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# Electoral Cycles in Active Labor Market Policies

by

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# Electoral Cycles in Active Labor Market Policies

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We examine how electoral motives influence active labor market policies that promote job-creation. Such policies reduce unemployment statistics. Using German state data for the period 1985 to 2004, we show that election-motivated politicians pushed job-promotion schemes before elections.

Keywords: political business cycles, opportunistic politicians, active labor market policies

JEL: P16, J08, H72, E62, H61

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## 1. Introduction

Electoral motives can influence economic policy. In particular, politicians have been shown to behave opportunistically before elections (e.g., Nordhaus 1975, Rogoff and Sibert 1988) to increase their re-election prospects. More recent studies show no electoral cycles in unemployment or inflation, but in economic performance and in policies such as government expenditures. By using panel data, electoral cycles have been shown in OECD countries, across states or provinces in federal states and also across municipalities.<sup>1</sup>

Unemployment has been shown to be an important indicator of government popularity (e.g., Lewis-Beck and Paldam 2000, Mueller 2003). Voters tend to be little informed about the state of the (macro) economy (e.g., Caplan 2007, pp. 80), but make reasonable assessments about unemployment (Concover et al. 1986, Paldam and Nannestad 2000, Davidson et al. 2010). Governments can directly decrease unemployment by using Active Labor Market Policies (ALMP). Individuals employed in ALMP measures immediately drop out of the unemployment statistics in countries such as Germany. ALMP therefore lowers unemployment figures, at least in the short-run, in a direct way. Many European governments have implemented ALMP programs.<sup>2</sup> Because of the political benefits, electoral manipulation seems likely through ALMP. We study whether there has been political manipulation of ALMP, using German state data for the period 1985 to 2004. Our results show that election-motivated politicians used ALMP (job-creation schemes) to reduce unemployment statistics before elections. The paper is organized as follows. Section 2 presents the institutional

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<sup>1</sup> Electoral cycles have been shown, for example, in OECD countries (Katsimi and Sarantidis 2011, Potrafke 2011), the German states (Schneider 2010, Tepe and Vanhuysse 2009), Canadian provinces (Blais and Nadeau 1992, Reid 1998, Tellier 2006), Portuguese municipalities (Veiga and Veiga 2007, Aidt et al. 2011), Brazilian municipalities (Sakurai and Menezes-Filho 2008, 2011), French municipalities (Foucault et al. 2008). For country studies see, for example, Grier (2008), Berger and Woitek (1997), Belke (2000), Batool and Sieg (2009).

<sup>2</sup> To be sure: the success of ALMP programs is ambiguous and varies across countries. In Switzerland and Germany, for example, ALMP programs hardly shortened unemployment duration (Lalive et al. 2008, Hagen and Steiner 2000, Fertig et al. 2006). 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). Using data from Denmark, Graversen and van Ours (2008) find positive activation program effects on unemployment duration and job finding rates. The ambiguity of ALMP success notwithstanding, politicians have implemented ALMP programs for a long time.

background. Section 3 describes the empirical strategy. Section 4 presents the results and Section 5 concludes.

## **2. Institutional background: active labor market policies in Germany**

Active labor market policies are intended to reintegrate unemployed persons into the labor market, for example, by subsidising wages or by means of job-creation schemes.<sup>3</sup> ALMP programs in Germany are supervised by the Federal Employment Agency (Bundesagentur für Arbeit, FEA). Historically, ALMP programs were an important innovation of the Job Promotion Act (AFG, Arbeitsförderungsgesetz), which formed the legal basis for labor market policies in Germany in the 1969-1997 period. In 1998, the Social Code (Sozialgesetzbuch, SGB) III was adopted with the intention to intensify ALMP. ALMP does not only play a role at the federal level, however. In practice, it is not only the FEA that implements ALMP, but above all, the states or 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). The state governments can implement their preferred labor market policies by subsidizing particular ALMPs with funds from their own budgets and by setting administrative guidelines in the LEAs. Political decision makers and high ranking civil servants in the LEAs cooperate in implementation. Politicians may also place friendly party members in responsible positions in the LEAs.<sup>4</sup> Beyond the programs initiated by the LEAs and the local agencies, a state government can implement additional ALMP measures.

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<sup>3</sup> 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.

<sup>4</sup> 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.

ALMP programs began in the beginning of the 1980s in the former West German states. We focus on this group of 10 states. In particular, we examine job-creation schemes until 2004 for two reasons: first, job-creation schemes were a prominent policy instrument but became less important after the end of 2004. 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 the beginning of 2005. Second, job-creation schemes are the ALMP measure for which the best and most comparable data is available in Germany. There are a number of other ALMP measures, but their names and structure changed over time and they are not necessarily comparable between states. Data on total ALMP spending at the states level are not available. We therefore use the number of individuals in job-creation schemes as a proxy for the governments' ALMP activities.

