

**IMPORTANCE OF STATUS QUO WHEN  
LOBBYING A COALITION  
GOVERNMENT**

---

R. Emre Aytimur

GEORG-AUGUST-UNIVERSITÄT GÖTTINGEN

# Importance of Status Quo when Lobbying a Coalition Government

R. Emre Aytimur\*

Georg-August-Universität Göttingen

May 28, 2013

## Abstract

Lobbying a coalition government is different than lobbying a single-party government, since in the case of a coalition government, the interest group can intervene in the intragovernmental decision process. In the case where the interest group likes the status quo more than the surplus maximizing policy, the interest group influences the policy without any contribution thanks to its credible threat to block unfavorable proposals. We show further that when, say, a *leftist* coalition government may be replaced by a *rightist* coalition government, the final policy reflects a *rightist* interest group's preferences more heavily due to the interest group's forward-looking considerations.

**Keywords:** lobbying, policy-making, coalition governments, status quo

**JEL Classification:** C78, D72, D78

## 1 Introduction

A coalition government, in contrast to a single-party government, encompasses political parties as separate entities. Given the prevalence of coalition governments, particularly in Western European democracies<sup>1</sup>, this feature of coalition governments has attracted a lot

---

\*Georg-August-Universität Göttingen, Chair of Public Economics, Platz der Göttinger Sieben 3, 37073 Göttingen, Germany. Email: Refik-Emre.Aytimur@wiwi.uni-goettingen.de.

<sup>1</sup>In 13 western european countries over the period 1945-1999, 69 per cent of governments were coalitions (238 of 343 cases). (Muller and Strom (2000))

of attention in terms of its consequences on accountability (see e.g. Kunicova and Rose-Ackerman (2005) and Persson, Tabellini and Trebbi (2003)), government spending (see e.g. Persson, Roland and Tabellini (2003), Persson and Tabellini (2004), Perotti and Kontopoulos (2002) and Baskaran (2013)) and budget deficits (see e.g. Roubini and Sachs (1989) and Woo (2003)). Surprisingly, its consequences on lobbying have been largely neglected, although the economic policy issues such as fiscal policy cannot be fully understood in isolation from lobbying and the exact same feature of coalition governments, i.e. not being a unitary political actor, may offer a special interest group (henceforth, SIG) a broader range of opportunities to intervene in the political process. In this paper, we make a step towards understanding the effect of coalition governments on lobbying outcomes.

The standard common agency lobbying game (henceforth, the SCA game, see e.g. Bernheim and Whinston (1986), and Grossman and Helpman (1994)) considers the government as a unitary actor which can always reject SIG's offer and implement its ideal policy. Hence, SIG has to compensate the single-party government for its utility difference between its ideal policy and SIG's proposed policy. In the SCA game, the outside option of the government is its ideal policy and payoffs do not depend on the status quo. However, in case of a coalition government, the assumption that the government is a unitary actor is not plausible. In this paper, we propose a lobbying game which considers each party of the coalition government (parties  $A$  and  $B$ ) as a different actor. When party  $A$  proposes a policy deal to party  $B$ , we let SIG to intervene in the intragovernmental bargaining process and to try to convince party  $B$  either to reject or to accept party  $A$ 's proposal. The first result is that the final policy is efficient in the sense of maximizing the total payoff of SIG and the coalition government, since we assume transferable utility, as in the SCA game. However, payoff distribution is clearly different than in the SCA game, and depends crucially on the status quo. When  $A$  proposes a policy to  $B$ , it has to make sure that  $B$  and SIG jointly prefer the proposed policy to the status quo, since otherwise the policy proposal is rejected and the status quo remains. In case SIG prefers the status quo to  $A$ 's policy proposal, which is the efficient policy in equilibrium,  $A$  has to make a sufficient transfer to  $B$  so that SIG cannot block  $A$ 's proposal by convincing  $B$  to reject it. SIG has policy influence without any payment in this case, thanks to its credible threat to block  $A$ 's proposal via  $B$ . Hence, the lack of observed lobbying contributions to parties does not necessarily mean no policy influence from lobbying group. Persson (1998), Helpman and Persson (2001), Polborn (2006) and Polborn and Sahakyan (2007) achieve similar results in different settings. Hence, as Polborn (2006) emphasizes, low lobbying expenditures do not necessarily imply that lobbying is not effective or that politicians cannot be influenced by lobbying.

If, on the other hand, SIG prefers the efficient policy to the status quo,  $A$  can lower its transfer to  $B$  to the point that SIG pays all its surplus relative to the status quo in order to make  $B$  accept  $A$ 's proposal. In summary, although the policy outcome is the efficient policy irrespective of the status quo, SIG's payment depends crucially on the status quo and can vary from zero to all its surplus compared to the status quo.

As the next step, we analyze a two-period model of lobbying a coalition government. The motivation of the two-period analysis is that an interest group is more forward-looking than a government, since a government's interest in the future is discounted by its probability of losing the power after the next elections. As opposed to the SCA game in which there is no link between periods since payoffs do not depend on the status quo, in our model, since payoffs depend on the status quo and the first period's policy becomes the second period's status quo, the analysis of the two-period model provides further insights. In the second period, SIG pays all its surplus compared to the status quo which is the first period's final policy if it prefers the efficient policy of the second period to the status quo. In case the next potential coalition government has more similar preferences to SIG's than the first-period's coalition government, the potential efficient policy in the second period is more favorable to SIG than the efficient policy of the single-period model in the first period. Hence, when the next potential coalition government has more similar preferences to SIG's than the first-period's coalition government<sup>2</sup>, SIG has an additional willingness to pay for a more favorable policy in the first period compared to the single-period model, since a more favorable policy in the first period will let SIG pay less for policy influence in case of a potential government change in the second period. Consequently, the first period's policy reflects SIG's preferences more heavily in this case than in the case of the single-period model. In other words, we reach the a priori surprising conclusion that the final policy reflects more heavily the preferences of, say, a *rightist* SIG in the case of a *leftist* government expected to be replaced by a rightist government rather than in the case of a rightist government to be replaced by a leftist government. However, this effect does not go as far as a rightist SIG achieves a better policy outcome with a leftist government than with a rightist one.

This result implies a higher policy convergence between the final policies implemented by the leftist and rightist coalition governments, and may shed additional light on voters' feeling of "tweedledum-tweedledee politics". For instance, Germany's current right-wing coalition

---

<sup>2</sup>Otherwise, if the first period's coalition government has more similar preferences to SIG's, then, even with the final policy of the single-period model in the first period, SIG does not need to pay for policy influence in the second period. Hence, it has no additional willingness to pay for a more favorable policy in the first period.

government CDU-FDP has come recently under attack for its attitude towards nuclear energy and minimum wage policies which increasingly mirrors positions usually associated with left-wing SPD and Green Party.<sup>3</sup>

Grossman and Helpman (2001) analyzes both lobbying a single-party government and a legislature. The intuitions of our results of the single-period model are very similar. However, since we assume transferable utility between coalition partners, the intuitions apply to a larger degree and become more transparent. Additionally, this assumption results in the policy choice that maximizes the total surplus of all players, independent of the configuration of players' ideal policy points. Another different result that this assumption implies is that contributing to the agenda-setter is redundant, since the agenda-setter takes already into account SIG's preferences due to SIG's potential intervention in the process later on. Most importantly, we study a two-period model of lobbying a coalition government as well and find intriguing results, as discussed above.

Grossman and Helpman (1994) is the seminal paper analyzing the influence of multiple lobbying groups on a single-party government in a common agency framework. Polborn (2006) and Polborn and Sahakyan (2007) study a dynamic lobbying model in which the status quo plays a key role as in our paper and two lobbying groups compete for influence on a binary policy choice. Besley and Coate (2001) considers lobbying a single-party government in a citizen-candidate model including an election stage where voters vote strategically foreseeing lobbying after elections.

Papers studying the influence of interest groups on a legislature, instead of a single-party government, include Snyder (1991), Groseclose and Snyder (1996), Persson (1998), Helpman and Persson (2001), Baron (2006) and Baron and Hirsch (2012). In the case of lobbying a legislature, it is sufficient to convince the majority of legislators in order to influence the policy. However, as analyzed by Baron (1998) and Diermeier and Feddersen (1998), in parliamentary systems, which lead often to coalition governments, a strong voting cohesion exists among coalition partners. This voting cohesion leads to the conclusion that an interest group has to convince the coalition government, as in our paper. Persson (1998) and Helpman and Persson (2001) analyze a setup where multiple interest groups compete for local public goods and each interest group makes a contribution only to its associated legislator. In Snyder (1991), the interest group has the additional power of setting the agenda. In Groseclose and Snyder (1996), there are two interest groups who compete sequentially to buy legislators'

---

<sup>3</sup>See, for instance, newspaper articles in Der Tagesspiegel ([www.tagesspiegel.de/meinung/meinungsgleichheit-alle-sind-bio-und-gegen-atomkraft/4017260.html](http://www.tagesspiegel.de/meinung/meinungsgleichheit-alle-sind-bio-und-gegen-atomkraft/4017260.html)), and in Handelsblatt ([www.handelsblatt.com/meinung/kommentare/cdu-und-spd-die-neue-deutsche-einheitspartei/6324872.html](http://www.handelsblatt.com/meinung/kommentare/cdu-und-spd-die-neue-deutsche-einheitspartei/6324872.html)).

votes in the context of a binary policy choice. Although buying votes of the majority of legislators is sufficient due to majority rule, the interesting result is that the first-mover interest group may prefer to buy supermajorities since that way it may be cheaper to prevent the reversal of the policy by the second-mover interest group. Baron (2006) studies fundamentally the same problem as Groseclose and Snyder (1996), but in a more institutionally structured framework, and then gives answers to questions such as which lobbyists are active in equilibrium, whether they prefer to lobby legislators who are supporting or opposing their policy views and when a lobbying group "buys" supermajorities. Baron and Hirsch (2012) study lobbying a coalition government where lobbies can also influence the formation of a coalition government. More importantly, they assume that interest groups cannot observe the intragovernmental bargaining process as a result of which they cannot intervene in this process, as opposed to our paper.

