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Abstract

This paper examines how electoral motives and government ideology influence active labor market policies (ALMP). We present a model that explains how politicians strategically use ALMP to generate political cycles in unemployment and the budget deficit. Election-motivated politicians increase ALMP spending before elections irrespective of their party ideology. Leftwing politicians spend more on ALMP than rightwing politicians. We test the hypotheses derived from our model using German state data from 1985:1 to 2004:11. The results suggest that ALMP (job-creation schemes) were pushed before elections.

Keywords: active labor market policies, political cycles, labor market expenditures, opportunistic politicians, partisan politicians

JEL: P16, J08, H72, E62, H61

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1 Introduction

Active labour market policies (ALMP) are a popular policy instrument in the arsenal of employment policy. In many European countries, governments have implemented several ALMP programs and have spent a great deal of money on these programs. The success of ALMP programs is, however, ambiguous. Empirical studies suggest that many ALMP programs have been quite ineffective. Country studies also suggest that the success of these programs varies across countries. In Switzerland and Germany, for example, ALMP programs did not shorten unemployment duration (Hagen and Steiner 2000, Lalive et al. 2008). In Poland, training programs have increased the probability of individual employment, whereas wage subsidies have had a negative influence on individual employment probability (Kluve et al. 2008). In Denmark, private and public job training as well as classroom job training have had positive employment and earnings effects (Jespersen et al. 2008). A meta analysis for European ALMP shows that the program type plays a significant role on program effectiveness. Direct employment programs in the public sector do not appear to have a positive influence on post-program employment rates, whereas wage subsidies appear to be more effective (Kluve 2010). Against this background of limited success, an intriguing question is why politicians have implemented ALMP programs for such a long time. We will therefore investigate whether political economic determinants, in particular electoral motives and government ideology, have influenced ALMP.

The political business cycle theory (PBC) and partisan cycle theory (PT) seek to explain how electoral motives and government ideology influence economic policy-making. PBC theory concentrates on politicians facing a short-run Phillips curve trade-off between unemployment and inflation (e.g., Nordhaus 1975, Rogoff 1990, Shi and Svensson 2006). Incumbents boost economic activity and reduce unemployment before elections in order to increase their re-election prospects. The partisan approach focuses on the role of party ideology and shows to what extent leftwing and rightwing politicians will provide policies that reflect the preferences of their partisans. Leftist parties traditionally appeal more to the labor base and promote expansionary monetary and fiscal policies, whereas rightwing parties appeal more to capital owners, and are therefore more concerned with reducing inflation (Hibbs 1977, Alesina 1987). Some attempts have been made to combine the two strands of literature, as politicians may plausibly be motivated by both opportunistic and partisan considerations. For example, an incumbent has strong incentives to take opinion polls into account: at times when he is popular, he may implement his favorite partisan politics, whereas he may engage in opportunistic behavior to increase his re-election chances if opinion polls become sufficiently unfavorable (Frey and Schneider 1978a, 1978b, Sieg 2006). To be sure, governments often do not have any influence on monetary policy. However, unemployment figures can be influenced directly via ALMP even by local governments. Formal models explaining the influence of electoral motives and government ideology on ALMP do not yet exist.

This paper examines how electoral motives and government ideology influence ALMP. We present a model that explains how politicians strategically use ALMP to generate polit-

ical cycles in unemployment and the budget deficit. Election-motivated politicians increase ALMP spending before elections irrespective of their party ideology. Leftwing politicians spend more on ALMP than rightwing politicians. We test the hypotheses derived from our model using German state data from 1985:1 to 2004:11. The results suggest that ALMP (job-creation schemes) were pushed before elections.

The paper is organized as follows: Section 2 presents the theoretical model. We analyze the optimization problem of the competing political parties and show that political cycles occur because of different party preferences and election dates. In section 3, we examine our hypotheses using German data. Section 4 concludes.

2 The model

2.1 Players and basic setup

Consider an incumbent i who is either a member of a rightwing party R or a leftwing party L, an opponent o who is a member of the other party ($i, o = L, R$ and $i \neq o$), and a mass of voters normalized to 1. The incumbent can implement ALMP measures. To stress the importance of ALMP, we neglect other conducts of government spending and assume that the government budget is balanced if no active labor market policy is implemented.

The unemployment rate u_t in period t depends on the natural rate of unemployment u_n and the expenditures on ALMP. For analytical convenience, we disregard all other determinants of unemployment, such as overall macroeconomic performance or structural reforms, in order to outline the effects of ALMP. The unemployment rate in period t is given as:

$$u_t = u_n - \beta \cdot b_t \tag{1}$$

with exogenous $\beta > 0$ and ALMP expenditures b_t. The government can thus decrease the unemployment rate via ALMP. The underlying mechanism is simple: the government creates jobs by subsidizing employment. On the one hand, the implementation of ALMP therefore increases the budget deficit because ALMP cause costs and usually do not generate additional revenues.[1] On the other hand, unemployment falls, and the government faces a clear trade-off between a larger government budget deficit and lower unemployment. Individuals are heterogeneous with respect to their individual risk of becoming unemployed. All individuals are unemployment averse and take current unemployment into account when deciding whether to re-elect the incumbent or to vote for the opponent.[2] Unemployment as the major economic driving force of government's popularity is well supported by empirical research

[1] Even if a job-creation measure generated additional revenues in the period of its implementation, these would certainly not exceed the expenditure required to create the measure.

[2] This assumption corresponds to the empirical fact that unemployment is the most important political topic in almost every industrialized country. 88% of the voters mentioned "unemployment" when asked what (in their opinion) the most important political problems were on the day of the election to the German Bundestag in 2005 (infratest dimap 2005).

on vote/popularity functions (see, e.g., Mueller 2003, Lewis-Beck and Paldam 2000). In addition, voters are in general little informed about the state of the (macro)economy (see, e.g., Caplan 2007, p. 80ff). They usually have no clue about the extent of budget deficit. Empirical evidence suggests, however, that most voters can provide a reasonable ball-park of the estimate of the unemployment rate (see, e.g., Conover et al. 1986, Paldam and Nannestad 2000, Davidson et al. 2010).