### **3. Data and empirical strategy**

#### **3.1 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 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 1 and 2 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 was subject to a seasonal pattern. Unemployment was higher in winter than in summer, whereas the cyclical pattern of the job-creation schemes has been time-delayed. There were 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 explanatory variables such as total population or the number of employed persons are not available on a monthly basis. We therefore cannot scale the job-creation schemes and unemployment. 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 The empirical model

The base-line panel data model has the following form:

$$\Delta \ln \text{ individuals in job-creation schemes}_{iym} = \alpha_1 \text{ Election}_{iym} + \alpha_2 \text{ Post-Election}_{iym} \\ + \beta \text{ Left}_{iym} + \lambda_m + \gamma_y + \eta_i + u_{iym}$$

with  $i = 1, \dots, 10$ ;  $m = 1, \dots, 12$ ;  $y = 1985, \dots, 2004$ .

The dependent variable  $\Delta \ln \text{ individuals in job-creation schemes}_{iym}$  denotes the growth rate in the number of individuals treated in job-creation schemes in every individual state  $i$ , month  $m$  and year  $y$ .<sup>5</sup> Panel unit root tests show that this variable is stationary. The variable  $\text{ Election}_{iym}$  captures the timing of the elections. It assumes the value of one in the twelve months before an election and zero otherwise. We use this electoral variable as a benchmark. For robustness

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<sup>5</sup> We use the number of individuals in job-creation schemes instead of the inflows into job-creation schemes as the measures vary in duration.

checks, we also apply different codings such as ten and eight months before the elections.  $Post-Election_{iym}$  assumes the value of one in the twelve months after an election and zero otherwise. There are no fixed election dates across the German states and the legislative periods last four or five years. However, early elections may be called. So far, about 8% of the elections in the German states were early elections. We address the early election issue in the robustness checks section.

To account for differences between leftist and rightwing governments, we include the variable “Left”.<sup>6</sup> 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 variable “Left” assumes the value of one in periods when a SPD Prime Minister was in office and the SPD did not form a coalition with the CDU (grand coalition), the value 0.5 when SPD and CDU formed a joint coalition (we do not distinguish whether the SPD or the CDU appointed the Prime Minister) and zero otherwise.<sup>7</sup> For robustness tests we replace the variable “Left” by individual coalition type dummies.  $\lambda_m$  describes fixed monthly,

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<sup>6</sup> Politicians with different ideologies may well behave opportunistically before elections, but implement economic policies in line with their party color during the legislative period (Frey and Schneider 1978a and 1978b). By employing OECD panel data, the results by Goerke et al. (2010) suggest that leftwing governments increased unemployment benefits. Leftwing governments did not, however, increase the growth rate of ALMP spending in OECD countries (Potrafke 2010).

<sup>7</sup> 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.



$\gamma_y$  fixed year<sup>8</sup>, and  $\eta_i$  fixed state effects.<sup>9</sup> Table 1 shows descriptive statistics of all variables included.

The basic model is initially estimated by feasible generalized least squares in a common fixed effects framework. 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 since job-creation schemes are often used in reaction to high unemployment. We therefore include the lagged number of unemployed persons in a further step. 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. For further robustness checks, we also aggregate the monthly data to annual data and include additional economic control variables that are only available on an annual basis such as total population and the number of firms.

## **4. Results**

### **4.1 Basic results**

Table 2 shows the regression results of the base-line model with monthly data. In column (1) we have only included the political variables. In column (2) 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

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<sup>8</sup> The fixed year effects also control for specific historical events such as the German unification.

<sup>9</sup> We exclude one of the fixed effect variables, respectively, in order to avoid perfect collinearity problems.

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 than 200 the Nickell-bias can be ignored. GMM-estimators are also biased for small  $N$ , so that we do not apply them with  $N=10$ . Column (3) refers to regressions in which we have excluded lagged variables that lack statistical significance. Only the first lag of the dependent variable remains statistically significant, the four months lagged number of unemployment persons just fails statistical significance at the 10% level. The first lag is statistically significant at the 1% level and the coefficient reveals an elasticity of about 0.4. 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 the predictions of the PBC theory, politicians increased the growth rate of the number of individuals in job-creation schemes before elections. 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) and (3) and at the 5% level in column (2). In contrast, the post-election variable does not turn out to be statistically significant in columns (1) to (3). This finding shows that politicians manipulated the growth rate of job-creation schemes before and not even after elections. An explanation why the post-election variable does not have a significantly negative influence on the growth rate of job-creation schemes may be the duration of these measures which on average was twelve months. The coefficient of the ideology variable also does not turn out to be statistically significant.

## **4.2 Robustness tests**

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 regular (predetermined) 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 replace the election year variable by one variable for regular and one for early elections. The coefficients of the regular election-year variables are statistically significant at the 5% level in columns (1) to (4) of Table 3 and again indicate that politicians behaved opportunistically to become re-elected. The early election-year variables do not turn out to be statistically significant. A reason may be that it needs time to implement job-creation schemes. Having an early election, the time span from the announcement to the election might be too short.