In section 2, we study a single-period model of lobbying a coalition government. In section 3, we extend our model to two periods, where the coalition government can change in the second period with some probability. Section 4 concludes.

## 2 A Single-Period Model

There is one special interest group (SIG) which tries to influence the coalition government consisting of two parties  $A$  and  $B$ . There is a unidimensional policy variable.

We analyze a game with perfect information, i.e. each player knows all previously chosen actions before choosing its action. The timing of the game is as follows:

1. SIG proposes a policy  $p \in \mathbb{R}$  and a contribution  $c_A \in \mathbb{R}$  to party  $A$  conditional on the choice of  $p$  as the final policy.
2. Party  $A$  proposes a policy  $p_A \in \mathbb{R}$  and a transfer  $t \in \mathbb{R}$  to party  $B$ , the transfer being conditional on  $B$ 's acceptance of  $A$ 's policy proposal.
3. Then, SIG makes a contribution offer  $c_B \in \mathbb{R}$  conditional on the acceptance of  $p_A$  by party  $B$  as the final policy and a contribution offer  $c'_B \in \mathbb{R}$  conditional on the rejection of  $p_A$  by party  $B$  as the final policy.
4. Party  $B$  accepts or rejects party  $A$ 's proposal. If party  $B$  accepts party  $A$ 's proposal,  $p_A$  is the final policy chosen, and the payments  $t$  and  $c_B$  are realized. If  $p_A = p$ , the payment  $c_A$  is also realized. If party  $B$  rejects party  $A$ 's proposal, the status quo policy  $q \in \mathbb{R}$  remains, and the payment  $c'_B$  is realized.

$A$ 's,  $B$ 's and SIG's preferences on the policy choice are respectively represented by concave single-peaked functions  $W_A(p)$ ,  $W_B(p)$  and  $W_S(p)$ . We assume further that the utility functions of all players are quasi-linear in monetary transfers.

Note that we have a stage in the game to capture the interest group's intervention into the intragovernmental bargaining process. After party  $A$  proposes a policy and a transfer to party  $B$ , SIG can propose a contribution to party  $B$  either to make  $B$  accept  $A$ 's proposal or to make  $B$  reject it. However, the timing of SIG's offer to  $B$  is not the critical assumption which allows SIG to intervene in the bargaining between the coalition partners. If we let SIG to make a proposal to  $B$  only at the beginning of the game and if SIG can observe the bargaining between the coalition partners, SIG would obtain any policy without any payment by threatening to block any other policy, thanks to its commitment power. We prefer our timing in order not to give an excessive commitment power to SIG and in spite of this modeling choice, we see in the following proposition that SIG has policy influence without any cost in many cases. In other words, not the timing of the game, but the assumption that SIG can observe the intragovernmental bargaining allows SIG to intervene. Grossman and Helpman (2001) make the same assumption. Often, there are long public discussions during the legislative process after a draft bill is introduced. Martin and Vanberg (2004) argue that these discussions are a tool to maintain the coalitional discipline, and they find that the length of the legislative process is increasing with the ideological divergence of coalition parties in Germany and in the Netherlands. Moreover, each of coalition partners tend often to publicize the details of their bargaining in order to send messages to their electorates. Last but not least, interest groups are usually infiltrated even in the private discussions through their contacts among party members.

We solve for the subgame perfect Nash equilibrium of the game by backward induction and we obtain the following proposition:

**Proposition 1** *The final policy  $p^*$  maximizes the total surplus of SIG,  $A$  and  $B$ , i.e.,*

$$p^* = \arg \max_p W_S(p) + W_A(p) + W_B(p)$$

*and SIG's total contribution is equal to*

$$\max\{0, W_S(p^*) - W_S(q)\}$$

In order to understand better the intuition of our results, we compare them with those of the SCA game where the unitary decisionmaker has the aggregate policy preferences of the

coalition.<sup>4</sup> The crucial difference between our game and the SCA game is the interest group's intervention into the intragovernmental bargaining process in our game. We believe that while lobbying a single-party government may be better represented by the SCA game, lobbying a coalition government is better represented by our game, as discussed in the preceding paragraph to Proposition 1.

The first remark is that the final policy is efficient in the sense of maximizing the total surplus of all players, as would be in the SCA game, since utility is transferable between all agents. When  $A$  proposes a policy, it has to consider SIG's intervention afterwards. The result of this intervention is that  $A$ 's policy proposal will be accepted if and only if the joint utility of  $B$  and SIG is higher in case of acceptance than in case of status quo. Hence,  $A$  takes into account the preferences of both  $B$  and SIG, and due to transferable utility between all players, it proposes the policy which maximizes the total utility of  $A$ ,  $B$  and SIG.

However, payoffs are clearly different than in the SCA game. In our model, the status quo affects the payoff distribution, whereas the status quo is irrelevant in the SCA game. Remarkably, if SIG prefers  $q$  rather than  $p^*$ , it does not need to pay anything to obtain  $p^*$ . Its potential intervention to block a policy via payments to party  $B$  is sufficient to obtain  $p^*$ . Party  $A$  has to offer a sufficient transfer to  $B$  so that SIG cannot convince  $B$  to reject  $A$ 's proposal. Why then does  $A$  propose the efficient policy although it cannot get any contribution from SIG? The reason is that  $A$ 's necessary transfer to  $B$  depends on SIG's willingness to pay to block the policy proposal. Therefore,  $A$  internalizes the policy preferences of SIG as well as  $B$ . Hence, in this case, SIG is certainly better off when facing a coalition government, since SIG does not need to pay anything for  $p^*$  as opposed to the SCA game where SIG pays the government's utility difference between its ideal policy and  $p^*$ . This result implies that no evidence of contributions from an interest group does not necessarily mean that the interest group is inactive and has no influence on the government.

The lack of commitment on the part of SIG not to intervene in the intragovernmental bargaining process can also be a disadvantage. If SIG prefers  $p^*$  rather than  $q$ , it pays all its surplus compared to the status quo, and its payoff becomes  $W_S(q)$ . In this case,  $A$  takes advantage of the fact that at the intervention stage, SIG would be ready to pay  $W_S(p^*) - W_S(q)$  to  $B$  in order to make  $B$  accept  $A$ 's proposal, and offers an accordingly low (possibly negative) transfer to  $B$ . Hence, in this case, SIG can be worse off compared to the

---

<sup>4</sup>The timing of the SCA game would be as follows: 1) SIG proposes a contribution  $c$  to the government  $G$  (whose policy preferences are given by  $W_G(p) = W_A(p) + W_B(p)$  with ideal policy  $p_G$ ), conditional on the choice of  $p$  as the final policy. 2)  $G$  chooses the final policy. If the final policy is  $p$ , the payment  $c$  is realized.

In equilibrium of the SCA game, the final policy is  $p^*$ , and the contribution of SIG is equal to  $W_G(p_G) - W_G(p^*)$ .



the equilibrium of the SCA game.<sup>5</sup> In this case, SIG can be even worse off than if it could not lobby at all.<sup>6</sup> Last but not least, the more SIG likes the status quo, the less it needs to pay. This result will be crucial in our analysis of the two-period model.

This discussion may look like suggesting that SIG is worse off when the coalition government is ideologically close, since in this case, it is more likely that SIG prefers  $p^*$  rather than  $q$  and consequently ends up paying all its surplus compared to the status quo. However, this is not true. If SIG prefers  $p^*$  rather than  $q$ , its equilibrium payoff is  $W_S(q)$ , whereas if SIG prefers  $q$  rather than  $p^*$ , it does not need to pay at all exactly because the final policy is worse than the status quo and its equilibrium payoff is  $W_S(p^*)$ , which is smaller than  $W_S(q)$ . Hence, although SIG pays all its surplus compared to the status quo when the coalition government is ideologically close, it is still better off than in the case of an ideologically farther coalition government.

In the proof, it is clear that SIG's proposal to  $A$  at the beginning of the game does not play any role. Even if SIG intervenes only indirectly, party  $A$  internalizes SIG's preferences, since party  $A$  knows that SIG will intervene after  $A$ 's proposal to  $B$ . Hence, as opposed to Grossman and Helpman (2001), we conclude that contributing directly to the agenda-setter is not essential.

