committee. If CM and EP agree on a compromise, it is submitted to CM and EP for acceptance by the usual qualified and absolute majorities, respectively.<sup>6</sup>

The bargaining outcome that EP, CM, and also the Commission expect to result from invoking the Conciliation Committee plays a crucial role at earlier stages of the procedure. Using backward induction it can be concluded that it is indeed *the* determinant of any codecision agreement if all players act strategically. Our analysis will focus on it.

Several authors have already devoted their attention to the Conciliation Committee including Steunenberg and Dimitrova (1999), Crombez (1997, 2000), Tsebelis and Garrett (2000), and Steunenberg and Selck (2002). However, their assessments of who shapes the agreements reached by EP and CM – and hence the distribution of power between these two players – are mostly qualitative. Moreover, they diverge.

Crombez regards EP as the agenda setter in the Conciliation Committee but concludes nevertheless that both EP and CM “genuinely codecide which policy to implement” (1997, p. 113). His analysis does not discriminate much between the Maastricht and Amsterdam versions of codecision, although the original version laid out in the Treaty of Maastricht in 1992 was specifically revised to make the procedure more symmetric.<sup>7</sup> Tsebelis and Garrett (2000) focus on the Amsterdam version and argue that the EU has moved a long way towards bicameralism. They find no reason to suggest that either CM or EP is favored by the procedure, so that both can be expected to have the same influence. In contrast, Steunenberg and Dimitrova (1999) observe an advantage to CM in a model that assumes the Council president to make a take-it-or-leave-it offer to EP. The commitment problems associated with such offers are an important, but not the only, reason which make this assumption controversial. It also builds an inter-institutional *asymmetry* into the model, and not surprisingly gives greater power to CM. However, we find that Steunenberg and Dimitrova’s conclusion of a significant advantage for CM can remain valid also for *symmetric* bicameral bargaining, as assumed by Garrett and Tsebelis. Key to this conclusion are

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<sup>4</sup>In their first readings, EP and CM do not have any time limit. Second readings are to be concluded within three months (extendable by one month), respectively. – These procedural details are unspecified in the EC Treaty, but laid out in a joint declaration of Commission, EP, and CM on practical arrangements. The *Co-decision Guide*, available from the Council of the European Union (<http://ue.eu.int/codec/en/EN.pdf>), offers comprehensive information.

<sup>5</sup>The Commission – by giving a negative opinion on EP’s proposal – can require CM to accept unanimously.

<sup>6</sup>This third reading of CM and EP has a time limit of six weeks with a possible two-weeks extension.

<sup>7</sup>See e.g. the comments by Tsebelis and Garrett (2000), Tsebelis and Money (1997), Crombez (2000), Crombez et al. (2000), and Garrett et al. (2001).

factually asymmetric intra-institutional majority rules, whose important inter-institutional impact the literature on power in the EU has largely neglected.

The paper assumes strategic players with spatial preferences characterized by individual ideal points in a Euclidian policy space, and uses noncooperative *Rubinstein bargaining* and cooperative *Nash bargaining* to predict agreements. A first important observation is that compromises reached by EP and CM will typically *not* be close to or even exactly in the middle of both decision bodies' ideal policy points. Instead, there is a robust bias of the bargaining outcome in favor of the player with smaller distance between its ideal point and the status quo, i. e. an important *status quo bias*. For instance, if utility of EP's and CM's respective representatives decreases *linearly* in the distance between each player's unidimensional ideal point and status quo, the symmetric Nash bargaining solution predicts an agreement exactly on the ideal point of the player with smaller distance to status quo if there exists any mutually beneficial policy change at all.

Bargaining's status quo bias is compatible with symmetric power or average influence on the bargaining outcome *only if* EP and CM are equally likely to be the party which is more enthusiastic about changing the status quo. This may be regarded as a purely empirical question referring to current and past policy positions of Council and Parliament members. The present paper takes a *constitutional design* perspective which for normative reasons analyzes the procedural rules under idealized random preferences which exhibit a high degree of symmetry across all members of CM and EP. We use both institutions' internal decision-making rules to deduce the probability distributions of CM's and EP's respective collective preference.

It turns out that CM's qualified majority requirement makes the *a priori* distribution of its collective ideal point – corresponding to the distribution of the ideal point of its pivotal member – pronouncedly skewed in contrast to an almost symmetric distribution implied by EP's simple majority rule. This means that CM is far more often the player closer to the status quo and, by bargaining's status quo bias, to define the compromise reached in the Conciliation Committee. Measuring a player's *power* as the sensitivity of the collective decision to its preferences, CM's a priori power turns out to exceed that of EP by an order of magnitude for the decision quotas presently applied: While a small shift of CM's position is passed through to the collective decision at a rate of approximately 56%, changes of EP's position in expectation induce a move of only about 6% of the original shift. The effects of the impending quota change in CM (prescribed by the Treaty of Nice) and the one proposed by the European Convention are contrasted. Moreover, the consequences of the European Union's enlargement to 25 members in May 2004 for the inter-institutional distribution of power are investigated for alternative decision quotas.

The remainder of the paper is organized as follows: Section 2 investigates status quo bias in bilateral bargaining between representatives of EP and CM. Section 3 introduces our method of power measurement. Section 4 then quantifies the implications of status quo bias for inter-institutional power and average influence of EP and CM on European Union policies. Section 5 summarizes our conclusions and discusses possible extensions of the analysis.

## 2 Bilateral Bargaining with Spatial Preferences

We suppose that the considered political actors have single-peaked preferences characterized by an individual *bliss point* or *ideal point* in a convex multi-dimensional policy space  $X \subseteq \mathbb{R}^n$  together with a metric  $d$  on  $X$ : The smaller the distance  $d(\lambda, x)$ , the more satisfied is an agent with ideal point  $\lambda$  by policy  $x \in X$ .<sup>8</sup> Moreover, negotiations between the European Parliament (EP) and the Council of Ministers (CM) will be analyzed under the important assumption that – at least during their dealings in the Conciliation Committee – there are real or virtual representatives of both EP and CM who possess spatial preferences of this kind. Their ideal points, denoted by  $\pi$  for EP and  $\mu$  for CM, are assumed to be common knowledge throughout the paper and are naturally given by the ideal points of the respective institution’s *median* or *pivotal members* for a unidimensional policy space  $X \subseteq \mathbb{R}$ . For higher dimensions, the assumption is not innocuous because a (generalized) median typically does not exist.<sup>9</sup>

We restrict potential agreements to Pareto-efficient policy outcomes which are considered as least as good as the status quo by both players, i. e. the *contract curve*  $C$ . For the assumed preferences,  $C$  is the segment of the line connecting  $\pi$  and  $\mu$  which lies within the intersection of the two balls with centers  $\pi$  and  $\mu$  and respective radius  $d(\pi, q)$  and  $d(\mu, q)$ , where  $q \in X$  refers to the status quo. Fig. 1 illustrates this for  $X = \mathbb{R}^2$ . For given positions  $\pi$  and  $\mu$ , negotiations between EP and CM thus always amount to bargaining in the unidimensional subspace  $C \subseteq X$ .

Steunenberg and Dimitrova (1999) argue that, although officially the Conciliation Committee is *co-chaired* by CM’s presiding member and EP’s Vice-President, the former exerts agenda setting power due to its more important role at the preparatory stage before the committee meets. They take the non-cooperative *ultimatum game* as their model for bargaining in the Conciliation Committee (see Fig. 2, part (a)): CM moves first and makes a proposal; EP responds by either rejecting or accepting it, in both cases ending negotiations.

For simplicity consider the unidimensional policy space  $X = [0, 1]$ , ideal points  $\pi$  and  $\mu \in X$  for EP and CM, respectively, where without loss of generality  $\pi \leq \mu$ , and status quo  $q = 0$ .<sup>10</sup> The set of Pareto-optimal policies which satisfy individual rationality is  $\tilde{X} = [\pi, \min\{\mu, 2\pi\}]$ . We will write  $\mu' \equiv \min\{\mu, 2\pi\}$  and restrict bargaining proposals to  $\tilde{X}$ . In the unique subgame perfect equilibrium (SPE) of this agenda setting game, CM proposes  $\mu'$  and EP’s strategy is to accept *any* offer  $x_0 \in [\pi, \mu']$ . This SPE prediction

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<sup>8</sup>This implies that each player has a set of concentric indifference curves, i. e. cares about the distance between  $\lambda$  and  $x$  but not about the latter’s position. This is controversial but standard in models of political decision-making.

<sup>9</sup>See Bade (2002) for a recent analysis of multidimensional electoral competition. Under the assumption that two competing parties select their platform under uncertainty (rather than only risk) about voters’ preferences, she proves existence of equilibrium for many multidimensional cases. Moreover, each party selects the respective median position *in each separate dimension* in equilibrium. This may explain the importance of single-issue decisions in practice and justify unidimensional modelling.

