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Interest Groups and Economic Performance: Some New Evidence

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> Diskussionspapier Nr. 84 Working Paper No. 84

INTEREST GROUPS AND ECONOMIC PERFORMANCE: SOME NEW EVIDENCE

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Zusammenfassung/ Abstract

Mancur Olson's theory of the decline of nations is path-breaking in political economics. It has been tested cross-sectionally in numerous empirical studies. We survey the existing results briefly, with a special focus on studies using the number of lobbies as an exogenous variable. Using data from the period 1973-2006, we then present the field's first time-series analysis of the effects of the number of interest groups on the German lobby list and macroeconomic performance, gauged in terms of economic growth and inflation. The number of interest groups (as a proxy for their influence) is shown to have an important impact on macrovariables: Interest group activity significantly leads to a decline in the growth rate and a rise in the inflation rate.

JEL-Klassifikation/ JEL-Classification: D61, D72, D78

Schlagworte/ Keywords: Interest groups, economic performance, growth rate, inflation rate

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1. Introduction

Seventeen years after his seminal book, *Logic of Collective Action* (1965), Mancur Olson set a second milestone in the literature on political economics with his volume entitled *The Rise and Decline of Nations* (1982). According to Olson, special interest groups (or distributional coalitions) have some very uncomfortable properties for society and the economy. First, they tend to extend the time taken by decision-making, their agendas are always overcrowded and they usually fix prices instead of quantities to protect their interests. Second, they reduce the willingness and capacity of a society to adapt to new technologies and to reallocate resources as necessitated by a changing environment. Third, distributional coalitions are always "inclusive" non-market oriented groups; they try to harmonize the values and the incomes of their members and, as a follow-up, they attempt to minimize intra-group conflict, all of which inevitably implies a loss of dynamic incentives. Fourth, an increase in the number of interest groups escalates the complexity of governmental regulations, complicates the search for political consensus and - all told - changes the direction of society's evolution.

Olson contends that, through this process of institutional sclerosis, special interest groups tend to decrease the efficiency and income growth of their societies because they internally and externally remove dynamic forces from the economic and social systems. He states that the follow-up costs of lobbying for rents and coming to agreements with the government are typically externalized to non-organized groups. The freer of shocks a time period is and the less adaptable the society becomes, the more the number of special interest groups will increase. According to Olson's "Logic", relatively small homogeneous groups have disproportionate power to assert their interests. He posits that competition among those groups may somewhat reduce this disproportionality but that the asymmetry never ceases to exist.

If this account - the essence of Olson (1982) - depicts the reality of certain societies correctly, then the decline of nations is predetermined unless exogenous shocks (e.g., crises, wars, and revolutions) destroy the fabric of interest groups and initiate a new growth process. But Olson, an expert on Swedish affairs, claims that is not necessarily so and proposes a kind of *deus ex machina* in the form of encompassing groups, which were an integral part of the famous Rehn-Meidner model in Sweden (Bosworth and Rivlin 1987). To Olson, these encompassing groups are the opposite of special interest groups in that they are orthogonal to special interests.² It is the incentive of the encompassing groups to enable their societies to prosper by distributing income with the least excess burden and to stop redistribution as soon

as the social costs of redistribution exceed its benefits. In some sense, encompassing groups are the incarnation of the "Common Good, the obvious beacon light of policy" (Schumpeter 1942: 250) or of Rousseau's *volonté générale*. Olson, whose "view of pluralistic democracy is essentially a dark one" (Rose-Ackerman 2003: 169), recognises only this way out of the trap.

Unfortunately, according to North (1983), Olson violates his own axioms, for destroying distributional coalitions, avoiding free-rider behaviour and returning to the virtuous path of economic instead of political competition would not be in the interest of the individuals. And why should they decide against their own self-interest? In the end it is not only the interest groups that tend to ruin the economy and society, it is the state and the government themselves. In a critique of Olson's *Rise and Decline*, Douglass North fully accepts Olson's premise that distributional coalitions tend to rigidify the system if they gain access to state power. But it would be wrong to understand the state only as "a passive reflection of interest group correlation" (North 1983: 163-164). The state is also an instrument of power that rests on the assignment of supremacy, which, in turn, reflects the degree of monopoly that the state has over its citizens and their interest groups.³

In principle, this argument is sound. In reality, though, the interest groups on the demand side nearly always meet a supply side, and the parties and politicians are interested in accommodating groups that provide them with information and votes.⁴ By obliging those groups, the state has relinquished much of its monopoly power, something it is always prone to do in a democracy, especially in the continental European states. It has thereby degenerated into a redistribution agency, euphemistically calling itself a "social state" and has run into a lot of trouble - including a shrinking growth rate and a rising inflation rate, as we show later.⁵