Utility being transferable between parties, we see that the policies chosen and the compensation needed would not change if party  $B$  was the agenda-setter instead of party  $A$ . But, clearly, parties' payoffs depend on the agenda-setter status.

### 3 A Two-Period Model

In this section, we analyze a two-period model. In each period, the game presented in section 2 is played. The link between periods and hence our interest to study the two-period model relies on the fact that the first period's final policy becomes the second period's status quo. Notice that there would not be such a link between periods in the SCA game, since the outcome does not depend on the status quo.

In the first period, SIG faces a coalition government composed by parties  $A$  and  $B$ . After the elections, in the second period, with some probability  $a$ ,  $0 < a < 1$ , the coalition

---

<sup>5</sup>However, even in this case, SIG can be better off than in the SCA game. This happens if

$$W_S(q) > W_S(p^*) + W_G(p^*) - W_G(p_G)$$

where the left-hand side is SIG's payoff in our game, and the right-hand side is its payoff in the SCA game.

<sup>6</sup>This happens if  $W_S(q) < W_S(p_G)$ .

government as well as  $A$ 's agenda-setting power will remain the same and SIG will lobby the same coalition government as in the first period, or with probability  $1 - a$ , a new coalition government composed by different parties  $C$  and  $D$  will gain the power, and SIG will lobby this new coalition government. In other words, we assume that there are two potential coalition governments in the second period. We conjecture that adding other potential governments would make the analysis cumbersome without adding new insights.  $A$ 's,  $B$ 's and SIG's preferences on the policy choice are as in section 2. Being policy-motivated, parties  $A$  and  $B$  care about the second period policy even if they are not in power anymore.  $C$ 's and  $D$ 's preferences on the policy choice are respectively represented by concave single-peaked functions  $W_C(p)$  and  $W_D(p)$ . We assume again that the utility functions of all players are quasi-linear in monetary transfers.  $\delta$  is the discount factor.

The two-period model is interesting since the first period's final policy becomes the second-period's status quo which matters for SIG's contribution level in the second period. Hence, SIG has an additional forward-looking motive in the first period. Given that the coalition government might change at the end of the first period, coalition parties  $A$  and  $B$  have less of a forward-looking motive. Consequently, the results of the original single-period model change in the way that the first-period's final policy is more biased towards SIG's preferences in many cases.

Before presenting the result, we need to introduce some further notations:

In the second period, we know from proposition 1 that, in case of a government change, the final policy will be the one which maximizes the total surplus of SIG and of parties  $C$  and  $D$ . We call this policy as  $p_2$ . We call  $\tilde{p}_2$  the policy which is equivalent to  $p_2$  in SIG's eyes, i.e.  $W_S(p_2) = W_S(\tilde{p}_2)$ . Such a policy  $\tilde{p}_2$  may exist since SIG has single-peaked policy preferences.

Finally, we define  $\bar{p}$  as

$$\bar{p} = \arg \max_{p_A} W_A(p_A) + W_B(p_A) + (1 + \delta(1 - a))W_S(p_A)$$

Notice that  $\bar{p}$  is more biased towards SIG's preferences than  $p^*$ , since  $1 + \delta(1 - a) > 1$ . Notice also that the additional weight on SIG's preferences, i.e.  $\delta(1 - a)$ , is the discounted probability of a government change.

**Proposition 2** *In the first period, there are three possible cases:*

1. *If  $W_S(p^*) \geq W_S(p_2)$ , then the final policy is  $p^*$ .*

2. If  $W_S(p_2) > W_S(\bar{p}) \geq W_S(p^*)$ , then the final policy is  $\bar{p}$ .
3. If  $W_S(\bar{p}) \geq W_S(p_2) > W_S(p^*)$ , then the final policy is  $p_2$  (or  $\tilde{p}_2$ ).

From Proposition 1, we know that SIG's second period payoff will depend on the status quo, i.e. on the first period's final policy, if SIG prefers the second period's efficient policy ( $p^*$  if  $A$  and  $B$  are in power, or  $p_2$  if  $C$  and  $D$  are in power) to the status quo. If, on the other hand, SIG prefers the status quo in the second period to the second period's efficient policy, then its payoff in the second period will not depend on the first period's final policy.

First, assume that  $W_S(p_2) > W_S(p^*)$ . If the first period's final policy was  $p^*$ , then, in case of a government change, SIG would need to pay its utility difference between the efficient policy  $p_2$  and the status quo  $p^*$  in the second period. However, it would pay less in the second period if the first period's final policy was more favorable than  $p^*$ . Therefore, it has an additional willingness to pay to obtain a more favorable policy in the first period. Since  $A$  internalizes SIG's preferences due to its potential intervention, it takes into account this additional willingness to pay and proposes a more biased policy towards SIG's preferences than  $p^*$ . This is what happens in cases 2 and 3. In case 2, SIG prefers the second period's final policy even to the more biased policy of the first period reflecting its additional willingness to pay (the additional bias being given by  $\delta(1-a)$ , the discounted probability of a government change). As the probability of a coalition change increases, i.e. as  $a$  decreases, the final policy gets more biased due to SIG's higher willingness to pay. In case 3,  $W_S(\bar{p}) \geq W_S(p_2)$ , hence SIG has no additional willingness to pay for a more favorable policy than  $p_2$ , since it already pays nothing in the second period in case of a government change with a status quo as favorable as  $p_2$ . Consequently, the first period's final policy becomes  $p_2$  (or  $\tilde{p}_2$  which gives a higher payoff to  $A$  and the same payoff to SIG).

In case 1, SIG prefers weakly the efficient policy of the single-period model, i.e.  $p^*$ , to the second-period's policy in case of a coalition change, i.e.  $p_2$ . Hence, if this policy is chosen, it will not need to pay for policy influence in the second period. Consequently, it has no additional motive for policy influence in the first period. The final policy is the same as in the single-period model.

To sum up, when the next potential coalition government's preferences are more similar to SIG's, i.e. when  $W_S(p_2) > W_S(p^*)$ , today's policy reflects SIG's preferences more heavily. The reason is that today's more favorable policy is tomorrow's more favorable status quo which lets SIG pay less for policy influence. To illustrate, consider a rightist SIG and a coalition government which may be replaced by another one. We conclude that today's policy reflects SIG's preferences more heavily if a leftist government is in place and may be replaced by a

rightist one rather than the inverse. This is a surprising result, since the final policy reflects more heavily a *rightist* SIG's preferences in case of a *leftist* government. However, it should be emphasized that even if the policy reflects a rightist SIG's policy preferences more heavily in the case of a leftist coalition government, this does not go as far as a rightist SIG obtains a more beneficial policy outcome when a leftist government is in power. Notice that in case 2, it is still the case that  $W_S(p_2) > W_S(\bar{p})$ , and in case 3, SIG obtains an equivalently beneficial policy outcome. Moreover, it should not be overlooked that SIG "pays" for this more biased policy, unless it prefers the status quo even to the more biased policy of the first period.

Indeed, SIG's total payment in the first period is intuitively very similar to that of the single-period model. When positive, SIG pays all its surplus compared to the status quo. The difference is that this surplus includes also the expected surplus of the second period. Moreover, if this surplus is negative, i.e. the status quo is very favorable for SIG, SIG has policy influence without any payment as in the single-period model.<sup>7</sup>

## 4 Conclusion

Lobbying a coalition government is different than lobbying a single-party government, since in the case of a coalition government, the interest group can intervene in the intragovernmental decision process. If the interest group prefers the status quo rather than the efficient (surplus maximizing) policy, SIG's credible threat of blocking a policy proposal is sufficient to have policy influence without any payment. If SIG prefers the efficient policy rather than the status quo, SIG needs to pay its surplus compared to the status quo.

We analyze as well a two-period model of lobbying a coalition government. In some cases, SIG has more to gain from a favorable policy of the first period compared to the case of the single-period model, since SIG's payoff depends on the status quo and the first period's policy becomes the second period's status quo. Since the coalition government can lose its power after elections, it has less future considerations. Consequently, the final policy can be more biased towards SIG's preferences than that of the single-period model. Interestingly, this happens when SIG's and the coalition government's policy preferences are more divergent.

---

<sup>7</sup>More details can be found in the appendix.

## 5 Appendix

**Proof of Proposition 1:** If party  $B$  accepts both the offers of party  $A$  and of SIG, its utility will be  $W_B(p_A) + t + c_B$ .

If party  $B$  accepts the offer of party  $A$  and rejects the offer of SIG, its utility will be  $W_B(p_A) + t$ . Hence, we see that  $c_B$  cannot be negative, since otherwise party  $B$  will simply reject the offer of SIG. Similarly,  $c'_B$  cannot be negative either.