<sup>10</sup> $q \in (0, \pi)$  and  $q \in (\mu, 1]$  would lead to qualitatively identical conclusions, where in the latter case CM is the player with smaller status quo distance. For  $q \in (\pi, \mu)$  there is no mutually beneficial policy change and hence the equilibrium outcome is  $x^* \equiv q$ .

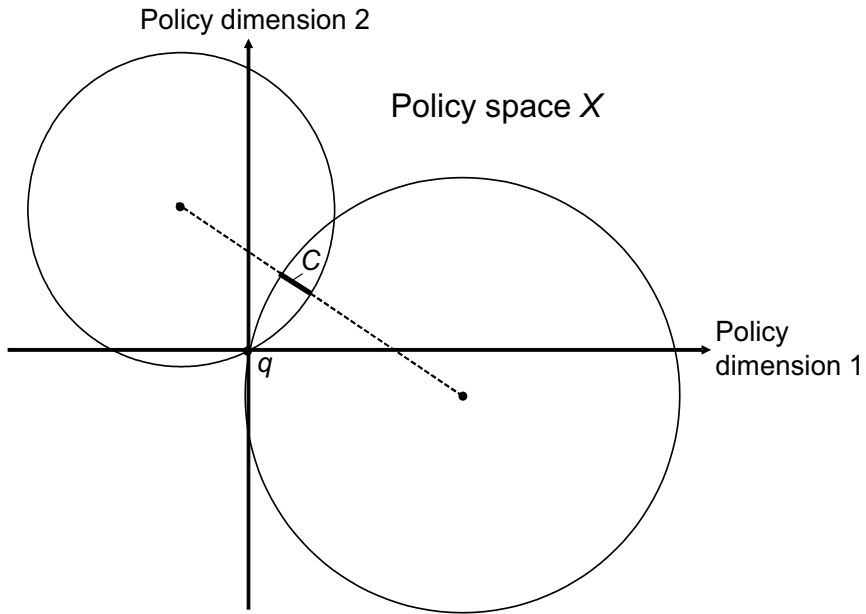


Figure 1: Contract curve  $C$  in case of a two-dimensional policy space

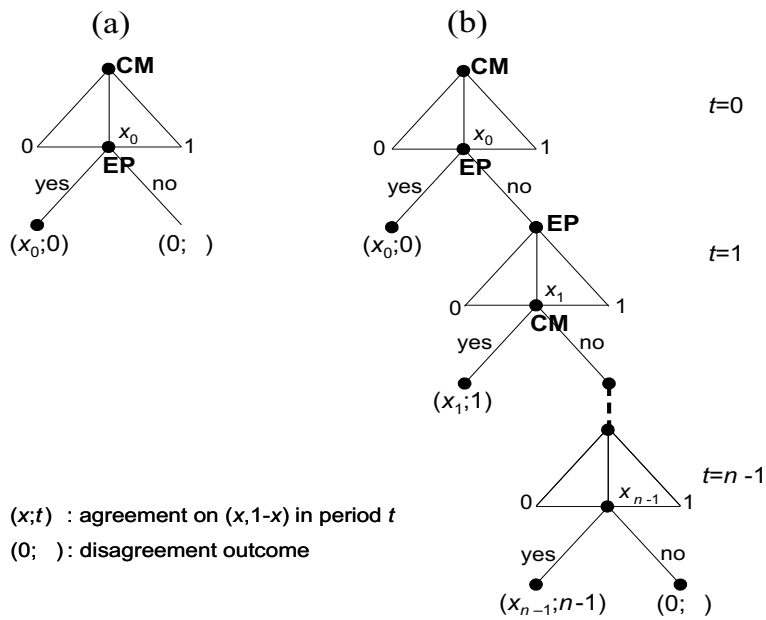


Figure 2: Ultimatum game form and  $n$ -stage alternating offers bargaining game form

reflects overwhelming bargaining power of CM as the proposer in the ultimatum game. Interestingly, in Crombez (2000) EP is considered to take the lead and make a take-it-or-leave-it proposal to CM. In this case,  $x^* = \pi$  would be the very asymmetric outcome.

No matter which of these conflicting assertions about who moves first is a better model of reality, ultimatum bargaining involves more than just agenda setting. The SPE prediction is driven by the first mover's opportunity to credibly make a take-it-or-leave-it offer, i. e. to irrevocably *commit* to its initial proposal. In our view, this is an unrealistic view of the Conciliation Committee. Ultimatum bargaining should be regarded as, at best, a coarse first approximation.

SPE predictions change significantly if, to us more realistically, one considers an *alternating offers bargaining game with  $n \geq 2$  stages* illustrated in Fig. 2, part (b). Let players' preferences over outcomes  $(x, t)$ , specifying the agreed policy and the time of agreement, be of the particularly simple type

$$\begin{aligned} U_\pi(x, t) = U(\pi, x, t) &= \delta_\pi^t \cdot u(\pi, x) \\ U_\mu(x, t) = U(\mu, x, t) &= \delta_\mu^t \cdot u(\mu, x) \end{aligned} \quad (1)$$

for discount factors  $\delta_i \in (0, 1)$ , which reflect players' patience, and function

$$u(\lambda_i, x) = \lambda_i - |\lambda_i - x| \quad (\lambda_i = \pi, \mu), \quad (2)$$

which represents players' spatial preferences in any fixed period  $t$ .<sup>11</sup> Using backward induction, the predicted bargaining outcome can then be characterized as follows:

**Proposition 1** *Given ideal points  $\pi \leq \mu$  and the finite set of periods  $T = \{0, \dots, n-1\}$ ,  $n \geq 1$ , the unique SPE outcome of the alternating offers bargaining game with  $n$  stages and preferences described by (1) and (2) in which CM proposes first is the efficient outcome  $(x^*(n, \delta_\mu, \delta_\pi); 0)$  with*

$$x^*(n, \delta_\mu, \delta_\pi) = \sum_{t=0}^{\lfloor \frac{n-1}{2} \rfloor} (\delta_\mu \delta_\pi)^t \cdot \mu' + \sum_{t=0}^{\lfloor \frac{n-2}{2} \rfloor} (\delta_\mu \delta_\pi)^t \cdot (2\pi - \delta_\pi \pi - \mu') - \delta_\pi \cdot \sum_{t=0}^{\lfloor \frac{n-3}{2} \rfloor} (\delta_\mu \delta_\pi)^t \cdot \pi \quad (3)$$

where  $\lfloor y \rfloor$  denotes the biggest integer smaller than or equal to  $y$ .

A proof can be found in Napel and Widgrén (2003). For  $\delta_\mu = \delta_\pi = 1$ , the last institution to propose gets its most preferred outcome on the contract curve.

EU deadlines for reaching a decision in the Conciliation Committee combined with the specific schedules of its members may define some *final* period in real negotiations.<sup>12</sup>

<sup>11</sup>Note that utility functions  $U_\pi$  and  $U_\mu$  formalize indifference between an eventual failure of negotiations (no agreement reached in the final period and thus the status quo prevails) and any earlier confirmation of the status quo (agreement on status quo policy  $q = 0$  in period  $t < n-1$ ).

<sup>12</sup>The time for the Conciliation Committee is by default limited to eight weeks – two weeks devoted to preparation plus six weeks for bargaining. The total period can be extended up to three months. Note that the member state which is holding presidency can significantly postpone the preparatory stage and hence conciliation.

Yet, it seems arbitrary to use any particular  $n$  in the model. A focal benchmark case is therefore bargaining *without* any fixed final round, as assumed by Rubinstein (1982). His main result – concerning more general types of preferences than the linear case studied above – implies that

$$x^*(\delta_\mu, \delta_\pi) = \frac{2\pi(1 - \delta_\pi)}{1 - \delta_\pi\delta_\mu} \quad (4)$$

is the unique SPE policy outcome, which is proposed by CM and immediately accepted by EP. Non-trivially, it is indeed the limit of (3) as  $n \rightarrow \infty$ . In case that EP is the first to propose, the SPE outcome would be

$$x^*(\delta_\pi, \delta_\mu) = \delta_\mu \frac{2\pi(1 - \delta_\pi)}{1 - \delta_\pi\delta_\mu} \quad (5)$$

instead (still considering  $\pi \leq \mu$ ; for  $\pi > \mu$  the roles of  $\mu$  and  $\pi$  have to be switched).

Assuming identical patience  $\delta_\mu = \delta_\pi = \delta \in (0, 1)$  both (4) and (5) converge to  $\lim_{\delta \rightarrow 1} x^*(\delta, \delta) = \pi$  as impatience gets negligible. Then, *no matter whether CM or EP has the initiative in the Conciliation Committee*, the bargaining result amounts to implementation of the ideal point of the player with smaller distance to the status quo. This amounts to a pronounced *status quo bias* of bargaining.