Theoretical knowledge and empirical evidence therefore warrant certainty that political lobbying adversely affects the economic performance of a state and, hence, leads to the decline of nations. The possible channels by which this result can occur are real, monetary, or both. In principle, the rent-seeking of interest groups diverts resources from productive use because optimal lobbying implies that the net benefits of lobbying and production are identical. If the share of resources devoted to production decreases, then the economy will not grow at the same rate as it would without lobbying. And if a great many interest groups are mobilized, then considerable congestion will result. Because the political scene is overcrowded and because the distributable part of the state's revenue will fall short of expectations, monetary rent-seeking will dry up but will be partly replaced by rent-seeking

activities that are not expenditure-intensive. These measures, like regulation and non-tariff trade barriers, tend to restrict competition and to reduce efficiency and growth. That effect is the real economic side of the problem.

The adverse macroeconomic effects of political lobbying on the monetary side relate to the capability and willingness of governments to resist the demands of interest groups. It is therefore crucial to know whether governments will be responsive or not (Besley and Burgess 2002). If they are responsive (the most likely case in view of electoral considerations), then they have to accommodate the monetary demands of the interest groups. With an independent central bank, governments can do so only by running ever larger budget deficits, for the state's revenue is lower than it would be without rent-seeking. Burgeoning budget deficits eventually boost the inflation rate, so two effects of competition among interest groups may be a decrease in the purchasing power of the currency and a distortion of relative prices, both of which worsen the allocation of resources. To a certain extent, though, this mechanism can also be seen as a self-defence strategy of the state: Nominal rent-seeking will be devaluated in real terms.

Drawing on these theoretical considerations, this article first gives a short overview of the empirical literature in section 2, particularly of studies using data from interest groups for estimating the effects that lobbying activities have on macro-variables. That exploration is followed by a description of the dataset in section 3, which for the first time in the literature on political economics permits a time-series analysis of the connection between interest groups and economic performance. Section 4 presents and discusses the results of the empirical analysis estimating the impact of interest group activity on the growth and inflation rates. Finally, section 5 concludes by putting the results in a common framework.

2. The empirical literature in brief

Empirical studies on the influence of interest groups enjoyed a boom from 1983 through 1987, the period directly after the publication of Olson's *Rise and Decline* (1982). They now belong to the "classical" contributions to the empirical literature on political economics. Most of this work was designed as cross-sectional research, or pooled time-series cross-sectional analyses, applied to OECD countries. The reasons for adopting that kind of design lay in the hope of increasing the variation in the data and in the necessity of using proxies for the strength of interest groups. (Data on the number of interest groups were, and still are, hard to

come by.) The results of these studies are rather mixed as far as Olson's hypotheses are concerned and have undergone little, if any, direct testing. If Heckelman (2000) is correct that the use of proxies biases the results downwards, then one may speak of a tendency towards a confirmation of Olson's hypotheses.⁶

In chronological order, a *strong to slight empirical verificatio*n of the theory can be found in the pioneering study by Choi (1983). Employing an "index of institutional sclerosis" to record the effect of an accumulation of interest groups, he confirms Olson's hypotheses for large countries and countries with "major disruptions". Pernholz (1986) uses an "index of full democracy" (the number of years in a country's democratic history) as an Olson variable and finds highly significant results confirming the theory. Vedder and Gallaway (1986), who investigate growth differentials between the US states by using seven measures of the presence of distribution coalitions (including Olson's original variables: age of state and the percentage of labour union membership), arrive at a robust confirmation of Olson's hypotheses.

The classic tests of Olson's theory in the 1980s also include three studies that come to *mixed* or negative results. One is McCallum and Blais (1987), who use three indicators as the Olson variable: Choi's index of institutional sclerosis, data on trade union membership (both highly significant) and Murrell's (1984) number of interest groups in 1970 (insignificant). Another is by Landau (1985), whose Olson variable is the number of years since major disruptions. He obtains significant results only by switching from the growth rate of gross domestic product (GDP) per capita to the growth rate of private income per capita. The third study in this set is by Nardinelli et al. (1987), who also employ the three indicators from McCallum and Blais (1987) as the Olson variable and again use data on the US states. They find no significant coefficient but do detect a dominant role of the catch-up hypothesis, results that contradict those reported by Vedder and Gallaway (1986).