We assume a voter-specific critical level of unemployment $u_j^c(\mu, e_j)$ that determines voters j's voting decision. Observing on election day an unemployment rate $u_t \leq u_j^c(\mu, e_j)$, the individual votes for the incumbent, otherwise for the opponent. We assume $u_j^c(\mu, e_j)$ to depend on two components. First, $u_j^c(\mu, e_j)$ varies negatively with the individual risk of becoming unemployed e_j, $e_j \in [0, 1]$, i.e.: $\frac{\partial u_j^c}{\partial e_j} < 0$. Second, u_j^c increases with the incumbent's overall popularity μ_t, i.e. $\mu_t \in [\underline{\mu}, \overline{\mu}]$: $\frac{\partial u_j^c}{\partial \mu_t} > 0 \; \forall \; j \in [0, 1]$. The individual risk of being unemployed may vary across regions and may depend on voters education, etc. The variable μ_t measures a component of the incumbent's overall popularity which does not depend on unemployment. We also assume $u_j^c(\underline{\mu}, 1) > 0$ and $u_j^c(\overline{\mu}, 0) < 1$ to hold. At a sufficiently low level of unemployment, even the individual who is affected first by unemployment will re-elect the incumbent, and, even the individual who is affected least by unemployment will vote against the incumbent at a sufficiently high rate of unemployment. Individuals are, hence, assumed to be self-interested and sociotropic, meaning that they are concerned about their own and their countries' economic circumstances. Empirical studies (see, e.g., Mueller 2003, Davidson et al. 2010) support the assumed voting behavior. The assumed voting behavior implicitly assumes that voters have a short memory and behave myopically. The assumption of retrospective voting behavior is supported by empirical evidence, whereas the empirical evidence concerning the length of time relevant for individuals' voting decision is mixed. In any event, the assumed voting behavior is well established in the literature on vote/popularity functions (see, e.g., Lewis-Beck and Paldam 2000).

Figure 1 summarizes the crucial assumption regarding voting behavior. The voters are lined up according to their e_j. For a given unemployment rate u_t, every individual with $e_j < \tilde{e}$ votes for the incumbent. Depending on the distribution of e_j, the incumbent is either re-elected or voted out of office.

The probability of an incumbent of party i being re-elected by the median voter is $p = p(u_t(b_t), \mu_t)$, $p \in (0, 1)$, with $\frac{\partial p}{\partial u_t} < 0$ (and hence $\frac{\partial p}{\partial b_t} > 0$).

2.2 The game

We analyze the incumbent's behavior in a 2 period model. At the beginning of period t, the incumbent decides about ALMP expenditures. Afterwards, the median voter chooses either to vote for the incumbent or the opponent, depending on u_t and μ_t. The winner sets ALMP expenditures in $t + 1$. The government budget is bounded in the sense that the government is obliged to finance deficits via taxes according to an intertemporal budget function. A

lump-sum tax is implemented to finance the present value of the cumulated deficit in period $t+1$. Thus, $\tau_{t+1} = b_t(1+i) + b_{t+1}$ holds with total tax revenues τ_{t+1} and interest rate i. Since the probability that the median voter votes for the incumbent in period t does not depend on actions in $t+1$, we can solve the optimization problem starting in period t.

Following the suggestions by Frey and Schneider (1978a, 1978b) and Sieg (2006), we combine partisan and opportunistic motives in the incumbent's indirect utility function. Incumbents are assumed to dislike unemployment. Furthermore, they receive an ego rent from being in office. In line with the literature on PBC and PT, the incumbent's indirect utility function in period $t+1$ is given by

$$U^i = \theta^i(-u_{t+1}^2) + (1-\theta^i)r - \delta^i\theta^i\tau_{t+1} \tag{2}$$

with the exogenous parameter θ^i, $\theta^i \in [0,1]$, capturing the importance of the partisan goal relative to the opportunistic goal of receiving the ego rent r. δ^i is the incumbent's preference for taxation. Our model implies that ALMP is (at least partly) able to lower unemployment - and not only to lower the official unemployment rate.[3] Solving the utility maximization problem, we end up with

$$b_{t+1}^{i*} = \frac{u_n}{\beta} - \frac{\delta^i}{2\beta^2}. \tag{3}$$

With respect to incumbent's partisan orientation, we assume the rightwing politician to be more averse against levying taxes than the leftwing politician ($\delta^R > \delta^L$) which appears to be in line with empirical evidence.[4] Since $\frac{\partial b_{t+1}^*}{\partial \delta^i} < 0$ holds, leftist incumbents have higher budget deficits than rightwing incumbents ($b_{t+1}^{L*} > b_{t+1}^{R*}$).

Given the politicians' strategies described in (3), the expected utility of the incumbent in period t amounts to

$$\begin{aligned} E(U^i) = &-\theta^i u_t^2 + (1-\theta^i)r - \delta^i\theta^i\frac{E(\tau_{t+1})}{1+i} + p(u_t(b_t))\left[-\theta^i(u_{t+1}^{i*})^2 + (1-\theta^i)r\right] \\ &+ (1-p(u_t(b_t)))\left[-\theta^i(u_{t+1}^{o*})^2\right] \end{aligned} \tag{4}$$

with expected period $t+1$ taxes $E(\tau_{t+1}) = b_t(1+i) + p(u_t(b_t))b_{t+1}^{i*} + (1-p(u_t(b_t)))b_{t+1}^{o*}$, optimal unemployment rates u_{t+1}^{i*} (u_{t+1}^{o*}) in case of the incumbent's re-election (the opponent's victory) and no ego rent ($r=0$) if the incumbent is not re-elected. Using (1) and (3), the optimal level of ALMP expenditures for incumbent i is given by

$$b_t^{i*} = \frac{u_n}{\beta} - \frac{\delta^i}{2\beta^2} + \frac{\partial p}{\partial u_t}\frac{\partial u_t}{\partial b_t}\frac{1}{2\beta^2}\left[\frac{(\delta^o-\delta^i)^2}{4\beta^2} + \frac{1-\theta^i}{\theta^i}r\right]. \tag{5}$$

[3] Although empirical evidence discussed in the introduction suggests that a reasonable share of ALMP does not have a sustainable effect, some measures indeed do have positive effects (see Fertig et al. 2006, for a discussion on the macroeconomic impact of ALMP). The current call for more evaluation studies made by many economists would not be reasonable if it was ex-ante clear that all measures are useless at all.

[4] E.g., empirical studies show that taxes were higher under leftwing governments (e.g., Garrett 1998, Allers et al. 2001, Reed 2006).

If the ego rent is non-negative, $r \geq 0$, the budget deficit is always higher in election periods than in non-election periods ($b_t^{i*} > b_{t+1}^{i*}$). The positive effect of b_t on the re-election probability gives rise to a higher level of ALMP in election periods.

Hence, in our model a political business cycle occurs due to systematic deviations in ALMP which depend on the incumbent's partisan orientation and on the timing of the election. ALMP expenditures are expected to be higher for leftwing than for rightwing governments and higher in election years than in non-election years.