As first pointed out by Binmore (1987), if the time that passes between each rejection and counter-offer becomes negligibly small, while the discount factors  $\delta_\mu$  and  $\delta_\pi$  applied to payoffs delayed by a fixed time interval stay constant (so that players become almost indifferent to the *period* of agreement) the SPE payoffs to CM and EP approach the utility levels of the *asymmetric Nash bargaining solution* (Nash 1950 and Kalai 1977) defined by the solution  $u^*$  to the maximization problem

$$\max_{u \in \mathcal{U}, u \geq u^q} (u_\pi - u_\pi^q)^\alpha \cdot (u_\mu - u_\mu^q)^\beta. \quad (6)$$

with bargaining powers

$$\alpha = \frac{\ln \delta_\pi}{\ln \delta_\mu + \ln \delta_\pi} \quad \text{and} \quad \beta = 1 - \alpha$$

for EP and CM, respectively. The *bargaining set*  $\mathcal{U}$  of all feasible utility combinations is constructed by mapping each policy  $x \in X$  to the utility pair  $(u(\pi, x), u(\mu, x))$  that reflects players' preferences for it. *Status quo utility*  $u^q \equiv (u(\pi, q), u(\mu, q))$  summarizes players' evaluation of the status quo situation. Utility function  $u$  need not be linear (as was assumed in (2)).

Reaching agreement a week earlier or later can make a big difference even for policy issues that have been discussed for years: Delay may imply that bargaining resumes with a changed composition of EP or CM, a new Council Presidency, or only after the EU's summer recess. Nevertheless, we feel that impatience does not play a crucial role in Conciliation Committee negotiations. Moreover, it is unspecified by official rules whether EP



or CM are first to submit a proposal. For these reasons and convenience we will use cooperative Nash bargaining to predict the agreement in the Conciliation Committee in the following. Since we do not see empirical or theoretical reasons to consider either EP or CM a more impatient or skilled bargainer, we focus on the *symmetric Nash bargaining solution*  $u^*$  which maximizes the unweighted product of both players' utility gains relative to the status quo. In line with above observation we obtain

**Proposition 2** *Assume that preferences of EP and CM are represented by utility functions  $u_i(x) = -d(\lambda_i, x)$  for  $\lambda_i, x \in X \subseteq \mathbb{R}$ . Then the symmetric Nash bargain corresponds to agreement on the ideal point which is closer to the status quo whenever there are gains from trade, i. e.*

$$\text{sign}(q - \pi) = \text{sign}(q - \mu) \implies x^*(\pi, \mu) = \begin{cases} \pi; & d(\pi, q) \leq d(\mu, q) \\ \mu; & d(\pi, q) > d(\mu, q). \end{cases}$$

**Proof.** For  $d(\pi, q) = d(\mu, q)$  the result is trivial. So consider gains from trade and  $d(\pi, q) < d(\mu, q)$ . The sum of utility of EP and CM on contract curve  $C = [\min\{\pi, \mu\}, \max\{\pi, \mu\}]$  is constant and equals  $-d(\pi, \mu)$ . The Nash bargain thus corresponds to the maximizer of

$$N(u_\pi, u_\mu) = (u_\pi + d(\pi, q))(u_\mu + d(\mu, q)) \quad (7)$$

subject to  $(u_\pi, u_\mu) \geq (-d(\pi, q), -d(\mu, q))$  and  $u_\pi + u_\mu = -d(\pi, \mu)$ . Substituting, one obtains

$$\begin{aligned} \frac{dN}{du_\pi} &= \frac{d[(u_\pi + d(\pi, q))(-d(\pi, \mu) - u_\pi + d(\mu, q))]}{du_\pi} \\ &= -2u_\pi + d(\mu, q) - d(\pi, q) - d(\pi, \mu) \end{aligned}$$

where  $d(\pi, q) < d(\mu, q)$  implies  $d(\mu, q) - d(\pi, q) = d(\pi, \mu)$ . So  $N(\cdot)$  increases for  $u_\pi < 0$  and achieves its unique maximum at  $u_\pi = 0$ . This is equivalent to  $x^*(\pi, \mu) = \pi$ . ■

The result is illustrated in Fig. 3. For unidimensional issues and linear utility the party less eager to replace the status quo gets *exactly* its ideal policy. The other one has to be satisfied with at least some improvement of the situation.<sup>13</sup> Hence, intuitively appealing assertions of EP and CM ‘meeting in the middle’ between their ideal policies – based on the superficial symmetry between the two players – are too quick.

If EP’s and CM’s utility is *not* linear in distance to the respective ideal point but strictly concave (corresponding to risk aversion or decreasing marginal returns from moving closer to the considered player’s ideal point, e. g.  $\tilde{u}(\lambda, x) = -(\lambda - x)^2$ ), then  $U$ ’s Pareto frontier, connecting the two extreme utility levels  $\bar{u} \equiv (0, \tilde{u}(\mu, \pi))$  and  $\underline{u} \equiv (\tilde{u}(\pi, \mu), 0)$ , becomes strictly concave as well. Keeping the symmetry between EP and CM (they have the same utility function  $\tilde{u}(\lambda_i, x)$ , just different ideal points), this implies that the hyperbola corresponding to the highest attainable level of the product of both players’ utility gains

<sup>13</sup>Both players enjoy equal net utility gains in this linear case. If utility is assumed to be interpersonally comparable, this means both benefit (relative to status quo) equally from the agreement.

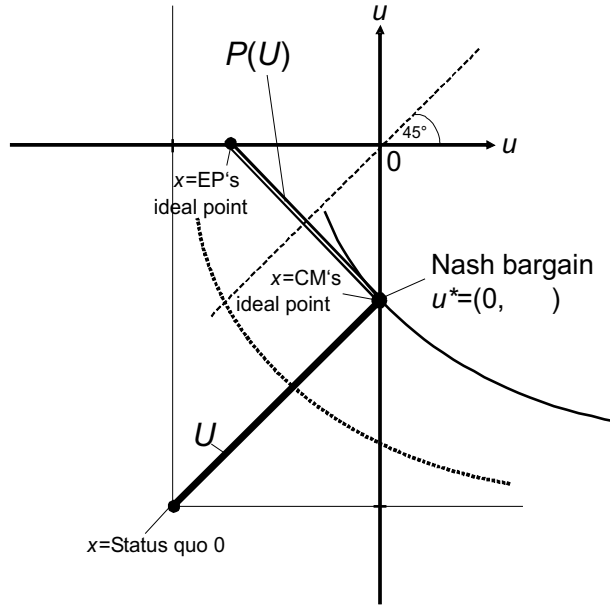


Figure 3: Bargaining set  $U$  and Nash bargain  $u^*$

touches  $U$ 's Pareto frontier  $P(U)$  no longer at its right endpoint,  $\bar{u}$ , but somewhere between it and the middle of the curve.

For *multidimensional* policy spaces, status quo bias is less pronounced but still important: The agreement will generically correspond to an interior point of the contract curve  $C$  which is, however, closer to the institution with smaller status quo distance. It approaches the latter's preferred endpoint of  $C$  as the angle between  $\pi - q$  and  $\mu - q$  gets small. As players become (symmetrically) more risk averse, the agreement will slowly improve for the player with greater dislike of the status quo, but still remain biased to his counterpart's favor. Focussing on cases with differentiable Pareto frontier, this can be summarized as follows:

**Proposition 3** *Assume that preferences of EP and CM on  $X \subseteq \mathbb{R}^n$  are represented by utility functions  $u_i(x) \equiv u(d(\lambda_i, x))$  which are strictly decreasing and weakly concave in  $d(\lambda_i, x)$  and yield a Pareto frontier described by a function  $\phi: u_\pi(x) \mapsto \max\{u_\mu(y) : y \in X \wedge u_\pi(y) = u_\pi(x)\}$  which is differentiable on the interior of the contract curve. Then the symmetric Nash bargain  $x^*(\pi, \mu) \equiv x^*$  is closer to the ideal point which is closer to the status quo, i. e.*

$$d(\pi, q) < d(\mu, q) \iff d(\pi, x^*) < d(\mu, x^*),$$

whenever there are gains from trade.