Interest in Olson's theory did not wane altogether after these early publications, however. The study by Knack and Keefer (1997), for example, belongs to a new strand of empirical work (social capital studies) but cannot show that Olson groups (distributional coalitions) exert a significant influence on growth or investment. The two authors leave one with the perplexing empirical puzzle that Putnam group membership (trust-building groups, associational life)⁸ has a negative influence on investment shares and consequently damages growth. This puzzle may be due to the difficulty of distinguishing between Putnam groups and Olson groups

empirically. Following the classic methodology, Tang and Hedley (1998) work with a sample of high-performing East Asian countries and countries with mediocre development in Latin America. Their study shows that countries with strong distributional coalitions have only slow economic growth combined with a relatively ineffective state and vice versa. It also demonstrates that recognising and modelling the interaction of interest groups and the state will appreciably improve estimation results. Heckelman (2000), too, uses Murrell's data and does not discern a significant correlation between the number of special interest groups and economic growth for the whole sample of countries. Instead, he shows a significant correlation if the countries are restricted to those that did not experience turmoil during the sample period, a finding that confirms Olson's theory. Last, but surely not least, 9 Coates and Heckelman (2003a) employ Murrell's data on the number of interest groups in different countries and show that the investment share of GDP is reduced by interest groups in OECD countries (significant) and increased in non-OECD countries (insignificant). They also reveal that it is the absolute number of interest groups (per capita) that counts, not the relative effect of the number of groups to the size of government (Coates and Heckelman 2003b). An additional result is the declining marginal impact that the number of interest groups has. In other words, the authors imply that the greater the number of groups that already exist, the less harm is done by the formation of an additional group.

In summary, the few studies attempting to explain growth rates on the basis of data on interest groups, such as their number (Murrell 1984; McCallum and Blais 1987) or the average membership of groups (Knack and Keefer 1997) are generally far less successful than approaches using theory-based proxies. The records of the latter are not optimal either but, according to Heckelman (2000), may be better than they seem. When sub-samples of countries are formed, as in Tang and Hedley (1998), Heckelman (2000) and Coates and Heckelman (2003a), the results confirming Olson's theory are greatly improved because of the greater homogeneity of their samples. A close look at the studies using the number of interest groups as the Olson variable, exclusively from Murrell (1984), in cross-sectional analyses once again reveals mixed results. In the classic studies by McCallum and Blais (1987) and Nardinelli et al. (1987), the number of distributional coalitions has no significant impact on the growth rate. However, Heckelman and Coates in particular have been successful at estimating significant coefficients that fit the theory – Heckelman (2000) for a sub-sample of countries without turmoil and Coates and Heckelman (2003a,b) for a sub-sample of OECD countries representing a comparably high state of development.

What is totally missing among these studies is a time-series approach. The main reason is, of course, a lack of data for the key independent variable. 10 To dispense with proxies, such as the time that has elapsed since the last period of turmoil, one must find a direct measure for the strength of interest groups vis-à-vis the state. Unlike the data in the studies outlined here, our set of data on the number of interest groups consists of only one country (Germany) but spans 34 years, an interval that allows the use of time-series analysis for the first time in this field of research.¹¹ Admittedly, the number of interest groups is not an accurate indicator of their strength, 12 but there are reasons for assuming that there is a positive correlation between these two factors (Murrell 1984). When a new interest group is formed, for example, it will have new members and new contributions to finance it. It will undertake new activities, and one cannot generally take it for granted that this new group will simply replace an old one (its specific members, funding and activities). Furthermore, if there are relevant changes in variables important for the economic, social and political systems, then the activities of existing interest groups will be stimulated and will serve as an incentive for latent groups to emerge and organise (Bischoff 2003). In our empirical study on the influence that interest groups have on economic growth and the inflation rate, we therefore find it legitimate to use the number of interest groups as a proxy for their activities and strength.

3. Data

The following empirical analysis is based on data from the Federal Statistical Office in Germany and the administration of the Bundestag (Germany's national parliament). The statistical office provided long time-series for real GDP (gdp), private consumption (c), gross investment (i), public debt (g), and the consumer price index (cpi) for Germany, covering the years from 1970 through 2006. The administration of the parliament contributed the "list of lobbies", which contains information on the number of interest groups (lobby) registered since 1973. The development of the registered lobby groups in Germany and their percentage change are shown in Figure 1.