3 Empirical analysis

3.1 Institutional background

3.1.1 Active labor market policies in Germany

Active labor market policies are supposed to reintegrate unemployed persons into the labor market by, for example, subsidising wages or by means of job-creation schemes.[5] The ALMP programs, in Germany supervised by the Federal Employment Agency (Bundesagentur fuer Arbeit, FEA) are intended to help overcome the unemployment problem. Historically, the ALMP programs were one of the most important innovations of the Job Promotion Act (AFG, Arbeitsfoerderungsgesetz), which formed the legal basis for labor market policies in Germany in the period 1969 to 1997. In 1998, the Social Code (Sozialgesetzbuch, SGB) III was adopted with the intention that ALMP should be further intensified.

ALMP does not only play a role at the federal level, however.[6] In practice, it is not only the FEA that implements ALMP, but above all, the Laender Employment Agencies (Landesanstalten, LEA) (for further details on labor market policies in Germany and the institutional set-up of job-creation schemes see, e.g., Thomsen 2007, p. 16).

In fact, the states' governments can implement their preferred labor market policies not only by subsidizing particular ALMPs with money from their own budgets, but also by setting administrative guidelines in the LEAs. Political decision makers and high ranking civil servants in the LEAs strongly cooperate. Politicians may also place friendly party members in responsible positions in the LEAs.[7] Besides the programs initiated by the LEAs

[5]There are several ALMP instruments which broadly remained the same but were extended over time. Thomsen (2007) refers to the SGB III as a legal basis and distinguishes between "Measures to Enhance and Adjust the Qualification of the Individuals", "Counselling and Assistance for Regional and Vocational Mobility", and "Subsidised Employment". The latter category consists of wage subsidies and two groups of employment programs, namely job-creation schemes and structural adjustment schemes. They both establish the so-called second labor market.

[6]For example, during the federal election campaigns for the Bundestag in 1994 and 1998 the chancellor Helmut Kohl used ALMP measures to fight unemployment to a notable extent.

[7]Local authorities also play an important role in ALMP because they arrange new jobs, find positions for unemployed persons and locally negotiate with the so called "Traeger", but they are not responsible for the budget decisions.

and the local agencies, each state government can implement additional ALMP measures. The trade-off between unemployment and budget deficit portrayed in our model is, therefore, based on real circumstances: for any given level of local or LEA activity, a states' government can implement additional ALMP measures.

ALMP programs started in the beginning of the 1980s in the former West German states. Our analysis focuses on this group of 10 states. In particular, we will examine job-creation schemes until 2004 for two reasons: (1) job-creation schemes were a prominent policy instrument and they became less important after the end of 2004, and (2) job-creation schemes are the ALMP measure for which the best and most comparable data is available in Germany. We do not include later years because of structural reforms of the German labor market by the so-called Hartz-laws, which were introduced in 2005. Data on ALMP spending are not available.

3.1.2 Parties, government coalitions, legislative periods and elections

Two major political parties have dominated the political spectrum in Germany: the leftist Social Democratic Party (SPD) and the conservative Christian Democratic Union (CDU). In Bavaria, Germany's largest federal state by area, the conservatives are not represented by the CDU but by their sister party, the Christian Social Party (CSU). CDU and CSU do not compete and they form a single faction in the federal parliament (Bundestag). This is why we use the label CDU for both parties in the empirical analysis. All federal chancellors and state prime ministers were members of one of these two major blocks, SPD and CDU. Therefore, one can test for ideology-induced effects on this left-right dimension. The much smaller Free Democratic Party (FDP) and Green party (GR) have played an important role as coalition partners in the former Western states. While the SPD has formed coalitions with all the other three parties, the CDU never formed a coalition with the Greens on the federal or state level during the period analyzed in this paper. We will also consider the influence of the different coalition types, because the left-right dimension may neglect ideological differences between government parties within a "camp" (e.g. for the Left between SPD/FDP and SPD/GR coalitions). As minority governments and other government formations have played a negligible role, they will be subsumed under the coalition types mentioned above.

There are no fixed election dates across the German states and the legislative periods last 4 or 5 years. However, early elections may be called. So far, less than 10% of the elections in the German states were early elections. We address the early election issue below.

3.2 Data and empirical strategy

3.2.1 Data and variables

We employ monthly data for the number of individuals treated in job-creation schemes provided by Germany's Federal Employment Office. The data covers the period 1985:1 to 2004:11 (levels) for the ten former West German states. We do not include the former East

German states and also do not consider Berlin because it was divided before the German unification and therefore the data contain a structural break.

Figures 2 and 3 illustrate the number of individuals in job-creation schemes and the number of unemployed persons from 1985:1 to 2004:11. The number of individuals in job-creation schemes and unemployment is subject to a seasonal pattern. Unemployment is higher in winter than in summer, whereas the cyclical pattern of the job-creation schemes is time-delayed. There are also differences in time and between the individual states. For example, unemployment as well as the number of job-creation schemes decreased at the end of the 1980s and reached a minimum after the German unification in 1990. Subsequently, both increased steadily in almost all German states. Overall, we control for these effects using fixed year, monthly, and state dummies in the econometric model.

Further structural economic variables are not available on a monthly basis, so that an exact scaling of the job-creation schemes and unemployment is not possible. However, referring to annual population data in the states, the ratio of unemployed persons to total population was, on average, about 4.1%, with a minimum of 1.5% and a maximum of 8.8%. Regarding the relationship between the number of individuals in job-creation schemes and the number of unemployed persons, there was, on average, approximately one job creation scheme per 30 unemployed persons, with a minimum of one job-creation scheme per 400 and a maximum of one per seven unemployed persons.

3.2.2 The empirical model

The basic econometric panel data model has the following form:

$$\begin{aligned}\Delta ln \text{ individuals in job-creation schemes}_{iym} = {} & \alpha_1 \text{ Election}_{iym} + \alpha_2 \text{ Post-Election}_{iym} \\ & + \sum_j \beta_j \text{ Ideology}_{ijym} + \lambda_m + \gamma_y + \eta_i + u_{iym}\end{aligned} \tag{6}$$

with $i = 1, ..., 10; j = 1, ..., 6$ (or $j = 1, 2$); $m = 1, ..., 12; y = 1985, ..., 2004$.

The dependent variable Δln *individuals in job-creation schemes*$_{iym}$ denotes the growth rate in the number of individuals treated in job-creation schemes in every individual state.[8] Panel unit root tests show that this variable is stationary. Moreover, λ_m describes fixed monthly, γ_y fixed year[9], and η_i fixed state effects.[10] The number of j depends on the specification.