The proof is provided in the appendix. In case of convex utility, i. e. if players are risk-loving or experience increasing marginal utility the closer  $x$  gets to their ideal point, the Nash bargain in general is no longer well-defined. However, for the special case of spatial preferences considered in this paper, the individually rational and Pareto-efficient

policy  $x^*$  most beneficial to the player with smallest status quo distance remains the focal prediction.<sup>14</sup>

Status quo bias is robust to the introduction of moderately asymmetric bargaining powers  $\alpha$  and  $\beta = 1 - \alpha$  in the Nash bargaining solution (and hence slight differences between EP's and CM's patience in Rubinstein bargaining). For the one-dimensional policy space  $X$ ,  $q = 0$ ,  $\pi \leq \mu$ , and  $u_i(x) = -d(\lambda_i, x)$ , the asymmetric Nash solution is the maximizer of

$$N(u_\pi, u_\mu) = (u_\pi + \pi)^\alpha \cdot (u_\mu + \mu)^{1-\alpha}$$

constrained by  $(u_\pi, u_\mu) \geq u^q$  and  $u_\pi + u_\mu = \pi - \mu$ . One can equivalently calculate the maximizer of  $\tilde{N}(u_\pi, u_\mu) = \ln N(u_\pi, u_\mu)$  which, after re-arranging, yields

$$\frac{d\tilde{N}}{du_\pi} = \frac{u_\pi - 2\alpha\pi + \pi}{u_\pi^2 - \pi^2} = 0$$

or

$$u_\pi = \pi(2\alpha - 1)$$

together with  $(u_\pi, u_\mu) > u^q$  as necessary conditions for an interior solution. Given  $\pi \leq \mu$ , the critical level of EP's bargaining power  $\alpha^c$  below which an asymmetric Nash bargain would actually turn out closer to CM's than to EP's ideal point, i. e.  $x^* > (\pi + \mu)/2$ , is

$$\alpha^c = \frac{3\pi - \mu}{4\pi}.$$

This is always smaller than  $1/2$  and may even be negative. So only a sufficiently pronounced asymmetry in bargaining powers would overcome status quo bias.

It follows from the close relation between the Nash solution and Rubinstein bargaining with discounting that the status quo bias established in Prop. 3 is also a feature of the latter, at least if EP and CM do neither discount future utility too much (so that  $x^*(\delta_\mu, \delta_\pi)$  is close to its Nash solution limit) nor too asymmetrically (so that  $\alpha$  is still above the critical level  $\alpha^c$  identified above). This applies to fairly general stage-level utility functions  $u(\lambda_i, x)$  as long as both EP and CM prefer to agree on Pareto-improving policies sooner rather than later. In case of alternating offers bargaining with *finite* time horizon, the opportunity to make the final take-it-or-leave-it offer in period  $t = n - 1$  is a source of bargaining strength which may actually over-compensate status quo bias for small  $n$ . But as argued above, we see no overwhelming reason to assume a particular  $n$  nor to associate it with either EP's or CM's proposal.

### 3 Measurement of Strategic Power

How do the above bargaining predictions and, in particular, status quo bias translate into a priori power of EP and CM in the Conciliation Committee? In order to obtain quantitative

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<sup>14</sup>See e. g. Osborne and Rubinstein (1990, pp. 16ff) or Harsanyi (1956) for justifications of the constrained maximizer  $u^*$  of (7), which corresponds to  $x^*$ , as the expected bargaining result that do *not* rely on Nash's original axiomatic argument and do not assume convexity.

statements, we apply the general framework for analysis of power in collective decision-making proposed by Napel and Widgrén (2004). It defines a player’s *a priori power* in a given decision procedure such as bilateral or multilateral bargaining or weighted voting and for a given probabilistic distribution of all relevant players’ preferences as the expected change to the equilibrium collective decision which would be brought about by a change in this player’s preferences.<sup>15</sup> In a spatial voting context, this links power to the question: Which impact would a marginal or fixed-size shift of a given player’s ideal policy point have on the collective decision?<sup>16</sup> This approach to power measurement via a *sensitivity analysis* of collective decisions generalizes the weighted counting of players’ pivot positions which is the basis of conventional power indices.<sup>17</sup> The measurement strategy is to start with a well-defined model of the decision situations which can arise, then to predict a (possibly stochastic) outcome and the *a posteriori power* associated with it for each situation, and finally to aggregate this information using a probability measure on decision situations.

For the rest of the paper we will assume a unidimensional policy space  $X = [0, 1]$  and linear spatial preferences. Decision situations are hence characterized by all actors’ ideal points and the status quo. The Nash solution predicts

$$x^*(\pi, \mu, q) = \begin{cases} \pi & \text{if } q < \pi \leq \mu \text{ or } \mu < \pi < q, \\ \mu & \text{if } q < \mu < \pi \text{ or } \pi \leq \mu < q, \\ q & \text{otherwise} \end{cases}$$

as the bargaining outcome. To evaluate a posteriori power, we consider the effect of a *marginal* shift of ideal points  $\pi$  and  $\mu$  to the left or right on this policy outcome. It is captured by the partial derivatives of the predicted outcome, i. e. the a posteriori power of EP for a *given* realization of status quo  $q$  and ideal points  $\pi$  and  $\mu$  is

$$\frac{\partial x^*(\pi, \mu, q)}{\partial \pi} = \begin{cases} 1 & \text{if } q < \pi < \mu \text{ or } \mu < \pi < q, \\ 0 & \text{if } q < \mu < \pi, \pi < \mu < q, \pi < q < \mu, \text{ or } \mu < q < \pi. \end{cases} \quad (8)$$

This formalizes that any (small) change of the player’s ideal point with smaller status quo distance translates into a same-size shift of the agreed policy, provided there is agreement about changing the status quo at all.

A priori, the expected impact that any marginal shift of EP’s ideal policy  $\pi$  would have on the collective decision reached in the Conciliation Committee is therefore

$$\xi_\pi = \Pr(\tilde{q} < \tilde{\pi} < \tilde{\mu}) + \Pr(\tilde{\mu} < \tilde{\pi} < \tilde{q}),$$

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<sup>15</sup>Alternatively one may make probabilistic assumptions about players’ *actions*, rather than preferences which induce actions. Traditional power indices take this ‘short-cut’, but thus lose the ability to account for strategic interaction.

<sup>16</sup>Note that a player can be powerful in defining the collective decision without being the one to benefit the most from it.

<sup>17</sup>All established indices for simple games, such as the Banzhaf index or the Shapley-Shubik index, can be obtained in this generalized framework by rather simple distribution assumptions and decision protocols. See Napel and Widgrén (2004) for details.

where  $\tilde{q}$ ,  $\tilde{\pi}$ , and  $\tilde{\mu}$  denote the random variables corresponding to status quo and ideal points. Not surprisingly, a priori power crucially depends on the distributional assumptions one makes about EP's and CM's ideal points and the status quo. In the absence of any other information, it is at least reasonable to assume that the status quo is *uniformly* distributed on  $X$ , implying

$$\xi_{\pi} = \int_0^1 \Pr(q < \tilde{\pi} < \tilde{\mu}) dq + \int_0^1 \Pr(\tilde{\mu} < \tilde{\pi} < q) dq.$$

If  $\tilde{\pi}$  and  $\tilde{\lambda}$  are uniformly distributed, too, this evaluates to  $\xi_{\pi} = 1/3$ . This number can also be directly deduced from the fact that there are six equally likely orderings of the three random variables  $\tilde{q}$ ,  $\tilde{\pi}$ , and  $\tilde{\mu}$ , and that in two of them EP has power 1. Then in expectation, a change of EP's position on a given policy issue by one marginal unit results in a shift of the collective decision by one third marginal unit. Analogously, one obtains  $\xi_{\mu} = 1/3$ . So for uniformly distributed ideal points of EP and CM, the equal-power indication which would be the result of a simple unanimity game model is confirmed. However, uniformity is not very convincing assumption at the level of EP and CM because it neglects the differences in the internal decision-making of both institutions which are an important part of the codecision procedure and its final bargaining stage investigated here. They comprise very different numbers of members and apply different majority rules to reach a decision or find a common position.

To capture this, assume that individual members of EP and CM have random ideal points  $\tilde{\pi}_1, \dots, \tilde{\pi}_k$  and  $\tilde{\mu}_1, \dots, \tilde{\mu}_m$  drawn independently from institution-specific symmetric distributions. For simplicity, we ignore that the members of CM have different voting weight, i. e. assume *simple voting* in both EP and CM. This assumption has only small effect on *inter*-institutional power. Any change to the status quo then needs at least a simple majority in EP and  $r = 11$  supporters in CM, where the latter number approximates the 71% threshold that exists for weighted voting in the real CM. For a policy  $x > q$  to the right of the status quo, the 11-th ideal point counted from the right is the critical position in CM. If the corresponding player prefers  $x$  to  $q$ , so will all 10 members to his or her right and the proposal is passed. If that player prefers  $q$ , so will all 4 voters to his or her left and the proposal fails. Similarly, for a policy  $x < q$  the 11-th ideal point counted from the left is crucial in CM. We therefore identify  $\tilde{\mu}$  with the  $r$ -th smallest value of  $\tilde{\mu}_1, \dots, \tilde{\mu}_m$ , namely the  $r$ -th order statistic  $\tilde{\mu}_{(r)}$ , when evaluating policies  $x < q$ , and with the  $(m - r + 1)$ -th smallest value, i. e. order statistic  $\tilde{\mu}_{(m-r+1)}$ , when evaluating policies  $x > q$ . Similarly, EP's random position  $\tilde{\pi}$  is given by  $\tilde{\pi}_{(p)}$  and  $\tilde{\pi}_{(k-p+1)}$  for  $x < q$  and  $x > q$ , respectively, considering  $k$  parliamentarians and a vote threshold of  $p$  that corresponds to simple majority.