Obviously, there is a notable upward trend in the number of interest groups over the reference period of more than three decades, with some downward displacement effect à la Peacock and Wiseman (1961) originating in Germany's unification. This displacement effect stems from the additional listing of East German lobbies and from two periods (1992 and 1995) during which East and West German lobbies reunited. As can be expected, the percentage change

in the number of lobby groups reveals a downward trend, which is rooted in the base effect of increasing absolute numbers. Why these absolute numbers have risen so much is a question addressed in an interesting strand of research but beyond the scope of this study.¹⁴

In order to perform the empirical analysis, we had to modify the raw data slightly. First, the macro-variables had to be complemented by the annual percentage change of these variables $(\delta gdp, \delta c, \delta i, \delta g, \delta cpi \text{ and } \delta lobby)$. Second, since German reunification affected nearly all of the macro-variables, the time-series contains outliers in 1991. Selecting from the literature's different recommendations on how to treat outliers, we opted not to exclude them but rather to replace them with the mean of the preceding and the following year. This decision was prompted mainly by the small size of the sample (which is standard in macroeconomic time-series with annual observations). Third, as described above, the German reunification process had a remarkable impact on the number of interest groups. In 1991 a large number of East German organisations were included, a change that led to a brief increase of 5.13% in the number of registered lobbies. The number fell in the following year, 1992, by 6.15% as similar interest groups from the West and East merged. We therefore additionally replaced the number of interest groups in 1991 and 1992 by the mean of the preceding and the following year. Fourth, the Bundestag did not provide the number of the interest groups in 1976, so again we calculated the average value for this year. Thus, our sample contains absolute values as well as the percentage changes of GDP, private consumption, gross investment, public debt, the consumer price index, and the number of interest groups registered as time-series covering the years 1970 to 2006 in Germany.

4. Estimation and results

For the empirical investigation of the effects that interest groups have on economic performance in Germany, we estimated the effect of lobbying on (1) the percentage change in GDP and (2) the inflation rate:

$$\delta g dp = \beta_0 + \beta_1 lobby + \beta_2 \delta lobby + \beta_3 \delta c + \beta_4 \delta i + \beta_5 t + \beta_6 d de + \beta_7 d pol + \varepsilon$$
 (1)

$$\delta cpi = \beta_0 + \beta_1 lobby + \beta_2 \delta lobby + \beta_3 \delta g + \beta_4 t + \beta_5 d de + \beta_6 d pol + \varepsilon$$
 (2)

The two models have a similar structure. In order to extract the main change of the variance, we included several control variables. Even if we had estimated effects on changing rates, a time trend would still have been obvious, so we included a variable t to capture the time trend in both regressions. Furthermore, both models were extended by two dummy variables: d_-de expressed the effect of German reunification (with values of one for the years after 1991), and d_-pol extracted different political attitudes of the German government (with values of one for years with a center-right government, led by the Christian Democrats). To control for the main part of the change in GDP (model 1), we additionally included the change in consumption δc and the change in investment δc . When testing the effects on inflation (model 2), we additionally included the change in public debt δc δ

The variables of interest, however, are the lobby-variables. In both regressions we expected two effects: (1) a level-related effect, for the number of lobbies has a negative impact on economic growth (and a positive one on inflation), and (2) a variation-related effect, for the rate of growth in the number of interest groups hampers economic growth (and fuels inflation). In both regressions the exogenous variables of most interest were thus the level (lobby) and the percentage change in the number of interest groups ($\delta lobby$). Table 1 presents the results.

4.1. Effects of interest groups on economic growth

With models (1.1) and (1.2) we investigated the impact of interest groups on the growth of GDP. For the estimation we used the Prais-Winston method, which estimates the parameters using generalized least squares (GLS) and which is particularly recommended for small samples.¹⁷ In the Prais-Winston method estimation errors are assumed to be serially correlated according to a first-order autoregressive process. Thus, the results are similar to parameter estimations based on an ARMA model with an autoregressive lag of one. As the results of model (1.1) show, the number of interest groups had a negative, statistically significant impact on economic growth. When the variable of the percentage change in interest groups was included in model (1.2), the effect moved slightly beyond the range of statistical

significance. However, the expected negative correlation still remained. By contrast, the results were not significant for the change in interest groups. In both models the control variables consumption, instrumented by its lagged value (&_l), and investment were positively correlated with the growth of GDP at a high level of significance. Even if the coefficients of the two dummy variables are not always within the statistical significant range, the tendency of the results is quite interesting. Whereas German reunification seemed to have a negative impact on economic growth, center-right governments tended to affect GDP positively. In both models, R-square of around 0.90 and significant F values at the 1% level indicate that the models fit the data very well. The Durbin-Watson values confirm that there was no serial correlation of the residuals. Additionally, we tested all models for multicollinearity. Because of the very low mutual explanatory power of the varying exogenous variables, we refuted multicollinearity in all the regression models.