Election$_{iym}$, *Post-Election*$_{iym}$, and $\sum_j$ *Ideology*$_{ijym}$ describe the political variables on which this study focuses on. First, the variable *Election*(12) captures the timing of the elections. It assumes the value of one in the twelve months before an election and zero

[8] We use the number of individuals in job-creation schemes instead of the inflows into job-creation schemes as the measures vary in duration.

[9] The fixed year effects also control for specific historical events such as the German unification.

[10] We exclude one of the fixed effect variables, respectively, in order to avoid multicollinearity problems.

otherwise. We use this electoral variable as a benchmark. For robustness checks, we also apply different codings such as ten and eight months before the elections.

The differences between leftist and rightwing governments will be tested on the left-right scale using the variable "Left" as well as different coalition type dummies, respectively. The dummy "Left" takes on the value of one in periods when a SPD Prime Minister was in office (excluding grand coalitions) and zero otherwise. In the alternative specification, the coalition type dummies take on the value of one when the specified coalition type was in power and zero otherwise. We distinguish between six different coalition types: CDU, CDU/FDP, CDU/SPD, SPD/FDP, SPD/GR, and SPD. With respect to the grand coalitions (CDU/SPD), we do not distinguish which of the two parties appointed the Prime Minister. To avoid multicollinearity between the coalition type dummies, one of the coalition type dummies must function as the reference category (here SPD). The estimated effects of the other coalition type dummies then need to be interpreted as deviations from the reference category. In fact, regressing the growth rate of the ALMP measure on the government ideology dummies implies that leftist and rightwing governments implement their preferred policies incrementally.[11] Descriptive statistics are provided in Table 1.

The basic model is initially estimated by feasible generalized least squares in a common fixed effects framework. In addition, we apply heteroskedastic and autocorrelation consistent (HAC) Newey-West type standard errors and variance-covariance estimates (Newey and West 1987, Stock and Watson 2008), because the Wooldridge test for serial correlation in the idiosyncratic errors of a linear panel-data model implies the existence of strong arbitrary serial correlation (Wooldridge 2002, p. 176-177). The number of individuals in job-creation schemes is directly related to the number of unemployed persons. Therefore, we include the lagged number of unemployed persons in a further step since job-creation schemes are used in reaction to high unemployment. We address the persistence and remaining seasonality of the dependent variable and the time-delayed interaction of unemployed persons and job-creation schemes by including a battery of lagged dependent variables and lags of the unemployment variable. We also aggregate the monthly data to annual data and include further economic control variables that are only available on an annual basis.

3.3 Estimation results

Table 2 shows the regression results of the base-line model with monthly data. In columns (1) and (2) we have only included the political variables. In columns (3) and (4) we have included a battery of lags of the dependent variable and the number of unemployed persons (24 additional variables are included: lag $1-12$ of the dependent variable and the number of unemployed persons respectively). In a dynamic estimation with lagged dependent variables, the common fixed-effect estimator is biased by $1/T$ (Nickell-bias). In our case with T bigger

[11] This is a significant point because politicians implement their preferred policies step by step during the legislative periods. Therefore, it would not be reasonable to regress the growth rates of the ALMP measure on the growth rates of the government ideology dummies.

than 200 the Nickell-bias can be ignored. GMM-estimators are also biased for small N, so that we do not apply them with $N = 10$. Columns (5) and (6) refer to regressions in which we have excluded lagged variables that lack statistical significance. The first lag remains as statistically significant at the 1% level and the coefficient reveals an elasticity of about 0.4. The four months lagged number of unemployment persons just fails statistical significance at the 10% level. In any event, the inclusion of the lagged dependent variables and the lagged number of unemployed persons does not affect our inferences regarding the political variables at all.

In accordance with our theoretical model, politicians increased the growth rate of the number of individuals in job-creation schemes in election years. The coefficient of the election variable tells us that before elections in the German states, the growth rate of the job-creation schemes increased by about 0.4% per month. The coefficient of the election year variable is statistically significant at the 10% level in columns (1), (2), (5) and (6) and at the 5% level in columns (3) and (4). In contrast, the post-election variable does not turn out to be statistically significant in columns (1) to (6). Thus, politicians behaved opportunistically. The results do not, however, support the hypothesis that leftist governments implemented more ALMP than rightwing governments. The coefficients of the ideology variables mostly do have the expected signs but do not turn out to be statistically significant. An exception is the CDU/SPD dummy variable which is statistically significant at the 1% level. The coefficients suggest that the growth rate of job-creation schemes under CDU/SPD (grand coalition) governments was about 0.3% higher than under pure SPD governments.

Elections can be irregular (early) (Brender and Drazen 2005, Shi and Svensson 2006). Following Shi and Svensson's (2006, p. 1374) identification strategy an election is classified as predetermined (regular) if either (i) the election is held on the fixed date (year) specified by the constitution; or (ii) the election is held in the last year of a constitutionally fixed term; or (iii) the election is announced at least a year in advance. In our sample, 8% of the state elections need to be classified as early. We have replaced the election year variable by a variable for regular and an early election variable. The regular election-year variables are statistically significant at the 5% level in columns (1), (2), and (4) in Table 3 and at the 10% level in column (3). The early election-year variables do not turn out to be statistically significant. These findings again indicate that politicians behaved opportunistically to become re-elected.

Federal elections may also influence ALMP in the German states. The reason is twofold: (1) the federal governments also implement some job-creation schemes and (2) the chancellor can encourage the prime ministers in the states (governors) that belong to his party to boost ALMP effort in order increase his re-election chances at the federal level. We have therefore included a federal election dummy that takes on the value one in the twelve months before a federal election and is zero otherwise. Table 4 shows that the federal election dummy is statistically significant at the 1% level. The numerical meaning is significant: the coefficient of the federal election dummy is about three times as big as the coefficient of the state election dummy variable. Notice that including the federal election dummy does not change

the estimated value and the statistical significance of the state election dummy.

We have replaced the base-line election dummy variables (which assume the value 1 in the 12 months preceeding an election) by election dummy variables that assume the value one in the ten and eight months before the election (and zero otherwise). Inferences do not change.

We checked for the sensitivity of the results to individual states. To rule out this possibility, we performed the regressions again, excluding one state at a time. Overall, the inferences are robust in that they are not subject to the inclusion of particular states. The influence of the election variables declines, however, when Schleswig-Holstein and the Saarland are excluded.