Assuming that density functions  $f$  exist for all these order statistics and denoting

cumulative distribution functions by  $F$ ., one obtains:

$$\begin{aligned}
\xi_\pi &= \int_0^1 \Pr(q < \tilde{\pi}_{(k-p+1)} < \tilde{\mu}_{(m-r+1)}) dq + \int_0^1 \Pr(\tilde{\mu}_{(r)} < \tilde{\pi}_{(p)} < q) dq \\
&= \int_0^1 \int_q^1 \Pr(q < \tilde{\pi}_{(k-p+1)} < \mu) f_{\tilde{\mu}_{(m-r+1)}}(\mu) d\mu dq + \int_0^1 \int_0^q \Pr(\mu < \tilde{\pi}_{(p)} < q) f_{\tilde{\mu}_{(r)}}(\mu) d\mu dq \\
&= \int_0^1 \int_q^1 [F_{\tilde{\pi}_{(k-p+1)}}(\mu) - F_{\tilde{\pi}_{(k-p+1)}}(q)] f_{\tilde{\mu}_{(m-r+1)}}(\mu) d\mu dq \\
&\quad + \int_0^1 \int_0^q [F_{\tilde{\pi}_{(p)}}(q) - F_{\tilde{\pi}_{(p)}}(\mu)] f_{\tilde{\mu}_{(r)}}(\mu) d\mu dq.
\end{aligned}$$

One can exploit that for identical symmetric distributions of  $\tilde{\pi}_1, \dots, \tilde{\pi}_k$ , the distributions of order statistics  $\tilde{\pi}_{(p)}$  and  $\tilde{\pi}_{(k-p+1)}$  satisfy the following symmetry condition (see e. g. Arnold et al., 1992, p. 26):

$$f_{\tilde{\pi}_{(p)}}(x) = f_{\tilde{\pi}_{(k-p+1)}}(1-x) \text{ and } F_{\tilde{\pi}_{(p)}}(x) = 1 - F_{\tilde{\pi}_{(k-p+1)}}(1-x). \quad (9)$$

The same applies to  $\tilde{\mu}_{(r)}$  and  $\tilde{\pi}_{(m-r+1)}$ . With (9), one has

$$\begin{aligned}
&\int_0^1 \int_q^1 [F_{\tilde{\pi}_{(k-p+1)}}(\mu) - F_{\tilde{\pi}_{(k-p+1)}}(q)] f_{\tilde{\mu}_{(m-r+1)}}(\mu) d\mu dq \\
&= \int_0^1 \int_q^1 [F_{\tilde{\pi}_{(p)}}(1-q) - F_{\tilde{\pi}_{(p)}}(1-\mu)] f_{\tilde{\mu}_{(r)}}(1-\mu) d\mu dq \\
&= \int_1^0 \int_{\bar{q}}^0 [F_{\tilde{\pi}_{(p)}}(\bar{q}) - F_{\tilde{\pi}_{(p)}}(\bar{\mu})] f_{\tilde{\mu}_{(r)}}(\bar{\mu}) d\bar{\mu} d\bar{q} \\
&= \int_0^1 \int_0^{\bar{q}} [F_{\tilde{\pi}_{(p)}}(\bar{q}) - F_{\tilde{\pi}_{(p)}}(\bar{\mu})] f_{\tilde{\mu}_{(r)}}(\bar{\mu}) d\bar{\mu} d\bar{q}
\end{aligned}$$

where the second equality results from substitution  $(\bar{\mu}, \bar{q}) \equiv (1-\mu, 1-q)$ . Hence, given symmetric distributions of ideal points, situations in which both EP and CM want to change policy to the right or, respectively, the left of the status quo are symmetric, and thus

$$\xi_\pi = 2 \cdot \int_0^1 \int_q^1 [F_{\tilde{\pi}_{(k-p+1)}}(\mu) - F_{\tilde{\pi}_{(k-p+1)}}(q)] f_{\tilde{\mu}_{(m-r+1)}}(\mu) d\mu dq. \quad (10)$$

gives our *measure of strategic power*<sup>18</sup> for EP. The expression for CM is analogous.

## 4 Results

As noted above, a priori power in EU decision-making has been analyzed by *power indices* defined on the domain of cooperative *simple games* in many studies (see e. g. Nurmi, 1998,

<sup>18</sup>For a detailed derivation in the general case, see Napel and Widgrén (2004).

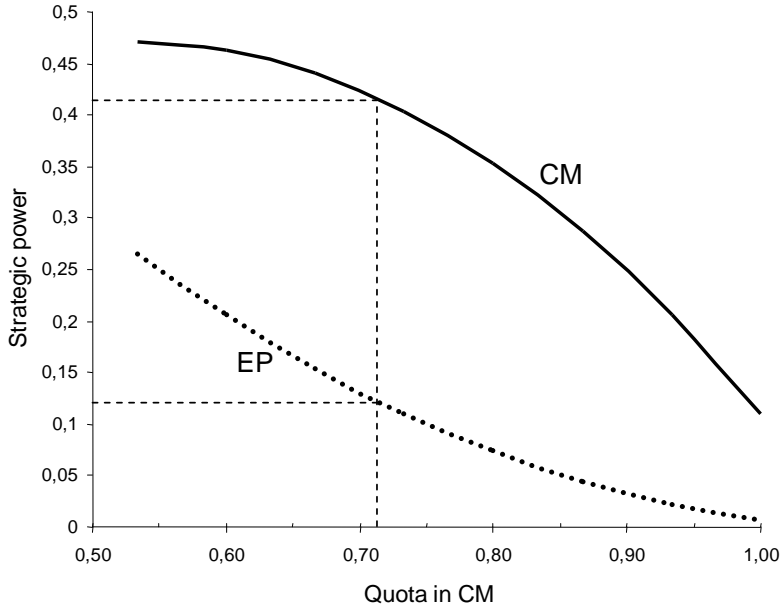


Figure 4: Distribution of power in EU15 for varying quota in CM and uniform  $\tilde{\pi}$

ch. 7, or Holler and Owen, 2001, for overviews). Condensing decision-making in the Conciliation Committee into that 0-1-framework yields a unanimity game in which both players have equal a priori power.<sup>19</sup> Given the lack of any obvious asymmetry between CM and EP inside the Conciliation Committee this seems a reasonable assessment at first sight, corresponding to the qualitative conclusions of Crombez (2000) and Tsebelis and Garrett (2000). Quantitative power analysis based on the explicit game-theoretic models studied above, however, leads to a very different assessment, which to us is more convincing. In the following, we present the results of our investigations using different assumptions on actors and the status quo.

## 4.1 Baseline Power Calculations

Nearly all spatial voting studies of EU decision-making assume that EP is a unitary actor that can be represented by one ideal policy position, and a frequently found companion assumption is that EP's ideal point  $\tilde{\pi}$  is *uniformly distributed* on the unit interval (see e.g. Steunenberg et al., 1999). So as a benchmark we look at the case of just  $k = 1$  parliamentarian with uniform ideal point (and quota  $p = 1$ ). In contrast,  $m = 15$  Council members will be considered, each with an independently  $[0,1]$ -uniformly distributed ideal policy position. It follows that the ideal point of CM's pivot,  $\tilde{\mu}$ , is *beta distributed* with parameters  $(r, m - r + 1)$ .

<sup>19</sup>This is assuming, as above, that CM and EP act like unitary actors whose respective yes-or-no decision is possibly determined in a different simple game reflecting the decision rule within CM and EP.

Given these baseline assumptions, equation (10) can be written as

$$\xi_{\pi} = 2 \int_0^1 \int_q^1 (\mu - q) m \binom{m-1}{m-r} \mu^{m-r} (1-\mu)^{r-1} d\mu dq, \quad (11)$$

and there is an analogous expression for CM. We consider not only quota  $r = 11$  which most closely resembles the real 71% quota, but all vote thresholds from 8 to 15 for comparison reasons. Numerical results are indicated in Fig. 4.<sup>20</sup> For  $r = 11$ , one obtains

$$\begin{aligned} \xi_{\pi} &= 0.110 \\ \xi_{\mu} &= 0.404 \end{aligned} \quad (12)$$

as ex ante power values. This means that a shift of CM's position by one (infinitesimal) unit within the policy space, will cause the collective decision to shift in the same direction by 0.404 (infinitesimal) units in expectation. The same change to EP's position translates only into a move of 0.110 units on average. With probability  $1 - 0.404 - 0.11 = 0.486$ , CM and EP lie on opposite sides of the status quo, which then prevails and neither player has ex post power in the sense of inducing a change of the agreed outcome by its strategic behaviour after a small exogenous preference change.