Since it takes time to make friends within the polity and bureaucracy and/or to implement redistributive measures in favour of special interest groups, we also expect interest groups to affect economic performance in the following year. Thus, we additionally regressed the two models on the lagged lobby-variables.

$$\delta g dp = \beta_0 + \beta_1 lobby l + \beta_2 \delta lobby l + \beta_3 \delta c + \beta_4 \delta i + \beta_5 t + \beta_6 d de + \beta_7 d pol + \varepsilon$$
 (3)

$$\delta cpi = \beta_0 + \beta_1 lobby l + \beta_2 \delta lobby l + \beta_3 \delta g + \beta_4 t + \beta_5 d de + \beta_6 d pol + \varepsilon$$
 (4)

with "_l" denoting a one-period-lagged effect. The results for economic growth (model 3) and inflation (model 4) are presented in Table 2. As the table shows, when testing for the lagged effect of the level of interest groups (model 3.1), the results confirmed our expectations. The negative effect on GDP growth rates was still obvious, albeit no longer statistically significant. When we included the lagged change in interest group numbers, however, the level of lobbies could not maintain its negative impact.

As these results show, the time-series approach in this contribution confirms Olson's theory with respect to the German economy. The number of interest groups has a statistically significant negative effect on the growth rates of GDP. This negative correlation between lobbying and economic growth has to be attributed to perceptible rent-seeking activities. But because that process takes time, the effects may not occur until the following period. For the elder groups with a well-established network, the delay may be due to administrative processes. For the younger groups that are still building such networks, it may be due to the

need to become familiar with political and administrative partners and, perhaps, to test their willingness to be influenced. This process requires additional resources to be withdrawn from productive activities in period t. The process thus hampers economic growth. There is also a supply side to rent-seeking. Because people becoming involved with lobbies are expected to be dissatisfied with their personal circumstances or the political situation, the growth of lobbies (i.e., rising numbers of pressure groups) induces political responses designed to avoid a loss of votes and, possibly, loss of the political majority.

But where are Olson's encompassing groups and their salutary effect on growth? They are more like a chimera: If they exist, they are well hidden. Without empirical evidence that they have kept growth from deteriorating, the best one can say is that their beneficial effect may have consisted in prevention of an even worse outcome. And what about the voters? In a democracy with powerful interest groups, they are the ones who foot the bill, paying in the currency of reduced economic growth and welfare. It might sound a little cynical, but interest groups and the government are the culprits, with the public falling victim to their complicity. As Frey (1994: 340) notes: "The Schumpeter-Downs model of democracy needs to be complemented by a model in which (between elections) a *coalition of all (established) politicians and parties* stands against the voters and taxpayers". He is perfectly right, but we present here additional evidence that special interest groups have meanwhile gained admission to this "cartel of politicians" (Frey 1994: 338) - if they have not already been part of it all along.

4.2. Effects of interest groups on inflation

With models (2.1) and (2.2) we also investigated a second question regarding economic performance: the impact of interest groups on the inflation rate. In this case, too, our estimation results supported Olson's hypotheses and were even stronger than in the growth case. As Table 1 shows, lobby activities, measured with the growing level of interest groups, significantly increased the inflation rate (model 2.1). When we included the change in lobby groups (model 2.2), the result's significance increased up to the 1% level. As in the growth equation, the change in lobby numbers itself was not statistically significant. However, the increasing effect that the change in lobby activities has on the consumer price index confirmed our expectations. In both models the time trend proved to be strongly significant with a negative slope, revealing not only a shift in paradigm related to inflation policy but

also the particular impact of the Maastricht process. The coefficient of the reunification dummy d_-de is positive and highly significant. It thus indicates a Peacock-Wiseman type of displacement effect within the consumer price index time-series due to Germany's short-lived economic boom after reunification. The strong significant negative coefficient of the political dummy d_-pol shows that center-right governments are more inclined than the center-left party (the Social Democrats) to follow an anti-inflation policy.