Other economic variables capturing the industry and employment structure and the fiscal equalization scheme may influence ALMP in the German states. We therefore controlled for these influences. Data on the industry and employment structure and the fiscal equalization scheme are, however, only available at an annual level. We therefore aggregated our monthly data to yearly data. The results in Table 5 show that employing annual data also points to an electoral cycle in ALMP. We included an election year dummy variable that takes on the value one in election years and is zero otherwise. The post-election year variable takes on the value one in post-election years and is zero otherwise. The election year variable is statistically significant at the 5% level in column (1). The numerical meaning of the coefficient of the election year variable is that the growth rate of the number of individuals in job-creation schemes increased by about 4% in election years. By contrast, the post-election year variable does not turn out to be statistically significant. In columns (2), the election year variable lacks statistical significance at conventional level. The variable "Left" has a positive sign but does not turn out to be statistically significant (column 1). Only the CDU/SPD coalition type dummy turns out to be statistically significant at the 10% level. The results in column (3) and (4) refer to regressions in which we employed Bruno's (2005a, 2005b) dynamic bias corrected estimator.[12] The lagged dependent variable does not turn out to be statistically significant in columns (3) and (4). The lagged growth rate of the unemployment rate is statistically significant at the 5% level in columns (2) and (4) and at the 1% level in columns (1) and (3) and has the expected positive sign. The inferences

[12]We have mentioned above that in the context of dynamic estimation, the common fixed-effect estimator is biased by 1/T. As T is significantly smaller with annual data, we need to correct for the bias now. The estimators that take into account the resulting bias can be broadly grouped into a class of instrumental estimators and a class of direct bias corrected estimators (see Behr 2003, for example, for a discussion). In accordance with large sample properties of the GMM methods, e.g., the estimator proposed by Arellano and Bond (1991) will be biased in our econometric model with N=10. For this reason, bias corrected estimators are more appropriate. Bruno (2005a, 2005b) presents a bias corrected least squares dummy variable estimator for dynamic panel data models with small N which we apply. We choose the Blundell-Bond (1998) estimator as the initial estimator in which the instruments are collapsed as suggested by Roodman (2006). This procedure makes sure to avoid using invalid and too many instruments (see Roodman 2006 and 2009 for further details). Following Bloom et al. (2007) we undertake 50 repetitions of the procedure to bootstrap the estimated standard errors.

regarding the election variables do not change; the CDU/SPD coalition type dummy does not turn out to be statistically significant in column (4).

Table 6 shows the results when industry and employment structure and the fiscal equalization scheme variables are included. We employ data by the German Federal Statistical Office on the number of firms and the number of employees in these firms in the manufacturing sector. The fiscal equalization variable captures the horizontal fiscal equalization system and equals the real amount of money which the individual state received (positive amount) or spent (negative amount) in period t. Neither the number of firms, nor the number of employees, nor the fiscal equalization variable turn out to be statistically significant. In any event, including these variables does not change the inferences regarding the political variables at all.

4 Conclusion

Electoral motives and government ideology can explain why governments all over Europe have implemented so many ALMP programs and spent so much money on these programs. Our theoretical model combines politicians' opportunistic and partisan behavior and predicts that (1) politicians will increase spending on ALMP before elections irrespective of their party ideology and (2) leftwing politicians will spend more on ALMP than rightwing politicians. We have tested these predictions using data for the German states from 1985:1 to 2004:11 and find that ALMP in the form of job-creation schemes were pushed before elections.

Our model and the empirical findings have important implications for labor economics as well as political economy. The predictions of our model can be tested for other European countries in which the effectiveness of ALMP programs have been controversial. Empirical studies could also employ other ALMP measures than job-creation schemes. Avenues for future research include the following questions: have electoral motives and government ideology influenced training programs and wage subsidies to the same extent? Are some ALMP measures more prone to strategic considerations before elections? If yes: can these effects explain why some AMLP programs turn out to be less effective than others? Is the influence of electoral motives and government ideology on ALMP different in East and West European countries?[13]

An important question for future research is whether expansionary policies (ALMP as well as other economic policies) before elections indeed improve the incumbent's re-election prospects. Our results suggest that political cycles in ALMP occur but we cannot draw any conclusions on the actual importance of expansionary ALMP for re-election purposes. When opportunistic behavior pays, politicians may well proceed boosting the economy in order to stay in office.

[13]By employing OECD panel data, the results by Goerke et al. (2010) suggest that leftwing governments increased unemploymend benefits. Leftwing governments did not, however, increase the growth rate of ALMP spending in OECD countries (Potrafke 2010).

The influence of electoral motives and government ideology on economic policy-making has often been investigated separately. The reason is that the political business cycle (PBC) and the partisan politics (PT) hypotheses are complementary. Only some attempts have been made in order to combine elements of the PBC and PT theories (Frey and Schneider 1978a and 1978b, Sieg 2006). Our model acknowledges that politicians may implement ideology-induced economic policies and also behave opportunistically. Leftwing politicians are expected to have more expansionary policies than rightwing politicians. Both leftwing and rightwing politicians will, however, boost economic activities before elections in order to become re-elected. Our model can therefore be used as theoretical background for future empirical studies that examine the influence of electoral motives and government ideology on economic policy-making.

5 Appendix

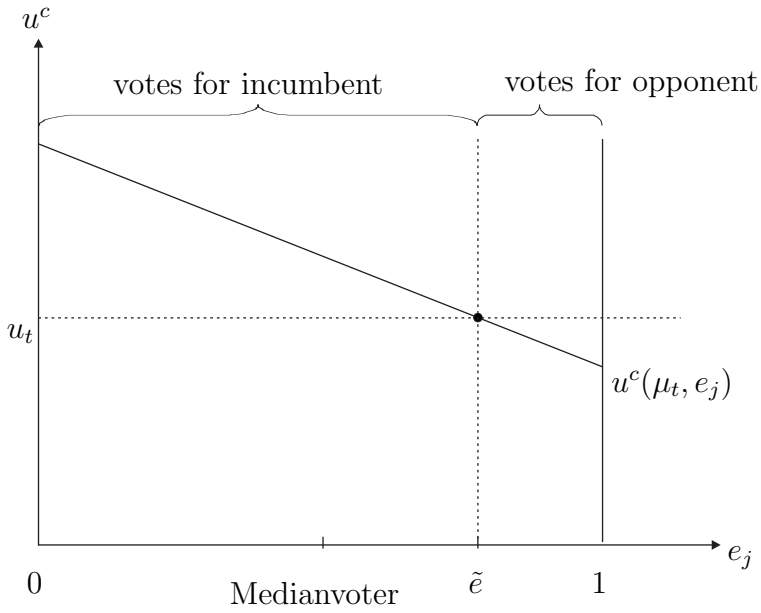

Figure 1: Individual's voting decision.