Figure 4 illustrates that under the assumption of a uniformly distributed ideal point  $\tilde{\pi}$  of EP, *both* EP and CM lose ex ante power as the decision quota applied in CM increases from simple majority to unanimity. The status quo prevails more frequently. Hence, neither the unitary representative of EP nor CM's pivotal member – always the most reluctant or even opposed to change status quo in case of unanimity rule – has much influence in the sense of translating own preferences into corresponding policy outcomes. Note that the above power measure is defined with the purpose of capturing *constructive power*. It could be adapted to deal with its more destructive cousin *blocking power*, which refers to the ability to prevent others from changing the status quo.<sup>21</sup>

## 4.2 Parliament Pivot vs. Council Pivot

A single EP representative with an ideal point varying uniformly on the policy space  $X = [0, 1]$  is an extreme assumption. The alternative – to us more reasonable – benchmark assumption is that *individual* decision makers' ideal points in *both* EP and CM come from a uniform distribution on  $[0, 1]$ . This implies that EP is not modelled as a unitary actor but rather it is represented by the pivotal voter in EP for each preference configuration.<sup>22</sup>

<sup>20</sup>Numbers were calculated for quotas  $d = \frac{8}{15}, \frac{9}{15}, \dots, 1$  and then interpolated. An analogous statement applies to Figs. 5–7.

<sup>21</sup>Presuming that countries have joined – and will be joining – mainly in order to influence future policies rather than cement an old status quo, constructive power is of greater interest to us.

<sup>22</sup>Since the 626-member EP sends 15 representatives to the real Conciliation Committee, there is, in principle, scope for strategically picking a delegation whose interests diverge from the pivotal voter's (see e.g. Segendorff 1998). However, under the above assumptions this cannot be advantageous because the agreement amounts to either EP's or CM's stated ideal point rather than a compromise.



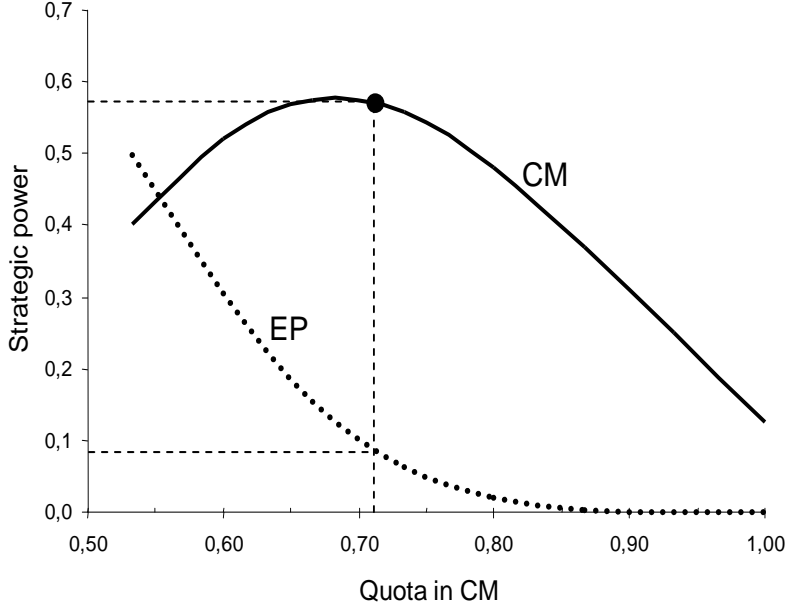


Figure 5: Distribution of power in EU15 considering the pivotal position,  $\tilde{\pi}$ , of 626 MEP

In the current EP there are  $k = 626$  MEPs implying that the ideal policy position of the pivot,  $\tilde{\pi}$ , is a  $(314,313)$ -beta-distributed random variable. Denoting by  $p = 314$  the threshold in EP and using the same assumptions for CM as above, one obtains

$$\xi_{\pi} = 2 \int_0^1 \int_q^1 \left[ \int_0^{\mu} k \binom{k-1}{k-p} x^{k-p} (1-x)^{p-1} dx - \int_0^q k \binom{k-1}{k-p} y^{k-p} (1-y)^{p-1} dy \right] m \binom{m-1}{m-r} \mu^{m-r} (1-\mu)^{r-1} d\mu dq. \quad (13)$$

Numerical results are shown in Fig. 5. For  $r = 11$ , one obtains

$$\begin{aligned} \xi_{\pi} &= 0.061 \\ \xi_{\mu} &= 0.557 \end{aligned} \quad (14)$$

as ex ante power values. While a small shift of CM's position is passed through to the collective decision at a rate of approximately 56%, a small opinion change of EP has an almost negligible effect on policy – implying a move amounting to only about 6% the original shift of EP's position.<sup>23</sup>

So, the disadvantage of the Parliament relative to the Council is more pronounced when – we think more realistically – it is modelled as a decision body compromising many

<sup>23</sup>If the computationally very demanding true *weighted* voting rule is used to determine CM's position, the results are  $\xi_{\pi} = 0.531$  and  $\xi_{\mu} = 0.080$ . Intra-institutional weights (in contrast to quotas) have only a second-order effect on inter-institutional power.

heterogenous decision makers. Whether  $k = 626$  is the best modelling choice is open to debate. Clearly, party membership (and discipline) in EP results in positive and perhaps even perfect correlation between many ideal points  $\tilde{\pi}_1, \dots, \tilde{\pi}_k$ . In view of this,  $\xi_\pi$  and  $\xi_\mu$  in (14) somewhat exaggerate the difference between EP's and CM's average influence in the Conciliation Committee. But note that given the rather high decision quota in CM, the numbers in (12) – based on EP's 'pivot position' varying uniformly over policy space  $X$ , altogether ignoring the centripetal effect of simple majority for  $k \geq 3$  – are only moderately more consoling from EP's perspective.

The intuition behind the stark power difference between EP and CM is as follows: First, EP's simple majority rule together with its great number of members implies that the random ideal point of its pivotal member, and hence by our assumption EP's ideal point  $\tilde{\pi}$  in the Conciliation Committee, has a (conditional) distribution which is highly concentrated around the mid-point of policy space  $X$  (see Fig. 8 in Appendix 2).<sup>24</sup> Second, CM's qualified majority rule ensures that the distribution (conditioned on the status quo) of the ideal point of its pivotal member – the 11-th most enthusiastic or 5-th least enthusiastic about changing the status quo in the considered direction – is more spread out and, importantly, skewed with a peak rather close to the status quo.<sup>25</sup> In other words, qualified majority implies a rather conservative position of CM in the Conciliation Committee while EP is usually more progressive and centrally located. Status quo bias in bargaining, established in Sect. 2, translates this into an inter-institutional bargaining advantage for CM, which implies significantly greater average influence and power for CM in the Conciliation Committee. Unfortunately, all this is not identified by using traditional power indices that ignore strategic interaction.

Figure 5 illustrates that under the assumption of 626 independently uniformly distributed EP members, the power impact of a quota increase or decrease in CM is non-monotonic: CM's strategic power is maximal for a two-thirds qualified majority requirement ( $r = 10$ ) – surprisingly close to the present 71% majority requirement in place. A quota increase raises the probability of the CM pivot being closer to status quo than the EP pivot *conditional* on existence of mutually beneficial policy changes. We will refer to this as the *relative vote threshold effect*. At the same time, higher CM quota also lowers the probability of CM pivot and EP pivot finding themselves on the same side of the status quo; if they do not, there is no mutually beneficial alternative to the latter and hence no influence for either institution. We refer to this as the *absolute vote threshold effect*. Strategic power is determined by the product of both. Up to  $r = 10$ , the (positive) relative effect of quota changes dominates. Above, the (negative) absolute effect begins to dominate: CM would lose power in absolute terms if it adopted a higher quota.<sup>26</sup>

In less technical terms, a high internal quota increases CM's chances to benefit from *bargaining's status quo bias*. But it also promotes *institutional status quo bias*: It gets more likely that respective EP and CM pivots prefer opposite changes to the status quo.

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<sup>24</sup>Considering the case in which EP *and* CM prefer moving to the right of the status quo,  $E(\tilde{\pi}_{(k-p+1)}) = 313/627$  with a standard deviation of less than 0.02.

<sup>25</sup>Similarly,  $E(\tilde{\mu}_{(m-r+1)}) = 5/16$  with a standard deviation of more than 0.11.

<sup>26</sup>CM would still improve its power in relative terms.