The results concerning inflation when we included the lagged lobby effects (Table 2) are also robust, significant and fulfil our expectations. The lagged effect of the level of interest groups (model 4.1) increased inflation in the following period. When additionally including the lagged change (model 4.2), the results too showed an increasing effect and, additionally, the results of the lagged level of interest groups moved into the statistical significant range. Thus, Olson's hypothesis can also be confirmed when considering lagged effects as well. Having sought only to test Olson's theory and not to develop a forecasting model for the inflation rate, we could stop here and state that the activities of interest groups in Germany clearly had the effect of increasing the level of consumer prices, as predicted by the theory.¹⁹

But, again, where are the encompassing groups? They are barely noticeable. Economic growth and the rate of inflation are positively correlated, with both of them decreasing over time. True, there is a positive correlation between the number of interest groups and the inflation rate. But considering the whole period under review, the number of interest groups has grown and inflation has declined. It might therefore be that a beneficial effect of the encompassing groups was at work, moderating the impact of lobbying by special interest groups. Yet of the 13 years in which inflation rates dropped outside the range of their standard deviation,²⁰ nine were above that statistical value and only four beneath it. Thus, there are more years with excessive inflation rates than with lower ones. If encompassing groups really existed, this finding is just one more showing that their moderating effect was only marginal and their impact on macro-indicators negligible.

5. Conclusions

Our analyses based on official data from the German Bundestag and Germany's Federal Statistical Office show that we have succeeded in estimating a significant negative influence that the number of interest groups operating in Germany has on that country's economic performance. For the first time, it was possible to use a directly measured variable (the

number of lobbies on the Bundestag's list of lobbies) as an exogenous variable for estimating lobbying effects through time-series analysis. The number of interest groups is highly significant and has the theoretically expected results: negative effects on economic growth and positive effects on the inflation rate. In contrast to the number of interest groups, the yearly changes in this number (in the current or lagged period) are not significant to the same degree. They do, however, always have the expected sign in estimations of the influence on the consumer price index. We have therefore successfully tested Mancur Olson's theory by using German data and have found that the number of interest groups has exerted a negative influence on Germany's economic performance since 1970, lowering the economic growth rate and increasing the inflation rate. The question of whether encompassing groups may have acted in a way that mitigated the demands of the special interest groups cannot be answered conclusively. Olson's last resort to prevent the decline of nations does not seem to have worked as effectively in Germany as he observed it to have worked in Sweden for a while.

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Endnotes

- 1, Mancur Olson's extraordinary importance for the social sciences was documented soon after his death in 1998 by special issues dedicated to him. See, for example, *Economics and Politics* (2003), *Journal of Theoretical Politics* (2003) and *Southern Economic Journal* (2007), as well as the book by Coates and Heckelman (2003c).
- 2, The implication is that, in the extreme case, every citizen of a state is a member of both a special group and an encompassing group. The size of the latter varies but is necessarily larger than a special interest group. However, it cannot exceed that of the national government, which, by political delegation at least theoretically, encompasses everyone in a society (Coates and Heckelman 2003b: p. 130; Lohmann 2003). According to Rabushka and Shepsle (1972), one could broadly speak of cross-cutting cleavages, which amount to an intraindividual conflict. For more implications of cross-cutting cleavages, see Josten and Zimmermann (2005).

- 3, The only known empirical study taking North's (1983) objections seriously and employing an interaction model of the state and distributional coalitions is that by Tang and Hedley (1998).
- 4, The monopoly power of the government (North 1983) is central to a point first raised by Gray and Lowery (1988). They contend that the government has the highest degree of "encompassingness" because it comprises everyone in a society and that it should theoretically be pro-growth. According to Gray and Lowery, special interest groups are pro-redistributive, and the stronger these groups are relative to the most encompassing group (the government), the more the monopoly power of the government vanishes and the greater the institutional sclerosis is. Coates and Heckelman (2003b) pick up this point successfully.
- 5, Olson (1995) grew rather disillusioned with the "devolution" of the Swedish model (his favourite one) when "encompassingness" as wage-bargaining at the national level ended in 1986 (Rosser 2007). Behaving in an encompassing way and following an encompassing policy seem to be temporally restricted to certain "policy windows" (Kingdon 1995).
- 6, Heckelman (2007) presented an exhaustive overview of the empirical studies that discuss the relative merits of the different approaches. In this section we single out highlights of that literature, focusing especially on studies that use explicit lobby data.
- 7, We distinguish studies in which interest groups are used as an exogenous variable from those in which they are used as an endogenous variable. Murrell (1984) is prominent in the latter field of research and is important specifically for a couple of studies that test Olson's theory explicitly. He is the first researcher in this line of work to use OECD-wide data on the number of interest groups in a base year (1970). He shows that duration of stability is the decisive factor in the accumulation of interest groups. Murrell did not address the question of how that affects growth, but the study has often been used as a database since its publication. Bischoff (2003) follows Murrell's line, concentrating on the question of whether the number of interest groups in a nation increases with political stability. Contradicting Olson's hypotheses, he finds no significant impact for political stability but a highly significant one for economic development (GNP per capita), a result confirmed in a study by Campos and Giovannoni (2007). By analysing panel data, Coates et al. (2007) also investigate determinants of interest groups and show that the contradiction between Murrell's and Bischoff's results can be resolved by using larger datasets.