If SIG wants  $B$  to accept  $A$ 's proposal, it should choose  $c_B$  and  $c'_B$  such that

$$W_B(p_A) + t + c_B \geq W_B(q) + c'_B$$

The above constraint is binding, and  $c'_B$  is optimally set to zero in this case by SIG in order to decrease  $c_B$ . We know also from above that  $c_B$  cannot be negative. Hence,

$$c_B = \max \{0, W_B(q) - W_B(p_A) - t\}$$

Replacing  $c_B$  by its value, the utility of SIG in this case becomes

$$W_S(p_A) - \max \{0, W_B(q) - W_B(p_A) - t\} - \mathbf{I}_{p_A=p} c_A$$

where the last term is an indicator function showing that SIG needs also to pay  $c_A$  if the final policy implemented  $p_A$  is the one proposed by SIG to  $A$  at the beginning of the game, namely  $p$ .

Similarly, if SIG wants  $B$  to reject  $A$ 's proposal, it chooses  $c_B = 0$  and

$$c'_B = \max \{0, W_B(p_A) + t - W_B(q)\}$$

Replacing  $c'_B$  by its value, the utility of SIG in this case becomes

$$W_S(q) - \max \{0, W_B(p_A) + t - W_B(q)\}$$

Comparing SIG's utility in two cases, we conclude that if

$$W_S(p_A) + W_B(p_A) + t - \mathbf{I}_{p_A=p} c_A \geq W_S(q) + W_B(q) \tag{1}$$

then SIG prefers to offer  $c_B = \max \{0, W_B(q) - W_B(p_A) - t\}$  to party  $B$ , and party  $B$  accepts  $p_A$ .

Hence, when party  $A$  proposes  $p_A$ , it has to make sure that inequality (1) holds.

Party  $A$  will maximize its utility  $W_A(p_A) - t + \mathbf{I}_{p_A=p}c_A$  subject to (1). The constraint is binding. Replacing  $t$  by its value, the problem of party  $A$  becomes

$$\max_{p_A} W_A(p_A) + W_S(p_A) + W_B(p_A) - \mathbf{I}_{p_A=p}c_A + \mathbf{I}_{p_A=p}c_A - W_S(q) - W_B(q)$$

We see that the expressions that depend on  $c_A$  cancel each other. The reason is that even if  $p_A = p$  and  $A$  receives  $c_A$ , it will need to pay back this amount to  $B$  in order to make sure that SIG does not intervene to block. In other words, SIG's lack of commitment not to intervene in the process makes any offer at the beginning of the game redundant.

Hence, the problem of party  $A$  simplifies to

$$\max_{p_A} W_A(p_A) + W_S(p_A) + W_B(p_A) - W_S(q) - W_B(q)$$

We call the solution as  $p^*$  which is equal to

$$p^* = \arg \max_{p_A} W_S(p_A) + W_A(p_A) + W_B(p_A)$$

We see that the surplus-maximizing policy is chosen.

Replacing  $t$  in the expression of  $c_B$ , we find that

$$c_B = \max\{0, W_S(p^*) - W_S(q) - \mathbf{I}_{p_A=p}c_A\}$$

If  $p_A \neq p^*$ , then  $\mathbf{I}_{p_A=p}c_A = 0$ , and  $c_B = \max\{0, W_S(p^*) - W_S(q)\}$ .

If  $p_A = p^*$ , then SIG pays in total  $c_A + \max\{0, W_S(p^*) - W_S(q) - c_A\}$ . If  $W_S(p^*) - W_S(q) \leq 0$ , the best SIG can choose is  $c_A = c_B = 0$ . If, instead,  $W_S(p^*) - W_S(q) > 0$ , SIG will not choose  $c_A$  larger than  $W_S(p^*) - W_S(q)$ , and the total payment will be  $c_A + W_S(p^*) - W_S(q) - c_A = W_S(p^*) - W_S(q)$ .

Hence, in all cases, the total amount paid by SIG is equal to  $\max\{0, W_S(p^*) - W_S(q)\}$ .

SIG's equilibrium payoff is given by  $W_S(p^*) - \max\{0, W_S(p^*) - W_S(q)\} = \min\{W_S(p^*), W_S(q)\}$ .

$A$ 's equilibrium payoff is  $W_A(p^*) + W_S(p^*) + W_B(p^*) - W_S(q) - W_B(q)$ .

$B$ 's equilibrium payoff is  $W_B(p^*) + t + c_B$  where

$$\begin{aligned} t + c_B &= W_S(q) + W_B(q) + \mathbf{I}_{p_A=p}c_A - W_S(p^*) - W_B(p^*) + \max\{0, W_S(p^*) - W_S(q) - \mathbf{I}_{p_A=p}c_A\} \\ &= W_S(q) + W_B(q) - W_S(p^*) - W_B(p^*) + \max\{0, W_S(p^*) - W_S(q)\} \\ &= W_B(q) - W_B(p^*) + \max\{0, W_S(q) - W_S(p^*)\} \end{aligned}$$

where the second equality follows from the above discussion about SIG's total payment. Hence,  $B$ 's equilibrium payoff is given by  $W_B(q) + \max\{0, W_S(q) - W_S(p^*)\}$ .

**Q.E.D.**

**Proof of Proposition 2:** In the second period, we know from proposition 1 that final policy is  $p^*$  with probability  $a$ , and  $p_2$  with probability  $1 - a$ .

In the first period,  $B$  accepts  $p_A$  if and only if<sup>8</sup>

$$W_B(p_A) + t + c_B + \delta[a(W_B(p_A) + \max\{0, W_S(p_A) - W_S(p^*)\}) + (1 - a)W_B(p_2)] \geq$$

$$W_B(q) + c'_B + \delta[a(W_B(q) + \max\{0, W_S(q) - W_S(p^*)\}) + (1 - a)W_B(p_2)]$$

Hence, if SIG wants  $B$  to accept  $p_A$ , it chooses  $c'_B = 0$  and

$$c_B = \max\{0, W_B(q) - W_B(p_A) - t$$

$$+ \delta a [W_B(q) + \max\{0, W_S(q) - W_S(p^*)\} - W_B(p_A) - \max\{0, W_S(p_A) - W_S(p^*)\}]\}$$

The utility of SIG in this case is

$$W_S(p_A) - c_B - \mathbf{I}_{p_A=p} c_A$$

$$+ \delta \left[ a [W_S(p^*) - \max\{0, W_S(p^*) - W_S(p_A)\}] + (1 - a) [W_S(p_2) - \max\{0, W_S(p_2) - W_S(p_A)\}] \right] \quad (2)$$

where the last term is its discounted second period utility, given that the status quo in the second period is  $p_A$ . In the second period, SIG pays  $\max\{0, W_S(p^*) - W_S(p_A)\}$  if the coalition remains the same, or  $\max\{0, W_S(p_2) - W_S(p_A)\}$  if the coalition changes.

Similarly, if SIG wants  $B$  to reject  $p_A$ , it chooses  $c_B = 0$  and

$$c'_B = \max\{0, W_B(p_A) - W_B(q) + t$$

$$- \delta a [W_B(q) + \max\{0, W_S(q) - W_S(p^*)\} - W_B(p_A) - \max\{0, W_S(p_A) - W_S(p^*)\}]\}$$

The utility of SIG in this case is

$$W_S(q) - c'_B$$

---

<sup>8</sup>We know from proposition 1 that if the coalition remains the same,  $B$ 's second-period utility is  $W_B(p_A) + \max\{0, W_S(p_A) - W_S(p^*)\}$  when  $p_A$  is the final policy of the first period, and  $W_B(q) + \max\{0, W_S(q) - W_S(p^*)\}$  when  $q$  is the final policy of the first period. If the coalition government changes,  $B$ 's second-period utility will be simply  $W_B(p_2)$ .

$$+\delta \left[ a[W_S(p^*) - \max\{0, W_S(p^*) - W_S(q)\}] + (1-a)[W_S(p_2) - \max\{0, W_S(p_2) - W_S(q)\}] \right] \quad (3)$$

where where the last term is its discounted second period utility, given that the status quo in the second period is  $q$ .

Comparing SIG's utility in (2) and (3) after replacing the values of  $c_B$  and  $c'_B$ , we conclude that if

$$\begin{aligned} & W_S(p_A) + (1 + \delta a)W_B(p_A) + \delta a \max\{0, W_S(p_A) - W_S(p^*)\} + t - \mathbf{I}_{p_A=p}c_A \\ & - \delta \left[ a \max\{0, W_S(p^*) - W_S(p_A)\} + (1-a) \max\{0, W_S(p_2) - W_S(p_A)\} \right] \\ \geq & W_S(q) + (1 + \delta a)W_B(q) + \delta a \max\{0, W_S(q) - W_S(p^*)\} \\ & - \delta \left[ a \max\{0, W_S(p^*) - W_S(q)\} + (1-a) \max\{0, W_S(p_2) - W_S(q)\} \right] \end{aligned}$$

equivalently if

$$\begin{aligned} & (1 + \delta a)W_S(p_A) + (1 + \delta a)W_B(p_A) + t - \mathbf{I}_{p_A=p}c_A - \delta(1-a) \max\{0, W_S(p_2) - W_S(p_A)\} \\ \geq & (1 + \delta a)W_S(q) + (1 + \delta a)W_B(q) - \delta(1-a) \max\{0, W_S(p_2) - W_S(q)\} \end{aligned} \quad (4)$$

then SIG prefers to make sure that party  $B$  accepts  $p_A$ .