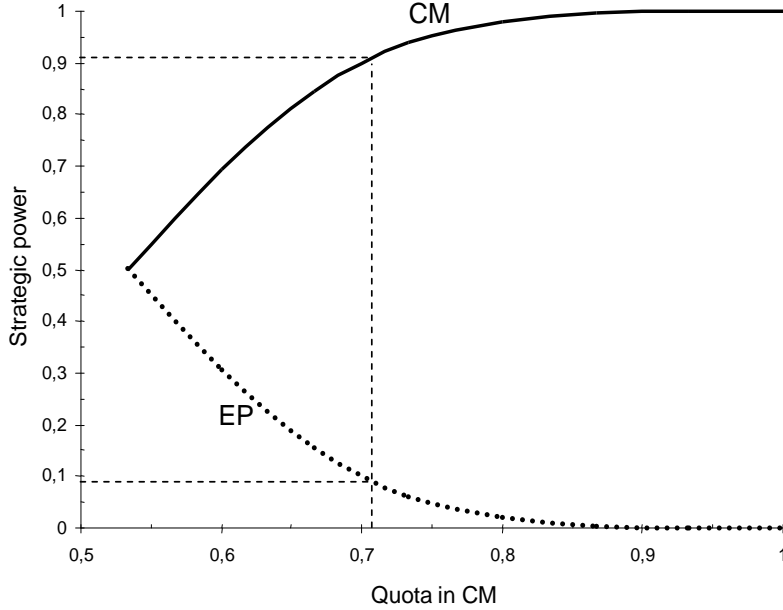


Figure 6: Distribution of power in EU15 with 626 MEP and fixed status quo  $q = 0$

Thus, fewer and fewer proposed policy changes get implemented, and players exercise less and less of constructive power.

### 4.3 Fixed Legislative Status Quo

If the reference point for an agreement in the Conciliation Committee,  $q$ , is uniformly distributed as assumed above, there may frequently be no mutual gains from an agreement. In this section, we fix the legislative status quo to zero, so that players agree about the direction but not the degree of change. This would be the case if EP and CM only invoked the Conciliation Committee when there are gains from trade. Thus we take a step from pure ex ante analysis to interim analysis.

Suppose that CM with  $m = 15$  members and EP with  $k = 626$  members are represented by their respective pivot. Fixing the legislative status quo to zero yields

$$\xi_{\pi} = \int_0^1 \left[ \int_0^{\mu} k \binom{k-1}{k-p} x^{k-p} (1-x)^{p-1} dx \right] m \binom{m-1}{m-r} \mu^{m-r} (1-\mu)^{r-1} d\mu \quad (15)$$

and an analogous expression for CM.

Figure 6 illustrates strategic power for varying Council quota  $r$ . For simple majority in both EP and CM, the former actually is minimally more powerful: Its even number of members results in an asymmetric pivot distribution with slightly more mass to the left of 0.5, whereas CM's pivot in the simple majority case is symmetric. EP therefore is slightly more often the player closer to the fixed status quo 0. As the majority requirement in CM increases, the distribution of its pivotal member moves to the left – in the unanimity case

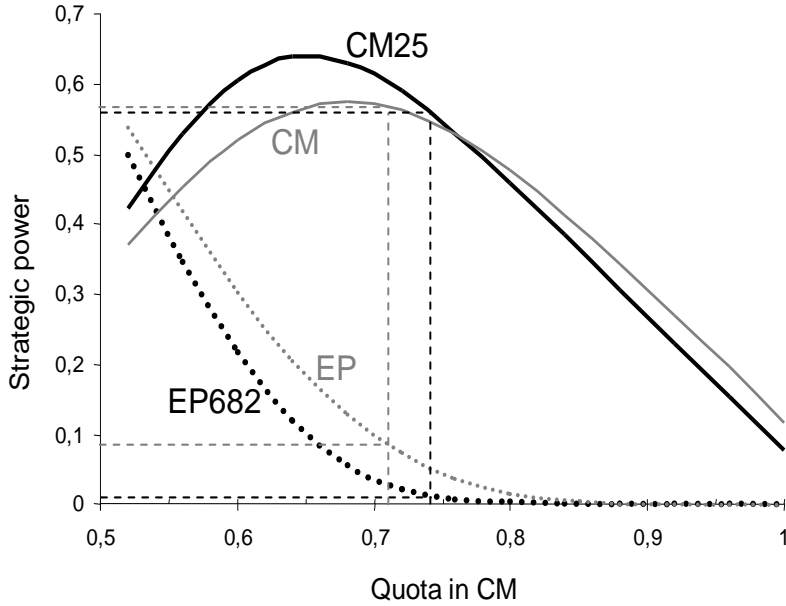


Figure 7: Distribution of power in EU25 with 682 MEP

even peaking at 0 (see Fig. 8 in the appendix). Already for  $r = 13$ , the probability that the CM pivot is to the left of EP's pivot is more than 0.99. In contrast to the case of random status quo, this does not affect the existence of mutually beneficial agreements, i. e. there is no negative absolute vote threshold effect.

For,  $r = 11$ , one obtains

$$\begin{aligned}\xi_{\pi} &= 0.062 \\ \xi_{\mu} &= 0.938.\end{aligned}\tag{16}$$

The difference between EP's and CM's influence is much more pronounced than under the previous section's assumption of random status quo. It is almost only CM that benefits from there *always* being gains from trade – no matter whether the 8th, 11th, or 15th most reluctant (to a policy change in the direction supported by EP) CM member defines this institution's position. Given a status quo of 0, CM can enjoy the positive relative vote threshold effect without countervailing absolute effect.

#### 4.4 Enlargement

Membership of the EU will expand on 1 May 2004 from the current 15 to 25 countries. This also has implications for the inter-institutional balance of power. In CM the number of members will increase hand in hand with the expanding membership; in EP, incumbent countries give up part of their seats. After the enlargement the total number of MEPs will increase from the current 626 to 682.<sup>27</sup>

<sup>27</sup>When Romania and Bulgaria join the EU supposedly in 2007, the total number of MEPs increases to 732, which is the upper limit as defined in the Treaty of Nice.

Figure 7 shows the impact of the enlargement on inter-institutional power in the Conciliation Committee, approximating decision-making in the enlarged Council by non-weighted voting of 25 players and, again, letting the status quo vary uniformly on  $X$ . The figure demonstrates that EP loses regardless of the quota chosen in CM. The impact for CM is positive when the quota in CM is below three quarters and negative beyond that. Note that the Treaty of Nice increased the quota from 71% to 74%.<sup>28</sup> The combined effect of enlargement and quota increase is to keep strategic power of CM roughly constant. It is striking that enlargement and the new quota push EP's power score practically to zero.

After the enlargement the relative vote threshold effect works stronger in favour of CM than in EU15 for low quotas. The turning point beyond which the absolute effect dominates is, however, reached at lower vote threshold level than in EU15. The dominance of the absolute effect decreases CM's power at faster pace in an enlarged EU than in EU15. This implies that, at high quotas, *both* EP and CM are worse off after the enlargement.

Recent attempts to reform EU decision-making, like the proposal of the Convention, have aimed at lowering the majority threshold in CM. In relative terms, CM's quota has remained practically unchanged through the history of the EC/EU. In Nice, despite the awareness of enlargement's deteriorating impact on EU's capacity to act, national governments decided to increase the quota. This makes EP powerless and shifts codecision back towards inter-governmentalism.

Moreover, it weakens the EU's capacity to act quite considerably. Baldwin et al. (2001) argued that to restore EU15's capacity to act in an enlarged Union, the Council's quota should be lowered to 67%. This would benefit EP even more than CM, but still leave it in the position of the less powerful actor. Interestingly, two-thirds majority is very close to CM's post-enlargement power maximum, which is reached at 64%. When membership of the EU approaches 30 countries, CM's power maximum moves towards the 60% proposed on many occasions during the ongoing inter-governmental conference.

## 5 Concluding Remarks

We agree with most observers of European integration that EU decision-making has developed in the direction of a balanced bicameral system. The set of policy areas to which codecision applies has been extended, gradually making it the most important decision-making procedure of the EU. Moreover, the Amsterdam version of codecision gives neither EP nor CM a significant *direct* procedural advantage. However, the apparent symmetry between Parliament and Council in the crucial stage of codecision, the Conciliation Committee, is *not* sufficient to make them equally powerful co-legislators. Distinct internal decision mechanisms – in particular different majority thresholds – provide a significant *indirect* procedural (dis-)advantage. Namely, status quo bias in Conciliation Committee

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<sup>28</sup>In the Treaty there are, in fact, two different thresholds: 255 and 258 votes of the total number of votes 345. The former was defined using a 74% quota and the latter as the number of votes. 258 votes of 345 total is 74.8%. Moreover, the quota is agreed only for EU27. Since Romania and Bulgaria will join only later, the vote threshold must be renegotiated before the actual enlargement in 2004.

decisions implies considerably greater influence for the on average more conservative Council. So, balanced bicameralism in the EU is still a long way ahead.

The calculations above demonstrate that inter-institutional power is highly sensitive to intra-institutional vote thresholds. A decrease of CM's quota has been proposed on many occasions, notably by the Commission before the critical Nice summit and recently by the European Convention<sup>29</sup>, mainly in order to avoid paralysis in the Council. It has typically been neglected that the latter can benefit from a comparatively high quota in terms of inter-institutional power. From this perspective, it is not surprising that the national governments represented in the Council rejected such proposals and have even increased the quota.<sup>30</sup>

There is, however, a trade-off between relative and absolute power. Our analysis suggests that the higher quota soon to be implemented will have a detrimental effect for CM and EP alike if both primarily care about absolute power and constructive influence on EU legislation. Under our a priori preference assumptions, a quota nearer to 60% would, first, not hurt or even benefit CM relative to the Treaty of Nice's provisions. Second, it would greatly improve the influence of the EU's only institution with a direct electoral mandate, the European Parliament, and strengthen the balanced bicameralism that at least officially has been high on the EU's agenda for a decade.<sup>31</sup> In contrast, the Nice rules render EP practically powerless and make 'codecision' a gross exaggeration. Finally, a quota reduction would significantly increase chances to implement changes to the status quo in the many policy areas to which codecision applies at all.