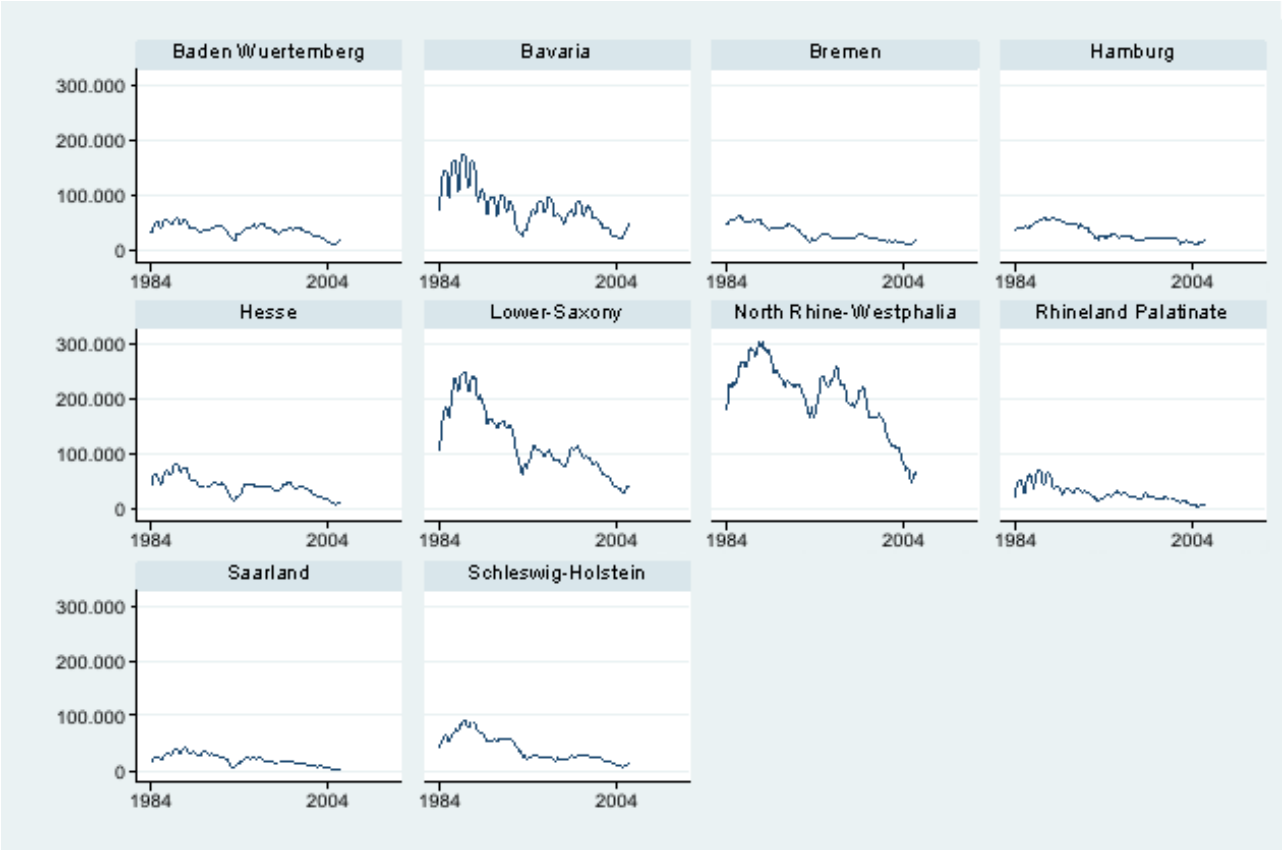

Figure 2: Number of individuals in job-creation schemes in the West German states in the period from 1984:12 to 2004:11. Source: German Federal Employment Office

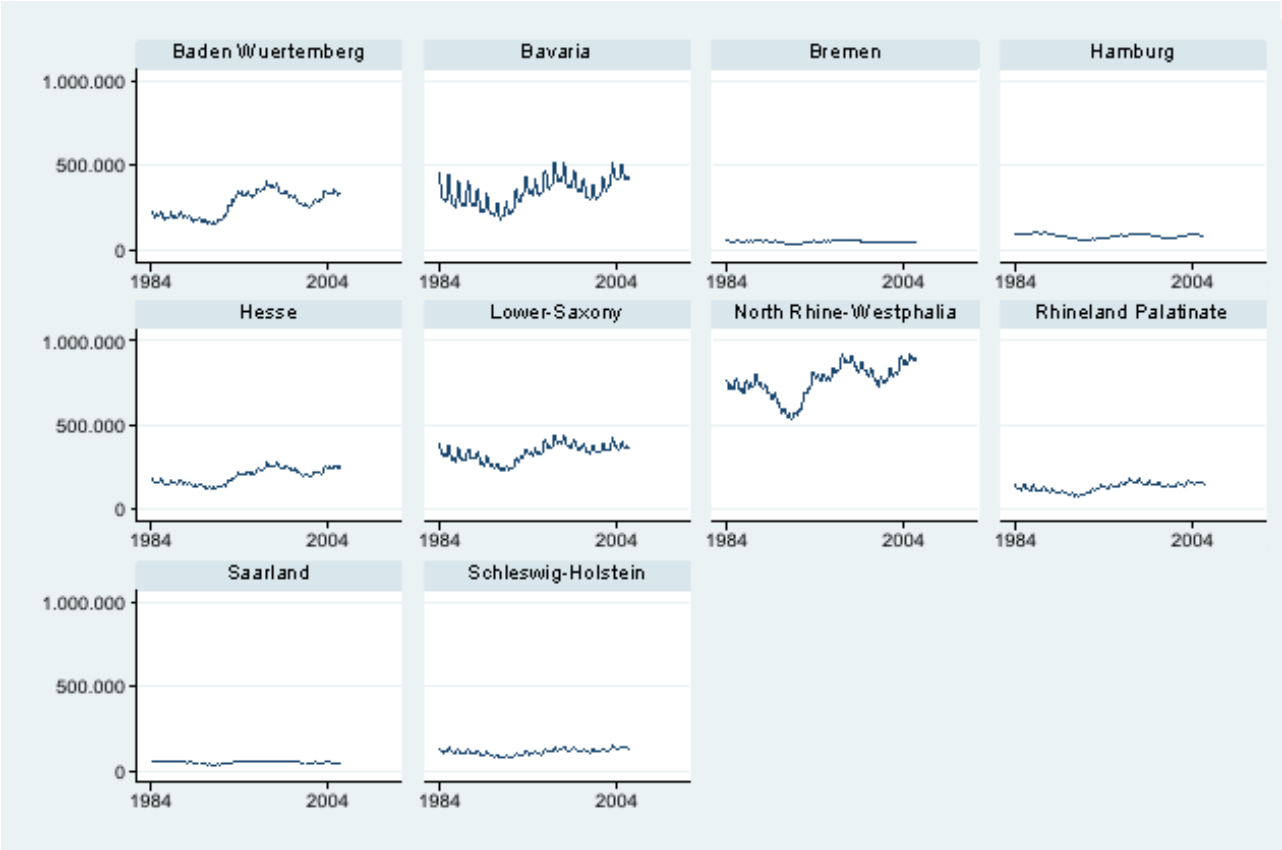

Figure 3: Number of unemployed persons in the West German states in the period from 1984:12 to 2004:11. Source: German Federal Employment Office