Hence, when party  $A$  proposes  $p_A$ , it has to make sure that inequality (4) holds.

Party  $A$  will maximize its utility

$$W_A(p_A) - t + \mathbf{I}_{p_A=p}c_A + \delta \left[ a[W_A(p^*) + w_B(p^*) + W_S(p^*) - W_B(p_A) - W_S(p_A)] + (1-a)W_A(p_2) \right]$$

subject to (4), where the last term is its second-period utility.<sup>9</sup> The constraint is binding. Replacing  $t$  by its value, the problem of party  $A$  becomes

$$\begin{aligned} & \max_{p_A} W_A(p_A) + (1 + \delta a)W_S(p_A) + (1 + \delta a)W_B(p_A) - \delta(1-a) \max\{0, W_S(p_2) - W_S(p_A)\} \\ & - (1 + \delta a)W_S(q) - (1 + \delta a)W_B(q) + \delta(1-a) \max\{0, W_S(p_2) - W_S(q)\} \\ & + \delta \left[ a[W_A(p^*) + w_B(p^*) + W_S(p^*) - W_B(p_A) - W_S(p_A)] + (1-a)W_A(p_2) \right] \end{aligned}$$

which can be written after simplifications as

$$\max_{p_A} W_A(p_A) + W_B(p_A) + W_S(p_A) - \delta(1-a) \max\{0, W_S(p_2) - W_S(p_A)\}$$

---

<sup>9</sup>If the coalition government remains the same, as known from proposition 1,  $A$ 's second-period utility will be  $W_A(p^*) + w_B(p^*) + W_S(p^*) - W_B(p_A) - W_S(p_A)$  where the second period's status quo is  $p_A$ . If the coalition government changes,  $A$ 's second-period utility will be simply  $W_A(p_2)$ .



since the remaining terms do not depend on  $p_A$ .

Replacing  $t$  in the expression of  $c_B$ , we find that

$$c_B = \max\{0, (1 + \delta a)W_S(p_A) - (1 + \delta a)W_S(q) - \mathbf{I}_{p_A=p}c_A + \delta(1 - a)[\max\{0, W_S(p_2) - W_S(q)\} - \max\{0, W_S(p_2) - W_S(p_A)\}] + \delta a[\max\{0, W_S(q) - W_S(p^*)\} - \max\{0, W_S(p_A) - W_S(p^*)\}]\}$$

After some algebra,

$$c_B = \max\{0, W_S(p_A) - W_S(q) - \mathbf{I}_{p_A=p}c_A + \delta a[\min\{W_S(p^*), W_S(p_A)\} - \min\{W_S(p^*), W_S(q)\}] + \delta(1 - a)[\max\{0, W_S(p_2) - W_S(q)\} - \max\{0, W_S(p_2) - W_S(p_A)\}]\}$$

Hence, as in the single period model, we see that, if positive, SIG pays all its surplus compared to the status quo, and if negative, SIG has policy influence without any payment. Naturally, its surplus includes now that of the second period. More specifically, the term  $\delta a[\min\{W_S(p^*), W_S(p_A)\} - \min\{W_S(p^*), W_S(q)\}]$  represents its surplus when the government stays the same, and the last term when the government changes.

There are two different ranges of  $p_A$  according to which the objective function differs:

(i)

$$\max_{p_A} W_A(p_A) + W_B(p_A) + W_S(p_A)$$

such that  $W_S(p_A) \geq W_S(p_2)$ .

(ii)

$$\max_{p_A} W_A(p_A) + W_B(p_A) + W_S(p_A) - \delta(1 - a)(W_S(p_2) - W_S(p_A))$$

(equivalently  $\max_{p_A} W_A(p_A) + W_B(p_A) + (1 + \delta(1 - a))W_S(p_A)$ )

such that  $W_S(p_A) \leq W_S(p_2)$ .

$A$  compares the solutions of the two preceding problems and chooses the one which maximizes its payoff.

There are three possible cases according to SIG's preferences:

1.  $W_S(p^*) \geq W_S(p_2)$ : In (i), the solution is  $p^*$ .

In (ii), since  $W_S(\bar{p}) \geq W_S(p^*)$ , the constraint  $W_S(p_A) \leq W_S(p_2)$  is binding. The constraint is binding possibly for two policies,  $p_2$  and  $\tilde{p}_2$  such that  $W_S(p_2) = W_S(\tilde{p}_2)$ . Hence, the solution is  $p_2$  or  $\tilde{p}_2$ , depending on which one gives a higher payoff to  $A$ .

$A$  prefers to choose  $p^*$ . Note that in (i),  $A$  chooses  $p^*$  when  $p_2$  or  $\tilde{p}_2$  are also possible. Similarly as in the proof of Proposition 1, it can be shown that the total amount paid by SIG is equal to

$$\begin{aligned} & \max\{0, W_S(p^*) - W_S(q) + \delta a[W_S(p^*) - \min\{W_S(p^*), W_S(q)\}]\} \\ & + \delta(1 - a) \max\{0, W_S(p_2) - W_S(q)\} \end{aligned}$$

Notice that this is equal to 0 if and only if  $W_S(q) \geq W_S(p^*) \geq W_S(p_2)$ .

2.  $W_S(p_2) > W_S(\bar{p}) \geq W_S(p^*)$ : In (i), the constraint is binding, and the solution is  $p_2$  or  $\tilde{p}_2$ .

In (ii), the solution is  $\bar{p}$ .

$A$  prefers to choose  $\bar{p}$ . Note that in (ii),  $A$  chooses  $\bar{p}$  when  $p_2$  or  $\tilde{p}_2$  are also possible. The total amount paid by SIG in this case is equal to

$$\begin{aligned} & \max\{0, W_S(\bar{p}) - W_S(q) + \delta a[W_S(p^*) - \min\{W_S(p^*), W_S(q)\}]\} \\ & + \delta(1 - a)[\max\{0, W_S(p_2) - W_S(q)\} - (W_S(p_2) - W_S(\bar{p}))] \end{aligned}$$

Notice that this is equal to 0 if and only if  $W_S(q) \geq W_S(\bar{p}) \geq W_S(p^*)$ .

3.  $W_S(\bar{p}) \geq W_S(p_2) > W_S(p^*)$ : In (i), the constraint is binding, and the solution is  $p_2$  or  $\tilde{p}_2$ .

Also in (ii), the constraint is binding, and the solution is  $p_2$  or  $\tilde{p}_2$ .

Hence,  $A$  chooses  $p_2$  or  $\tilde{p}_2$  in this case and the total amount paid by SIG is given by

$$\begin{aligned} & \max\{0, W_S(p_2) - W_S(q) + \delta a[W_S(p^*) - \min\{W_S(p^*), W_S(q)\}]\} \\ & + \delta(1 - a) \max\{0, W_S(p_2) - W_S(q)\} \end{aligned}$$

Notice that this is equal to 0 if and only if  $W_S(q) \geq W_S(p_2) > W_S(p^*)$ .

**Q.E.D.**

## References

- [1] Baron, D. P. (1998), "Comparative Dynamics of Parliamentary Governments", *American Political Science Review*, 92 (3), pp. 593-609.
- [2] Baron, D. P. (2006), "Competitive Lobbying and Supermajorities in a Majority-rule Institution", *Scandinavian Journal of Economics*, 108 (4), pp. 607-642.
- [3] Baron, D. P. and Hirsch, A. (2012), "Common Agency Lobbying over Coalitions and Policy", *Economic Theory*, 49 (3), pp. 639-681.
- [4] Baskaran, T. (2013), "Coalition Governments, Cabinet Size, and the Common Pool Problem: Evidence from the German States", Mimeo.
- [5] Bernheim, B. D. and Whinston, M. D. (1986), "Menu Auctions, Resource Allocation, and Economic Influence", *Quarterly Journal of Economics*, 101 (1), pp. 1-32.
- [6] Besley, T. and Coate, S. (2001), "Lobbying and Welfare in a Representative Democracy", *Review of Economic Studies*, 68, pp. 67-82.
- [7] Diermeier, D. and Feddersen, T. J. (1998), "Cohesion in Legislatures and the Vote of Confidence Procedure", *American Political Science Review*, 92 (3), pp. 611-621.
- [8] Groseclose, T. and Snyder, J. M. (1996), "Buying Supermajorities", *American Political Science Review*, 90, pp. 303-315.
- [9] Grossman, G. M. and Helpman, E. (1994), "Protection for Sale", *American Economic Review*, 84, pp. 833-850.
- [10] Grossman, G. M. and Helpman, E. (2001), *Special Interest Politics*, MIT Press.
- [11] Helpman, E. and Persson, T. (2001), "Lobbying and Legislative Bargaining", *Advances in Economic Analysis and Policy*, 1 (1), article 3.
- [12] Kunicova, J. and Rose-Ackerman, S. (2005), "Electoral Rules and Constitutional Structures as Constraints on Corruption", *British Journal of Political Science*, 35, pp. 573-606.
- [13] Martin, L. W. and Vanberg, G. (2004), "Policing the Bargain: Coalition Government and Parliamentary Scrutiny", *American Journal of Political Science*, 48 (1), pp. 13-27.