- 8, Which constitute the "social capital" of a society fostering economic growth and last not least the happiness of the people (Putnam 2000).
- 9, A different, but interesting question is whether interest groups exert a significant impact on the income distribution as well. Shughart et al. (2003) can show empirically for the US states that the relative strength of interest groups increases the Gini coefficient significantly.
- 10, Another reason may be that Olson concentrated primarily on long-term growth, a focus implying that the decline in growth will continue because of the presence of interest groups even if the number of interest groups remains constant. This hypothesis is simulated by the use of Murrell's 1970 data in many cross-sectional analyses and by the fact that cross-sections generally imply different stages of development from one sample country to the next. The analysis is long-term by nature, for catching-up will take a long time. Our analysis in this chapter is clearly short-term, for we are looking at short-term annual growth and annual levels of interest groups and their changes. The regressions over this long time series, however, definitely substantiate the long-run relationship between interest groups and growth.
- 11, Considering how keen Germans are on perfecting administration procedure, it may not be altogether surprising that they are the only ones to have such a strong data source. Besides that, interest groups are an integral and official part of the German political system. They may be heard in parliamentary committees, have the right of access to the Bundestag (federal parliament) building, and even prepare and write laws which caused a slight scandal when this routine became public in April, 2008. To use this access, however, they must be registered in the Bundestag's list of lobbies. Otherwise, they are not recognised as an interest group and are not heard.
- 12, Of course, this conundrum is not confined to our approach. All approaches (including cross-sectional analysis) that use the number of lobbies as an exogenous variable suffer from the same problem.
- 13, As a consequence, the absolute number of lobbies before unification (1,501 in 1990) is nearly identical with the number after the first drop (1,481 in 1992). Analogously, the absolute number of lobbies in 1993 (1,530) is nearly identical with that after the second drop in 1995 (1,538).
- 14, Murrell (1984), Bischoff (2003) and Coates et al. (2007) have all worked on this topic, using cross-sectional analysis. As to be expected, factors in the formation of interest groups were a nation's stability (Olson 1982); socioeconomic development (Bischoff 2003); and democracy, size of the nation and diversity (Coates et al.

2007). It seems an open question, however, whether these results would be easily transferable to a time-series context of an individual country such as Germany and what their relative importance would be if one could eventually distinguish between Olson and Putnam groups. It is necessary to find indicators that capture the growing complexity of the scientific, technological, "Europeanised" and globalised world leading to the divergence of interests. "Soft" factors, such as the development of trust in a society or even "German Angst," should be included as well.

15, Since the change in consumption is typically assumed to be affected by the change in private income, a possible endogeneity problem may arise for regression (1). The variable "change in investment" could also be affected by the change in GDP, however, it should be mainly driven by the change in the real interest rate and an endogeneity problem seems to be less likely here. Therefore, we performed several "Hausman-Wu-Tests" to test for endogeneity of these two variables statistically. As expected, the change in consumption can be considered as highly endogenous. With respect to the change in investment, by contrast, no endogeneity could be found in the data. Thus, as a referee thoughtfully advised, we considered this endogeneity-problem by instrumenting for the change in consumption using its lagged value.

16, To control for inflation, we additionally considered Friedman's dictum that inflation is always a monetary phenomenon. We therefore included money supply (using data from the Deutsche Bundesbank) as a control variable. As the results showed, the effects of money supply were not statistically significant; they even varied in tendency. Because the other results did not change, we decided not to use this variable after all.

17, For an overview and further details on the Prais-Winston estimation method, see Stata Corporation (2005).

18, Unfortunately, our data do not permit us to say anything further about encompassing groups. Our scepticism, however, is shared by Rose-Ackerman (2003: 179): "McGuire and Olson (1996) come up with the idea of encompassing or super-encompassing groups to deal with this problem. These groups are fine in theory, but McGuire and Olson never explain where they come from. Even if they do exist and are better than an autocratic 'stationary bandit', they might want to redistribute property to themselves before becoming advocates of a stable rule of law designed to preserve property rights and facilitate economic activity". If an encompassing group were to exist, would it be a registered lobby? The answer to this question posed by an anonymous referee is yes, but the problem is that a group may have had encompassing ideas at some time but that it could also mutate into a special interest group. Precisely that change happened to the Modell Deutschland (the German Model) because

of the globalisation process from the mid-1980s on. When big firms or large associations earn most of their money abroad, why should they continue behaving in an encompassing way at home?