Variable	Obs.	Mean	Std. Dev.	Min	Max	Source
Monthly data						
Job-Creation Schemes	2390	6326.23	6440.11	172	30711	Federal Employment Agency
Unemployed Persons	2390	231364.5	211696.9	33679	921330	Federal Employment Agency
Election (12)	2390	0.24	0.43	0	1	own calculation
Post-Election (12)	2390	0.24	0.43	0	1	own calculation
Regular Election (12)	2390	0.22	0.41	0	1	own calculation
Early Election (12)	2390	0.02	0.13	0	1	own calculation
Federal Election (12)	2390	0.25	0.43	0	1	own calculation
Left	2231	0.62	0.49	0	1	Potrafke (2011)
SPD	2390	0.34	0.47	0	1	Potrafke (2011)
SPD/FDP	2390	0.11	0.31	0	1	Potrafke (2011)
SPD/GR	2390	0.13	0.34	0	1	Potrafke (2011)
CDU/SPD	2390	0.07	0.25	0	1	Potrafke (2011)
CDU/FDP	2390	0.15	0.36	0	1	Potrafke (2011)
CDU	2390	0.20	0.40	0	1	Potrafke (2011)
Annual data						
Job-Creation Schemes	200	6308.09	6401.36	236.27	29536.92	Federal Employment Agency
Unemployment Rate	200	9.58	2.68	3.73	16.78	Federal Employment Agency
Election (12)	200	0.25	0.43	0	1	own calculation
Post-Election (12)	200	0.24	0.43	0	1	own calculation
Regular Election (12)	200	0.23	0.42	0	1	own calculation
Early Election (12)	200	0.02	0.14	0	1	own calculation
Federal Election (12)	200	0.25	0.43	0	1	own calculation
Left	186	0.62	0.49	0	1	Potrafke (2011)
SPD	200	0.29	0.45	0	1	Potrafke (2011)
SPD/FDP	200	0.11	0.31	0	1	Potrafke (2011)
SPD/GR	200	0.19	0.39	0	1	Potrafke (2011)
CDU/SPD	200	0.07	0.26	0	1	Potrafke (2011)
CDU/FDP	200	0.16	0.37	0	1	Potrafke (2011)
CDU	200	0.19	0.39	0	1	Potrafke (2011)
Firms	200	4210.855	3799.453	331	11905	Federal Statistical Office
Employees in Firms	200	627775.1	579617.1	60608	2037956	Federal Statistical Office
Fiscal equalization	200	-52.115	1009.377	-2734.389	1889.04	Federal Statistical Office

Table 1: Descriptive statistics.

	(1) **FGLS**	(2) **FGLS**	(3) **FGLS**	(4) **FGLS**	(5) **FGLS**	(6) **FGLS**
Election (12)	0.0045*	0.0043*	0.0041**	0.0039**	0.0029*	0.0027*
	(1.98)	(1.88)	(2.41)	(2.28)	(1.94)	(1.85)
Post-Election (12)	0.0016	0.0007	0.0019	0.0009	0.0011	0.0005
	(0.93)	(0.36)	(1.19)	(0.49)	(0.92)	(0.37)
Left	0.0013		0.0021		0.0015	
	(0.85)		(1.50)		(1.63)	
SPD/FDP		0.0008		0.0011		0.0004
		(0.63)		(0.98)		(0.45)
SPD/Grüne		0.003		0.0022		0.0016
		(1.68)		(1.64)		(1.41)
CDU/SPD		0.0041***		0.0027**		0.0020**
		(4.55)		(2.64)		(2.58)
CDU/FDP		-3x10^{-5}		-0.0011		-0.0006
		(0.02)		(1.04)		(0.81)
CDU		0.0001		-0.001		0.0001
		(0.02)		(0.34)		(0.02)
Lags Dependent Variable			Lag 1.-12.	Lag 1.-12.		
Lags Unemployed Persons			Lag 1.-12.	Lag 1.-12.		
Lagged Dependent Variable					0.3944***	0.3967***
					(10.99)	(11.29)
Δ ln Unemployed Persons $(t-4)$					0.0434	0.0428
					(1.68)	(1.63)
Fixed State Effects	Yes	Yes	Yes	Yes	Yes	Yes
Fixed Year Effects	Yes	Yes	Yes	Yes	Yes	Yes
Fixed Monthly Effects (Seasonality)	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2221	2380	2120	2279	2200	2359
Number of N	10	10	10	10	10	10
R-Squared (overall)	0.22	0.20	0.40	0.38	0.34	0.33

Notes: Absolute value of t-statistics in brackets; * significant at 10%; ** significant at 5%; *** significant at 1%

Table 2: Regression results. Dependent variable: Growth rate of the number of individuals in job-creation schemes *(Arbeitsbeschaffungsmaßnahmen)*, 1985:1-2004:11. Heteroskedastic and autocorrelation consistent (HAC) Newey-West type standard errors. Lags included.

	(1) **FGLS**	(2) **FGLS**	(3) **FGLS**	(4) **FGLS**
Regular Election (12)	0.0046**	0.0046**	0.0029*	0.0029**
	(2.36)	(2.38)	(2.23)	(2.31)
Early Election (12)	-0.0031	-0.0028	-0.0023	-0.0023
	(0.57)	(0.53)	(0.60)	(0.60)
Left	0.0007		0.0011	
	(0.40)		(0.99)	
SPD/FDP		0.0009		0.0004
		(0.73)		(0.50)
SPD/Grüne		0.0028		0.0014
		(1.54)		(1.25)
CDU/SPD		0.0043***		0.0022**
		(4.79)		(2.80)
CDU/FDP		0.0004		-0.0003
		(0.27)		(0.31)
CDU		0.0005		-0.0006
		(0.14)		(0.31)
Lagged Dependent Variable			0.3943***	0.3963***
			(10.70)	(11.07)
Δ ln Unemployed Persons $(t-4)$			0.0426	0.0423
			(1.67)	(1.62)
Fixed State Effects	Yes	Yes	Yes	Yes
Fixed Year Effects	Yes	Yes	Yes	Yes
Fixed Monthly Effects (Seasonality)	Yes	Yes	Yes	Yes
Observations	2221	2380	2200	2359
Number of N	10	10	10	10
R-Squared (overall)	0.22	0.20	0.34	0.33

Notes: Absolute value of t-statistics in brackets;
* significant at 10%; ** significant at 5%; *** significant at 1%

Table 3: Regression results. Dependent variable: Growth rate of the number of individuals in job-creation schemes *(Arbeitsbeschaffungsmaßnahmen)*. Heteroskedastic and autocorrelation consistent (HAC) Newey-West type standard errors. Monthly data. Regular and early elections.