- [14] Muller, W. and Strom, K. (2000), *Coalition Governments in Western Europe*, Oxford: Oxford University Press.
- [15] Perotti, R. and Kontopoulos, Y. (2002), "Fragmented Fiscal Policy", *Journal of Public Economics*, 86, pp. 191-222.
- [16] Persson, T. (1998), "Economic Policy and Special Interest Politics", *Economic Journal*, 108, pp. 310-327.
- [17] Persson, T. , Roland, G. and Tabellini, G. (2003), "How the Electoral Rules Shape Party Structures, Government Coalitions and Economic Policies", Mimeo.
- [18] Persson, T. , Tabellini, G. and Trebbi, F. (2003), "Electoral Rules and Corruption", *Journal of the European Economic Association*, 1 (4), pp. 958-989.
- [19] Persson, T. and Tabellini, G. (2004), "Constitutional Rules and Economic Policy Outcomes", *American Economic Review*, 94, pp. 25-46.
- [20] Polborn, M. (2006), "Investment under Uncertainty in Dynamic Conflicts", *Review of Economic Studies*, 73, pp. 505-529.
- [21] Polborn, M. K. and Sahakyan, Z. (2007), "Dynamic Lobbying Conflicts", *Economics of Governance*, 8, pp. 263-279.
- [22] Roubini, N. and Sachs, J. (1989), "Political and Economic Determinants of Budget Deficits in the Industrial Democracies", *European Economic Review*, 33, pp. 903-938.
- [23] Snyder, J. M., Jr. (1991), "On Buying Legislatures", *Economics and Politics*, 3, pp. 93-109.
- [24] Woo, J. (2003), "Economic, Political, and Institutional Determinants of Public Deficits", *Journal of Public Economics*, 87, pp. 387-426.

## **Bisher erschienene Diskussionspapiere**

- Nr. 162 Aytimur, Refik Emre: Importance of Status Quo when Lobbying a Coalition Government, Mai 2013
- Nr. 161 Aytimur, Refik Emre: Extreme Parties and Political Rents, März 2013
- Nr. 160 Strulik, Holger: Optimal Aging with Uncertain Death, Juni 2013
- Nr. 159 Prettnner, Klaus; Strulik, Holger: Trade and Productivity: The Family Connection Redux, Juni 2013
- Nr. 158 Vogt, Nora; Bizer, Kilian: Lock-in effects in competitive bidding schemes for payments for ecosystem services, Juni 2013
- Nr. 157 Baskaran, Thushyanthan: Identifying local tax mimicking: administrative borders and a policy reform, Juni 2013
- Nr. 156 Herwartz, Helmut; Walle, Yabibal M.: State dependence in the finance-growth nexus: a functional coefficient approach, Juni 2013
- Nr. 155 Krenz, Astrid: Cross-country heterogeneity and endogeneity bias in life satisfaction estimations-macro- and micro-level evidence for advanced, developing and transition countries, Mai 2013
- Nr. 154: Krenz, Astrid: Services Sector's Concentration: the European Union, Greece, and the New Economic Geography, Mai 2013
- Nr. 153: Ahmed, Junaid; Martinez-Zarzoso, Inmaculada: Blessing or Curse: The Stabilizing Role of Remittances, Foreign Aid and FDI to Pakistan, Mai 2013
- Nr. 152: Strulik, Holger; Werner, Katharina: 50 is the New 30 – Long-run Trends of Schooling and Retirement Explained by Human Aging, März 2013
- Nr. 151: Dalgaard, Carl-Johan; Strulik, Holger: The History Augmented Solow Model, März 2013
- Nr. 150: Strulik, Holger; Trimborn, Timo: The Dark Side of Fiscal Stimulus, Januar 2013
- Nr. 149: Prettnner, Klaus: Public education, technological change and economic prosperity, Januar 2013
- Nr. 148: Lankau, Matthias; Bicskei, Marianna; Bizer, Kilian: Cooperation Preferences in the Provision of Public Goods: An Experimental Study on the Effects of Social Identity, Dezember 2012
- Nr. 147: Krenz, Astrid: Modeling Services Sectors' Agglomeration within a New Economic Geography Model, Dezember 2012
- Nr. 146: Krenz, Astrid: A Panel Co-integration Analysis of Industrial and Services Sectors' Agglomeration in the European Union, Dezember 2012
- Nr. 145: Strulik, Holger: Knowledge and Growth in the Very Long Run, November 2012
- Nr. 144: Baskaran, Thushyanthan: Ideology and fiscal policy: quasi-experimental evidence from the German States, Oktober 2012
- Nr. 143: Ehlers, Tim; Schwager, Robert: Honest Grading, Grade Inflation and Reputation, Oktober 2012
- Nr. 142: Gehringer, Agnieszka: Another look at the determinants of current account imbalances in the European Union: An empirical assessment, Oktober 2012
- Nr. 141: Strulik, Holger; Werner, Katharina: Life Expectancy, Labor Supply, and Long-Run Growth: Reconciling Theory and Evidence, September 2012
- Nr. 140: Strulik, Holger; Prettnner, Klaus; Prskawetz, Alexia: The Past and Future of Knowledge-based Growth, September 2012

- Nr. 139: Prettnner, Klaus; Trimborn, Timo: Demographic change and R&D-based economic growth: reconciling theory and evidence, September 2012
- Nr. 138: König, Jörg; Ohr, Renate: Homogeneous groups within a heterogeneous community - Evidence from an index measuring European economic integration, August 2012
- Nr. 137: Schwager, Robert: Student Loans in a Tiebout Model of Higher Education, Juli 2012
- Nr. 136: Martínez-Zarzoso, Inmaculada: Exporting and Productivity: Evidence for Egypt and Morocco, April 2012
- Nr. 135: König, Jörg; Ohr, Renate: Messung ökonomischer Integration in der Europäischen Union – Entwicklung eines EU-Integrationsindexes -, April 2012
- Nr. 134: Gehringer, Agnieszka: Financial liberalization, growth, productivity and capital accumulation: The case of European integration, März 2012
- Nr. 133: Berner, Eike; Birg, Laura: Retailers and Consumers. The pass-through of import price changes, März 2012
- Nr. 132: Gehringer, Angnieszka: Current accounts in Europe: implications of the external imbalances for the future of the common monetary policy, März 2012
- Nr. 131: Ohr, Renate; Özalbayrak, Mehmet: The Euro – A „MUST“ for Small European States?, Januar 2012
- Nr. 130: Zeddies, Götz: Der Euro als Triebfeder des deutschen Exports?, November 2011
- Nr. 129: Geishecker, Ingo; Siedler, Thomas: Job Loss Fears and (Extreme) Party Identification: First Evidence from Panel Data, Oktober 2011
- Nr. 128: König, Jörg; Ohr, Renate: Small but Beautiful? Economic Impacts of the Size of Nations in the European Union, August 2011
- Nr. 127: Schüder, Stefan: Monetary Policy Trade-Offs in a Portfolio Model with Endogenous Asset Supply, Juni 2011
- Nr. 126: Hiller, Sanne: The Export Promoting Effect of Emigration: Evidence from Denmark, Juni 2011
- Nr. 125: Martínez-Zarzoso, Inmaculada; Voicu, Anca M.; Vidovic, Martina: CEECs Integration into Regional and Global Production Networks, Mai 2011
- Nr. 124: Roth, Felix; Gros, Daniel; Nowak-Lehmann D., Felicitas: Has the Financial Crisis eroded Citizens' Trust in the European Central Bank? Panel Data Evidence for the Euro Area, 1999-2011, Mai 2011, Revised Version März 2012
- Nr. 123: Dreher, Axel; Vreeland, James Raymond : Buying Votes and International Organizations, Mai 2011
- Nr. 122: Schürenberg-Frosch, Hannah: One Model fits all? Determinants of Transport Costs across Sectors and Country Groups, April 2011
- Nr. 121: Verheyen, Florian: Bilateral Exports from Euro Zone Countries to the US - Does Exchange Rate Variability Play a Role?, April 2011
- Nr. 120: Ehlers, Tim: University Graduation Dependent on Family's Wealth, Ability and Social Status, April 2011
- Nr. 119: Cho, Seo-Young; Dreher, Axel; Neumayer, Eric: The Spread of Anti-trafficking Policies – Evidence from a New Index, März 2011
- Nr. 118: Cho, Seo-Young; Vadlamannati, Krishna Chaitanya: Compliance for Big Brothers: An Empirical Analysis on the Impact of the Anti-trafficking Protocol, Februar 2011
- Nr. 117: Nunnenkamp, Peter; Öhler, Hannes: Donations to US based NGOs in International Development Cooperation: How (Un-)Informed Are Private Donors?, Februar 2011