19, We tested several models for the inflation rate's effect on real GDP and found it to be insignificant. We can therefore refute the possibility that the decreasing effect of lobbies on economic growth is only a side effect due to the increasing effect on inflation. Because the two channels of lobby activities affecting economic performance can be clearly distinguished, we can state that interest group activities directly effect both macrovariables: GDP growth and investment.

20, With a mean value of 3.0819 and a standard deviation of 1.0502.

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Tables

Table 1 Estimation results of the effects of lobbying on economic growth and inflation

	model (1.1)	model (1.2)	model (2.1)	model (2.2)
	(end: $\delta g dp$)	(end: $\delta g dp$)	(end: δcpi)	(end: δcpi)
lobby	-0.0119 *	-0.0053	0.0104 **	0.0145 ***
	(-1.75)	(-0.84)	(2.37)	(3.29)
$\delta lobby$	_	0.1379	_	0.0084
Ciolog	_	(1.69)	-	(0.13)
δc (Instrument: δc_l)	0.4530 ***	0.4604 ***		
(instrument. α_{-i})	(3.42)	(4.10)	_	-
δi	0.2810 ***	0.2340 ***		
\mathcal{O}_{i}	(6.21)	(6.62)	-	-
g			0.0131	0.0188 *
0	-	-	(1.27)	(1.93)
δd _ de	-1.6537	-1.7689 **	1.5731 **	1.6074 **
ou _ uc	(-1.52)	(-2.06)	(2.22)	(2.46)
δd _ pol	0.4627	0.3854	-1.1325 **	-1.5042 ***
ca _ poi	(0.66)	(0.62)	(-2.32)	(-3.08)
t	0.4550	0.2581	-0.5202 ***	-0.6732 ***
	(1.58)	(0.95)	(-2.96)	(-3.71)
N	34	33	32	31
R^2	0.85	0.92	0.51	0.62
$\operatorname{Pr} ob > F$	0.0000	0.0000	0.0016	0.0004
DW	1.80	1.84	1.87	1.93

^{* / ** / ***} significant at 10% / 5% / 1%, t-statistics in parentheses.

Table 2 Effects of interest groups on economic growth and inflation (lag-versions)

exogenous variables	model (3.1)	model (3.2)	model (4.1)	model (4.2)
	(end: $\delta g dp$)	(end: $\delta g dp$)	(end: δcpi)	(end: δcpi)
lobby_1	-0.0052	0.0012	0.0067	0.0100 **
	(-1.03)	(0.26)	(1.57)	(2.21)
$\delta lobby_1$	-	0.0305	-	0.0405
		(0.42)		(0.58)
δc (Instrument $\delta c_{-}l$)	0.4835 ***	0.3598 ***		-
(instrument $\partial c_{-}t$)	(4.40)	(3.59)	-	
δi	0.2306 ***	0.2584 ***	-	
Ol	(6.38)	(8.15)		-
g			0.0145	0.0212 *
8	-	-	(1.29)	(1.87)
δd _ de	-1.6724 **	-1.4611 **	0.9313	0.6523
	(-2.30)	(-2.37)	(1.29)	(0.92)
δd _ pol	0.3122	-0.2492	-0.8190	-1.0675 **
$\omega = poi$	(0.57)	(-0.50)	(-1.63)	(-2.10)
t	0.2336	-0.0010	-0.3619 **	-0.4615 **
	(1.10)	(-0.05)	(-2.19)	(-2.65)
N	33	32	31	30
R^2	0.90	0.93	0.43	0.51
$\Pr{ob} > F$	0.0000	0.0000	0.0119	0.0077
DW	1.77	2.00	1.79	1.92

^{*/**/***} significant at 10% / 5% / 1%, t-statistics in parentheses

Figures

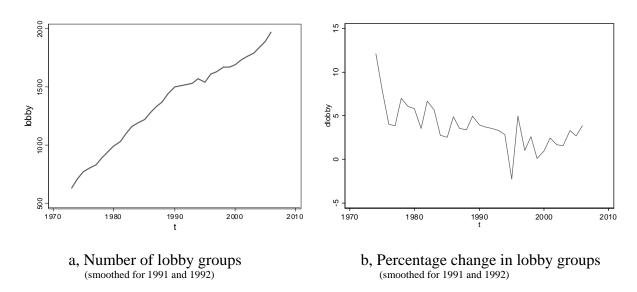


Figure 1 Development of registered lobby groups in Germany

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