	(1) **FGLS**	(2) **FGLS**	(3) **FGLS**	(4) **FGLS**
Election (12)	0.0045*	0.0043*	0.0029*	0.0028*
	(2.02)	(1.95)	(1.98)	(1.94)
Post-Election (12)	0.0015	0.0006	0.0011	0.0005
	(0.81)	(0.33)	(0.82)	(0.34)
Federal Election (12)	0.0123***	0.0132***	0.0089***	0.0099***
	(4.09)	(5.77)	(4.24)	(6.51)
Left	0.0013		0.0015	
	(0.91)		(1.71)	
SPD/FDP		0.0007		0.0003
		(0.56)		(0.38)
SPD/Grüne		0.0029		0.0015
		(1.58)		(1.31)
CDU/SPD		0.004***		0.002**
		(4.42)		(2.50)
CDU/FDP		-0.0002		-0.0008
		(0.20)		(1.04)
CDU		-1x10^{-5}		-0.0001
		(0.00)		(0.53)
Lagged Dependent Variable			0.3872***	0.3887***
			(11.18)	(11.48)
Δ ln Unemployed Persons $(t-4)$			0.0433	0.0427
			(1.67)	(1.61)
Fixed State Effects	Yes	Yes	Yes	Yes
Fixed Year Effects	Yes	Yes	Yes	Yes
Fixed Monthly Effects (Seasonality)	Yes	Yes	Yes	Yes
Observations	2221	2380	2200	2359
Number of N	10	10	10	10
R-Squared (overall)	0.22	0.20	0.34	0.33

Notes: Absolute value of t-statistics in brackets;
* significant at 10%; ** significant at 5%; *** significant at 1%

Table 4: Regression results. Dependent variable: Growth rate of the number of individuals in job-creation schemes *(Arbeitsbeschaffungsmaßnahmen)*. Heteroskedastic and autocorrelation consistent (HAC) Newey-West type standard errors. Monthly data. Federal elections considered.

	(1) **FGLS**	(2) **FGLS**	(3) **FGLS**	(4) **FGLS**
Election (12)	0.0439**	0.0394*	0.0459**	0.0427*
	(2.62)	(1.94)	(2.14)	(1.85)
Post-Election (12)	0.0221	0.0032	0.0162	-0.0021
	(0.71)	(0.10)	(0.60)	(0.08)
Left	0.0165		0.0282	
	(0.37)		(0.71)	
SPD/FDP		0.0423		0.0333
		(1.22)		(0.61)
SPD/Grüne		0.0281		0.0231
		(0.71)		(0.62)
CDU/SPD		0.0708*		0.0473
		(1.85)		(0.66)
CDU/FDP		0.0215		0.0066
		(0.57)		(0.14)
CDU		-0.0401		-0.0648
		(0.54)		(1.11)
Δ ln Unemployment Rate $(t-1)$	0.7952***	0.5659*	0.874***	0.623**
	(3.36)	(2.22)	(2.62)	(2.22)
Lagged Dependent Variable			0.1413*	0.1247
			(1.84)	(1.56)
Fixed State Effects	Yes	Yes	Yes	Yes
Fixed Year Effects	Yes	Yes	Yes	Yes
Observations	176	190	166	180
Number of N	10	10	10	10
R-Squared (overall)	0.73	0.73		

Notes: Absolute value of t-statistics in brackets;
* significant at 10%; ** significant at 5%; *** significant at 1%

Table 5: Regression results. Dependent variable: Growth rate of the number of individuals in job-creation schemes *(Arbeitsbeschaffungsmaßnahmen)*. Heteroskedastic and autocorrelation consistent (HAC) Newey-West type standard errors and dynamic bias corrected estimator. Annual data.

	(1) **FGLS**	(2) **FGLS**	(3) **FGLS**	(4) **FGLS**
Election (12)	0.0366*	0.0308	0.0386*	0.0339
	(2.08)	(1.65)	(1.68)	(1.43)
Post-Election (12)	0.0163	-0.003	0.0118	-0.0072
	(0.54)	(0.09)	(0.42)	(0.29)
Left	0.0207		0.0306	
	(0.43)		(0.77)	
SPD/FDP		0.0511		0.0412
		(1.44)		(0.75)
SPD/Grüne		0.0363		0.0326
		(0.86)		(0.80)
CDU/SPD		0.0964		0.068
		(1.81)		(0.86)
CDU/FDP		0.0201		0.0079
		(0.49)		(0.17)
CDU		-0.0309		-0.0577
		(0.42)		(1.00)
Δ ln Unemployment Rate $(t-1)$	0.852***	0.659**	0.9361***	0.7087**
	(3.31)	(2.47)	(2.79)	(2.42)
Δ ln Firms	0.6548	0.8095	0.6773	0.822
	(0.91)	(1.34)	(0.88)	(0.95)
Δ ln Employees in Firms	0.4204	0.8015	0.3264	0.7145
	(0.40)	(0.99)	(0.24)	(0.55)
Fiscal Equalization	$-2x10^{-5}$	$-2x10^{-5}$	$-2x10^{-5}$	$-1x10^{-5}$
	(0.91)	(0.74)	(0.51)	(0.41)
Lagged Dependent Variable			0.1211	0.0968
			(1.55)	(1.19)
Fixed State Effects	Yes	Yes	Yes	Yes
Fixed Year Effects	Yes	Yes	Yes	Yes
Observations	176	190	166	180
Number of N	10	10	10	10
R-Squared (overall)	0.73	0.73		

Notes: Absolute value of t-statistics in brackets;
* significant at 10%; ** significant at 5%; *** significant at 1%

Table 6: Regression results. Dependent variable: Growth rate of the number of individuals in job-creation schemes *(Arbeitsbeschaffungsmaßnahmen)*. Heteroskedastic and autocorrelation consistent (HAC) Newey-West type standard errors and dynamic bias corrected estimator. Annual data.

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