- Nr. 116: Geishecker, Ingo; Riedl, Maximilian: Ordered Response Models and Non-Random Personality Traits: Monte Carlo Simulations and a Practical Guide, Revised Version Februar 2012
- Nr. 115: Dreher, Axel; Gassebner, Martin; Siemers, Lars-H. R.: Globalization, Economic Freedom and Human Rights, Oktober 2010
- Nr. 114: Dreher, Axel; Mikosch, Heiner; Voigt, Stefan: Membership has its Privileges – The Effect of Membership in International Organizations on FDI, Oktober 2010
- Nr. 113: Fuchs, Andreas; Klann, Nils-Hendrik: Paying a Visit: The Dalai Lama Effect on International Trade, Oktober 2010
- Nr. 112: Freitag, Stephan: Choosing an Anchor Currency for the Pacific, Oktober 2010
- Nr. 111: Nunnenkamp, Peter; Öhler, Hannes: Throwing Foreign Aid at HIV/AIDS in Developing Countries: Missing the Target?, August 2010
- Nr. 110: Ohr, Renate; Zeddies, Götz: „Geschäftsmodell Deutschland“ und außenwirtschaftliche Ungleichgewichte in der EU, Juli 2010
- Nr. 109: Nunnenkamp, Peter; Öhler, Hannes: Funding, Competition and the Efficiency of NGOs: An Empirical Analysis of Non-charitable Expenditure of US NGOs Engaged in Foreign Aid, Juli 2010
- Nr. 108: Krenz, Astrid: *La Distinction* reloaded: Returns to Education, Family Background, Cultural and Social Capital in Germany, Juli 2010
- Nr. 107: Krenz, Astrid: Services sectors' agglomeration and its interdependence with industrial agglomeration in the European Union, Juli 2010
- Nr. 106: Krenz, Astrid; Rübel, Gerhard: Industrial Localization and Countries' Specialization in the European Union: An Empirical Investigation, Juli 2010
- Nr. 105: Schinke, Jan Christian: Follow the Sun! How investments in solar power plants in Sicily can generate high returns of investments and help to prevent global warming, Juni 2010
- Nr. 104: Dreher, Axel; Sturm, Jan-Egbert; Vreeland, James Raymon: Does membership on the Security Council influence IMF conditionality?, Juni 2010
- Nr. 103: Öhler, Hannes; Nunnenkamp, Peter; Dreher, Axel: Does Conditionality Work? A Test for an Innovative US Aid Scheme, Juni 2010
- Nr. 102: Gehringer, Agnieszka: Pecuniary Knowledge Externalities in a New Taxonomy: Knowledge Interactions in a Vertically Integrated System, Juni 2010
- Nr. 101: Gehringer, Agnieszka: Pecuniary Knowledge Externalities across European Countries – are there leading Sectors?, Juni 2010
- Nr. 100: Gehringer, Agnieszka: Pecuniary Knowledge Externalities and Innovation: Intersectoral Linkages and their Effects beyond Technological Spillovers, Juni 2010
- Nr. 99: Dreher, Axel; Nunnenkamp, Peter; Öhler, Hannes: Why it pays for aid recipients to take note of the Millennium Challenge Corporation: Other donors do!, April 2010
- Nr. 98: Baumgarten, Daniel; Geishecker, Ingo; Görg, Holger: Offshoring, tasks, and the skill-wage pattern, März 2010
- Nr. 97: Dreher, Axel; Klasen, Stephan; Raymond, James; Werker, Eric: The costs of favoritism: Is politically-driven aid less effective?, März 2010
- Nr. 96: Dreher, Axel; Nunnenkamp, Peter; Thiele, Rainer: Are 'New' Donors Different? Comparing the Allocation of Bilateral Aid between Non-DAC and DAC Donor Countries, März 2010
- Nr. 95: Lurweg, Maren; Westermeier, Andreas: Jobs Gained and Lost through Trade – The Case of Germany, März 2010

- Nr. 94: Bernauer, Thomas; Kalbhenn, Anna; Koubi, Vally; Ruoff, Gabi: On Commitment Levels and Compliance Mechanisms – Determinants of Participation in Global Environmental Agreements, Januar 2010
- Nr. 93: Cho, Seo-Young: International Human Rights Treaty to Change Social Patterns – The Convention on the Elimination of All Forms of Discrimination against Women, Januar 2010
- Nr. 92: Dreher, Axel; Nunnenkamp, Peter; Thiel, Susann; Thiele, Rainer: Aid Allocation by German NGOs: Does the Degree of Public Refinancing Matter?, Januar 2010
- Nr. 91: Bjørnskov, Christian; Dreher, Axel; Fischer, Justina A. V.; Schnellenbach, Jan: On the relation between income inequality and happiness: Do fairness perceptions matter?, Dezember 2009
- Nr. 90: Geishecker, Ingo: Perceived Job Insecurity and Well-Being Revisited: Towards Conceptual Clarity, Dezember 2009
- Nr. 89: Kühl, Michael: Excess Comovements between the Euro/US dollar and British pound/US dollar exchange rates, November 2009
- Nr. 88: Mourmouras, Alex, Russel, Steven H.: Financial Crises, Capital Liquidation and the Demand for International Reserves, November 2009
- Nr. 87: Goerke, Laszlo, Pannenberg, Markus: An Analysis of Dismissal Legislation: Determinants of Severance Pay in West Germany, November 2009
- Nr. 86: Marchesi, Silvia, Sabani, Laura, Dreher, Axel: Read my lips: the role of information transmission in multilateral reform design, Juni 2009
- Nr. 85: Heinig, Hans Michael: Sind Referenden eine Antwort auf das Demokratiedilemma der EU?, Juni 2009
- Nr. 84: El-Shagi, Makram: The Impact of Fixed Exchange Rates on Fiscal Discipline, Juni 2009
- Nr. 83: Schneider, Friedrich: Is a Federal European Constitution for an Enlarged European Union Necessary? Some Preliminary Suggestions using Public Choice Analysis, Mai 2009
- Nr. 82: Vaubel, Roland: Nie sollst Du mich befragen? Weshalb Referenden in bestimmten Politikbereichen – auch in der Europapolitik – möglich sein sollten, Mai 2009
- Nr. 81: Williamson, Jeffrey G.: History without Evidence: Latin American Inequality since 1491, Mai 2009
- Nr. 80: Erdogan, Burcu: How does the European Integration affect the European Stock Markets?, April 2009
- Nr. 79: Oelgemöller, Jens; Westermeier, Andreas: RCAs within Western Europe, März 2009
- Nr. 78: Blonski, Matthias; Lilienfeld-Toal, Ulf von: Excess Returns and the Distinguished Player Paradox, Oktober 2008
- Nr. 77: Lechner, Susanne; Ohr, Renate: The Right of Withdrawal in the Treaty of Lisbon: A game theoretic reflection on different decision processes in the EU, Oktober 2008
- Nr. 76: Kühl, Michael: Strong comovements of exchange rates: Theoretical and empirical cases when currencies become the same asset, Juli 2008
- Nr. 75: Höhenberger, Nicole; Schmiedeberg, Claudia: Structural Convergence of European Countries, Juli 2008
- Nr. 74: Nowak-Lehmann D., Felicitas; Vollmer, Sebastian; Martinez-Zarzoso, Inmaculada: Does Comparative Advantage Make Countries Competitive? A Comparison of China and Mexico, Juli 2008
- Nr. 73: Fendel, Ralf; Lis, Eliza M.; Rülke, Jan-Christoph: Does the Financial Market Believe in the Phillips Curve? – Evidence from the G7 countries, Mai 2008
- Nr. 72: Hafner, Kurt A.: Agglomeration Economies and Clustering – Evidence from German Firms, Mai 2008