Our arguments are based on common spatial voting assumptions, bargaining theory, and the framework of Napel and Widgrén (2004). We made several simplifications that should be relaxed in future research. For example, we did not explicitly analyze the effect of weighted voting in the Council. Preliminary computations confirm, however, that current weights in CM have only second-order effects on inter-institutional power, very slightly benefitting EP. Also, we considered one isolated instance of bargaining between players who suffered exactly the *same* disutility from distance to their respective ideal point. Thus, repeated-game effects (typically allowing for a great multiplicity of equilibrium outcomes) and log-rolling based on player-specific utility and / or different distance functions (weighting policy dimensions by subjective measures of salience), were not dealt with. These shortcomings have limited policy implications, though: Log-rolling complicates the derivation of the contract curve considerably, but the essential bargaining problem of selecting among many Pareto-efficient alternatives (with different distributional consequences) remains the same. Also, regular national and European elections limit the scope for sophisticated repeated-game strategies of EP and CM as such. More controversial is the hypothesis that Council and Parliament are represented essentially by their respective

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<sup>29</sup>For assessments of the precise proposals see Baldwin et al. (2001) and Baldwin and Widgrén (2003a and 2003b).

<sup>30</sup>A high quota can also act as a safeguard against having the majority's will imposed on a given country. But the probability of being in the minority under qualified majority rule decreases in the number of voters. So this is an unlikely motive for a quota increase accompanying EU enlargement.

<sup>31</sup>The Council would remain the, by far, most powerful institution.

pivotal members in their negotiations – which is unfortunately standard. It restricts both institutions to exhibit a high level of collective rationality.

## Appendix 1

**Proposition 3 – Proof.** Without loss of generality assume  $q = 0$  and let  $u_i(\lambda_i) = 0$ . Utility is the same concave strictly decreasing function of distance to the respective ideal point for both players. Hence it suffices to show  $u_\pi^q > u_\mu^q \iff u_\pi^* > u_\mu^*$ . The Pareto frontier of  $U$

$$\begin{aligned} P(U) &= \left\{ \left( u_\pi(\gamma\pi + (1-\gamma)\mu), u_\mu(\gamma\pi + (1-\gamma)\mu) \right) : \gamma \in [0, 1] \right\} \\ &= \left\{ \left( u((1-\gamma)d(\pi, \mu)), u(\gamma d(\pi, \mu)) \right) : \gamma \in [0, 1] \right\} \end{aligned}$$

is symmetric w. r. t. the 45°-line. So  $\phi(\phi(u_\pi)) = \phi(u_\mu) = u_\pi$ , which implies

$$\phi'(\tilde{u}_\pi) = -1 \tag{17}$$

for fixed point  $\tilde{u}_\pi = \phi(\tilde{u}_\pi)$ . Concavity of utility function  $u(\cdot)$  translates into concavity of  $\phi(\cdot)$ , so (17) implies

$$\phi'(u_\pi) \begin{cases} \geq -1; & u_\pi < \tilde{u}_\pi, \\ \leq -1; & u_\pi > \tilde{u}_\pi. \end{cases} \tag{18}$$

Now assume  $u_\pi^q > u_\mu^q$  and first note that EP and CM will not agree on the endpoint of the contract curve most preferred by CM:

1. Consider  $u_\pi(\mu) < u_\pi^q$ , i. e. CM's ideal point leaves EP worse off than the status quo. The endpoint of the contract curve preferred by CM then gives exactly utility  $u_\pi = u_\pi^q$  to EP, implying that the Nash product  $N(u_\pi, u_\mu) \equiv (u_\pi - u_\pi^q)(u_\mu - u_\mu^q)$  is zero. Since it is positive in the interior of the contract curve, this cannot be the Nash bargaining outcome.
2. Consider  $u_\pi(\mu) \geq u_\pi^q$ , i. e. CM's ideal point leaves EP weakly better off than the status quo. CM's preferred endpoint of the contract curve in this case is  $\mu$  and yields utility 0 to CM and  $\phi(0) < 0$  to EP. This is no solution either: The change in the Nash product  $N(u_\pi, u_\mu)$  implied by moving slightly from  $\mu$  towards  $\pi$  is captured by its directional derivative at  $(\phi(0), 0)$  along the Pareto frontier, i. e. in direction of vector  $a \equiv (1, \phi'(\phi(0)))$ :

$$\begin{aligned} N'_a(\phi(0), 0) &= (0 - u_\mu^q, \phi(0) - u_\pi^q) \begin{pmatrix} 1 \\ \phi'(\phi(0)) \end{pmatrix} \\ &= -u_\mu^q + \phi(0)\phi'(\phi(0)) - u_\pi^q\phi'(\phi(0)) \\ &= -(u_\mu^q + u_\pi^q\phi'(\phi(0))) + \phi(0)\phi'(\phi(0)). \end{aligned}$$

$\phi(0) < \tilde{u}_\pi$ , so (18) implies  $0 \geq \phi'(\phi(0)) \geq -1$ . Therefore, given  $u_\mu^q < u_\pi^q < 0$ , the first summand is strictly positive. Both  $\phi(0)$  and  $\phi'(\phi(0))$  are negative, so the second summand is positive, too. Therefore,  $N'_a(\phi(0), 0) > 0$  and  $(\phi(0), 0)$  cannot maximize  $N(\cdot)$ .

It follows that EP and CM must either agree on  $\pi$ , in which case  $u_\pi^* > u_\mu^*$  is obvious, or on some point in the interior of the contract curve which is characterized by tangency of an iso- $N(\cdot)$  line and  $\phi(\cdot)$  in  $(u_\pi^*, u_\mu^*)$ . For the latter case, note that the slope of iso- $N(\cdot)$  line

$$g(u_\pi) = \frac{k}{u_\pi - u_\pi^q} + u_\mu^q$$

with  $k = (u_\pi^* - u_\pi^q) \cdot (u_\mu^* - u_\mu^q)$  is

$$g'(u_\pi^*) = -\frac{u_\mu^* - u_\mu^q}{u_\pi^* - u_\pi^q}$$

in  $(u_\pi^*, u_\mu^*)$ . Suppose  $u_\pi^* \leq u_\mu^*$ . Then  $g'(u_\pi^*) < -1$  given  $u_\pi^q > u_\mu^q$ . However,  $u_\pi^* \leq u_\mu^*$  means  $u_\pi^* \leq \tilde{u}_\pi$ , which implies  $\phi'(u_\pi^*) \geq -1$  by (18). This is a contradiction, so that indeed  $u_\pi^* > u_\mu^*$ .

Similarly, assuming  $u_\pi^q \leq u_\mu^q$  and supposing  $u_\pi^* > u_\mu^*$  a contradiction can be shown (for any interior solution  $g'(u_\pi^*) > -1$ , while (18) implies  $\phi'(u_\pi^*) \leq -1$ ). ■

## Appendix 2

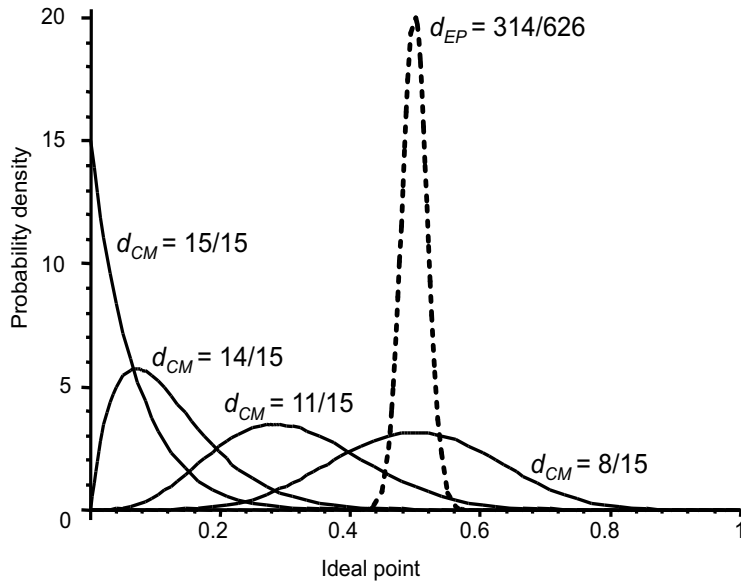


Figure 8: Distribution of the pivotal player's ideal point in EP and CM for different decision quotas



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