- Nr. 71: Pegels, Anna: Die Rolle des Humankapitals bei der Technologieübertragung in Entwicklungsländer, April 2008
- Nr. 70: Grimm, Michael; Klasen, Stephan: Geography vs. Institutions at the Village Level, Februar 2008
- Nr. 69: Van der Berg, Servaas: How effective are poor schools? Poverty and educational outcomes in South Africa, Januar 2008
- Nr. 68: Kühl, Michael: Cointegration in the Foreign Exchange Market and Market Efficiency since the Introduction of the Euro: Evidence based on bivariate Cointegration Analyses, Oktober 2007
- Nr. 67: Hess, Sebastian; Cramon-Taubadel, Stephan von: Assessing General and Partial Equilibrium Simulations of Doha Round Outcomes using Meta-Analysis, August 2007
- Nr. 66: Eckel, Carsten: International Trade and Retailing: Diversity versus Accessibility and the Creation of "Retail Deserts", August 2007
- Nr. 65: Stoschek, Barbara: The Political Economy of Environmental Regulations and Industry Compensation, Juni 2007
- Nr. 64: Martinez-Zarzoso, Inmaculada; Nowak-Lehmann D., Felicitas; Vollmer, Sebastian: The Log of Gravity Revisited, Juni 2007
- Nr. 63: Gundel, Sebastian: Declining Export Prices due to Increased Competition from NIC – Evidence from Germany and the CEEC, April 2007
- Nr. 62: Wilckens, Sebastian: Should WTO Dispute Settlement Be Subsidized?, April 2007
- Nr. 61: Schöllner, Deborah: Service Offshoring: A Challenge for Employment? Evidence from Germany, April 2007
- Nr. 60: Janeba, Eckhard: Exports, Unemployment and the Welfare State, März 2007
- Nr. 59: Lambsdorff, Johann Graf; Nell, Mathias: Fighting Corruption with Asymmetric Penalties and Leniency, Februar 2007
- Nr. 58: Köller, Mareike: Unterschiedliche Direktinvestitionen in Irland – Eine theoriegestützte Analyse, August 2006
- Nr. 57: Entorf, Horst; Lauk, Martina: Peer Effects, Social Multipliers and Migrants at School: An International Comparison, März 2007 (revidierte Fassung von Juli 2006)
- Nr. 56: Görlich, Dennis; Trebesch, Christoph: Mass Migration and Seasonality Evidence on Moldova's Labour Exodus, Mai 2006
- Nr. 55: Brandmeier, Michael: Reasons for Real Appreciation in Central Europe, Mai 2006
- Nr. 54: Martínez-Zarzoso, Inmaculada; Nowak-Lehmann D., Felicitas: Is Distance a Good Proxy for Transport Costs? The Case of Competing Transport Modes, Mai 2006
- Nr. 53: Ahrens, Joachim; Ohr, Renate; Zeddi, Götz: Enhanced Cooperation in an Enlarged EU, April 2006
- Nr. 52: Stöwhase, Sven: Discrete Investment and Tax Competition when Firms shift Profits, April 2006
- Nr. 51: Pelzer, Gesa: Darstellung der Beschäftigungseffekte von Exporten anhand einer Input-Output-Analyse, April 2006
- Nr. 50: Elschner, Christina; Schwager, Robert: A Simulation Method to Measure the Tax Burden on Highly Skilled Manpower, März 2006
- Nr. 49: Gaertner, Wulf; Xu, Yongsheng: A New Measure of the Standard of Living Based on Functionings, Oktober 2005
- Nr. 48: Rincke, Johannes; Schwager, Robert: Skills, Social Mobility, and the Support for the Welfare State, September 2005

- Nr. 47: Bose, Niloy; Neumann, Rebecca: Explaining the Trend and the Diversity in the Evolution of the Stock Market, Juli 2005
- Nr. 46: Kleinert, Jörn; Toubal, Farid: Gravity for FDI, Juni 2005
- Nr. 45: Eckel, Carsten: International Trade, Flexible Manufacturing and Outsourcing, Mai 2005
- Nr. 44: Hafner, Kurt A.: International Patent Pattern and Technology Diffusion, Mai 2005
- Nr. 43: Nowak-Lehmann D., Felicitas; Herzer, Dierk; Martínez-Zarzoso, Inmaculada; Vollmer, Sebastian: Turkey and the Ankara Treaty of 1963: What can Trade Integration Do for Turkish Exports, Mai 2005
- Nr. 42: Südekum, Jens: Does the Home Market Effect Arise in a Three-Country Model?, April 2005
- Nr. 41: Carlberg, Michael: International Monetary Policy Coordination, April 2005
- Nr. 40: Herzog, Bodo: Why do bigger countries have more problems with the Stability and Growth Pact?, April 2005
- Nr. 39: Marouani, Mohamed A.: The Impact of the Multifiber Agreement Phaseout on Unemployment in Tunisia: a Prospective Dynamic Analysis, Januar 2005
- Nr. 38: Bauer, Philipp; Riphahn, Regina T.: Heterogeneity in the Intergenerational Transmission of Educational Attainment: Evidence from Switzerland on Natives and Second Generation Immigrants, Januar 2005
- Nr. 37: Büttner, Thies: The Incentive Effect of Fiscal Equalization Transfers on Tax Policy, Januar 2005
- Nr. 36: Feuerstein, Switgard; Grimm, Oliver: On the Credibility of Currency Boards, Oktober 2004
- Nr. 35: Michaelis, Jochen; Minich, Heike: Inflationsdifferenzen im Euroraum – eine Bestandsaufnahme, Oktober 2004
- Nr. 34: Neary, J. Peter: Cross-Border Mergers as Instruments of Comparative Advantage, Juli 2004
- Nr. 33: Bjorvatn, Kjetil; Cappelen, Alexander W.: Globalisation, inequality and redistribution, Juli 2004
- Nr. 32: Stremmel, Dennis: Geistige Eigentumsrechte im Welthandel: Stellt das TRIPs-Abkommen ein Protektionsinstrument der Industrieländer dar?, Juli 2004
- Nr. 31: Hafner, Kurt: Industrial Agglomeration and Economic Development, Juni 2004
- Nr. 30: Martinez-Zarzoso, Inmaculada; Nowak-Lehmann D., Felicitas: MERCOSUR-European Union Trade: How Important is EU Trade Liberalisation for MERCOSUR's Exports?, Juni 2004
- Nr. 29: Birk, Angela; Michaelis, Jochen: Employment- and Growth Effects of Tax Reforms, Juni 2004
- Nr. 28: Broll, Udo; Hansen, Sabine: Labour Demand and Exchange Rate Volatility, Juni 2004
- Nr. 27: Bofinger, Peter; Mayer, Eric: Monetary and Fiscal Policy Interaction in the Euro Area with different assumptions on the Phillips curve, Juni 2004
- Nr. 26: Torlak, Elvira: Foreign Direct Investment, Technology Transfer and Productivity Growth in Transition Countries, Juni 2004
- Nr. 25: Lorz, Oliver; Willmann, Gerald: On the Endogenous Allocation of Decision Powers in Federal Structures, Juni 2004
- Nr. 24: Felbermayr, Gabriel J.: Specialization on a Technologically Stagnant Sector Need Not Be Bad for Growth, Juni 2004
- Nr. 23: Carlberg, Michael: Monetary and Fiscal Policy Interactions in the Euro Area, Juni 2004
- Nr. 22: Stähler, Frank: Market Entry and Foreign Direct Investment, Januar 2004
- Nr. 21: Bester, Helmut; Konrad, Kai A.: Easy Targets and the Timing of Conflict, Dezember 2003

- Nr. 20: Eckel, Carsten: Does globalization lead to specialization, November 2003
- Nr. 19: Ohr, Renate; Schmidt, André: Der Stabilitäts- und Wachstumspakt im Zielkonflikt zwischen fiskalischer Flexibilität und Glaubwürdigkeit: Ein Reform-ansatz unter Berücksichtigung konstitutionen- und institutionenökonomischer Aspekte, August 2003
- Nr. 18: Rühmann, Peter: Der deutsche Arbeitsmarkt: Fehlentwicklungen, Ursachen und Reformansätze, August 2003
- Nr. 17: Suedekum, Jens: Subsidizing Education in the Economic Periphery: Another Pitfall of Regional Policies?, Januar 2003
- Nr. 16: Graf Lambsdorff, Johann; Schinke, Michael: Non-Benevolent Central Banks, Dezember 2002
- Nr. 15: Ziltener, Patrick: Wirtschaftliche Effekte des EU-Binnenmarktprogramms, November 2002
- Nr. 14: Haufler, Andreas; Wooton, Ian: Regional Tax Coordination and Foreign Direct Investment, November 2001
- Nr. 13: Schmidt, André: Non-Competition Factors in the European Competition Policy: The Necessity of Institutional Reforms, August 2001
- Nr. 12: Lewis, Mervyn K.: Risk Management in Public Private Partnerships, Juni 2001
- Nr. 11: Haaland, Jan I.; Wooton, Ian: Multinational Firms: Easy Come, Easy Go?, Mai 2001
- Nr. 10: Wilkens, Ingrid: Flexibilisierung der Arbeit in den Niederlanden: Die Entwicklung atypischer Beschäftigung unter Berücksichtigung der Frauenerwerbstätigkeit, Januar 2001
- Nr. 9: Graf Lambsdorff, Johann: How Corruption in Government Affects Public Welfare – A Review of Theories, Januar 2001
- Nr. 8: Angermüller, Niels-Olaf: Währungskrisenmodelle aus neuerer Sicht, Oktober 2000
- Nr. 7: Nowak-Lehmann, Felicitas: Was there Endogenous Growth in Chile (1960-1998)? A Test of the AK model, Oktober 2000
- Nr. 6: Lunn, John; Steen, Todd P.: The Heterogeneity of Self-Employment: The Example of Asians in the United States, Juli 2000
- Nr. 5: Güßefeldt, Jörg; Streit, Clemens: Disparitäten regionalwirtschaftlicher Entwicklung in der EU, Mai 2000
- Nr. 4: Haufler, Andreas: Corporate Taxation, Profit Shifting, and the Efficiency of Public Input Provision, 1999
- Nr. 3: Rühmann, Peter: European Monetary Union and National Labour Markets, September 1999
- Nr. 2: Jarchow, Hans-Joachim: Eine offene Volkswirtschaft unter Berücksichtigung des Aktienmarktes, 1999
- Nr. 1: Padoa-Schioppa, Tommaso: Reflections on the Globalization and the Europeanization of the Economy, Juni 1999

Alle bisher erschienenen Diskussionspapiere zum Download finden Sie im Internet unter: <http://www.uni-goettingen.de/de/60920.html>.