Columns (2) and (4) in Table 3 show results where we have replaced the variable “Left” by coalition type dummy variables which do not turn out to be statistically significant.<sup>10</sup> 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 (reference category). In any event, replacing the variable “Left” by coalition type dummy variables does not change the inferences regarding the election variables (inferences also do not change when we use the common election and post-election variable).

Federal elections may also influence ALMP in the German states. The reason is twofold: (1) the federal governments can also implement 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 to increase his re-election chances at the federal level. We have

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<sup>10</sup> The coalition type dummies take 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 perfect collinearity 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.

therefore included a federal election dummy that assumes the value of 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 preceding an election) by election dummy variables that take the value of one in the ten and eight months before the election (and zero otherwise). Inferences do not change (results not shown).

We have checked for the sensitivity of the results to individual states. To rule out this possibility, we have 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 (results not shown).

Other economic variables capturing population, the industry and employment structure and the fiscal equalization scheme may influence ALMP in the German states. We have therefore controlled for these influences. Data on population, the industry and employment structure and the fiscal equalization scheme are, however, only available at an annual level.<sup>11</sup> We have 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 have included an election year dummy variable that assumes the value of one in election years and is zero otherwise. The post-election year variable assumes the value of one in post-election years and

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<sup>11</sup> 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  $t$ .

is zero otherwise. The election year variable is statistically significant at the 5% level in columns (1) and (3) and at the 10% level in column (2). 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 column (4), the election year variable lacks statistical significance at conventional levels. The results in columns (2) and (4) refer to regressions in which we have employed Bruno's (2005a, 2005b) dynamic bias corrected estimator.<sup>12</sup> The lagged dependent variable is statistically significant at the 5% level in column (2) and at the 10% level in column (4). The variable "Left" does not turn out to be statistically significant. The lagged growth rate of the unemployment rate is statistically significant at the 1% level in columns (1) to (4) and has the expected positive sign. Neither the population, nor the number of firms, nor the number of employees, nor the fiscal equalization variables turn out to be statistically significant. In any event, including these variables does not change the inferences regarding the election variables at all.

## 5. Conclusion

ALMP measures directly reduce unemployment figures and sugar-coat unemployment statistics. Electoral motives can thus explain why governments have implemented so many ALMP programs and spent so much money on these programs. We have tested whether election motivated politicians use ALMP policies for manipulation using data for the German

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<sup>12</sup> 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.

states from 1985:1 to 2004:11 and find that ALMP in the form of job-creation schemes were pushed before elections.

The empirical findings have important implications for studies in Public Choice and Labor Economics. Electoral cycles in ALMP can be tested for other countries in which the effectiveness of ALMP programs has 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 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?

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.

## References

- Aidt, T. S., Veiga, F. J., & Veiga, L. G. (2011). Election results and opportunistic policies: A new test of the rational political business cycle. *Public Choice*, forthcoming.
- Arellano, M., & Bond, S. (1991). Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. *Review of Economic Studies* 58, 277-297.
- Batool, I., & Sieg, G. (2009). Bread and the attrition of power: economic events and German election results. *Public Choice* 141, 151-165.
- Behr, A. (2003). A comparison of dynamic panel data estimators: Monte Carlo evidence and an application to the investment function. *Discussion paper 05/03, Economic Research Centre of the Deutsche Bundesbank*.
- Belke, A. (2000). Partisan political business cycles in the German labour market? Empirical tests in the light of the Lucas-critique. *Public Choice* 104, 225-283.
- Berger, H., & Woitek, U. (1997a). Searching for political business cycles in Germany. *Public Choice*, 91, 179-197.
- Blais, A., & Nadeau, R. (1992). The electoral budget cycle. *Public Choice* 74, 389-403.
- Bloom, D., Canning, D., Mansfield, R. K., & Moore, M. (2007). Demographic change, social security systems, and savings. *Journal of Monetary Economics* 54, 92-114.
- Blundell, R. W., & Bond, S. R. (1998). Initial conditions and moment restrictions in dynamic panel data models. *Journal of Econometrics* 87, 115-143.
- Brender, A., & Drazen, A., (2005). Political budget cycles in new versus established democracies. *Journal of Monetary Economics* 52, 1271-1295.
- Bruno, G.S.F. (2005a). Approximating the bias of the LSDV estimator for dynamic unbalanced panel data models. *Economics Letters* 87, 361-366.
- Bruno, G.S.F. (2005b). Estimation and inference in dynamic unbalanced panel data models with a small number of individuals. *Stata Journal* 5, 473-500.
- Bundesagentur für Arbeit (2004). Begriff der Arbeitslosigkeit in der Statistik unter SGB II und SGB III.
- Bundesagentur für Arbeit (2007). Data on Employment, Unemployment, and ALMP.
- Caplan, B. (2007). *The myth of the rational voter. Why democracies choose bad policies*. Princeton University Press: Princeton, New Jersey.
- Conover, P.J., Feldman, S., & Knight, K. (1986). Judging inflation and unemployment – the origins of retrospective evaluations. *Journal of Politics* 48, 565-588.

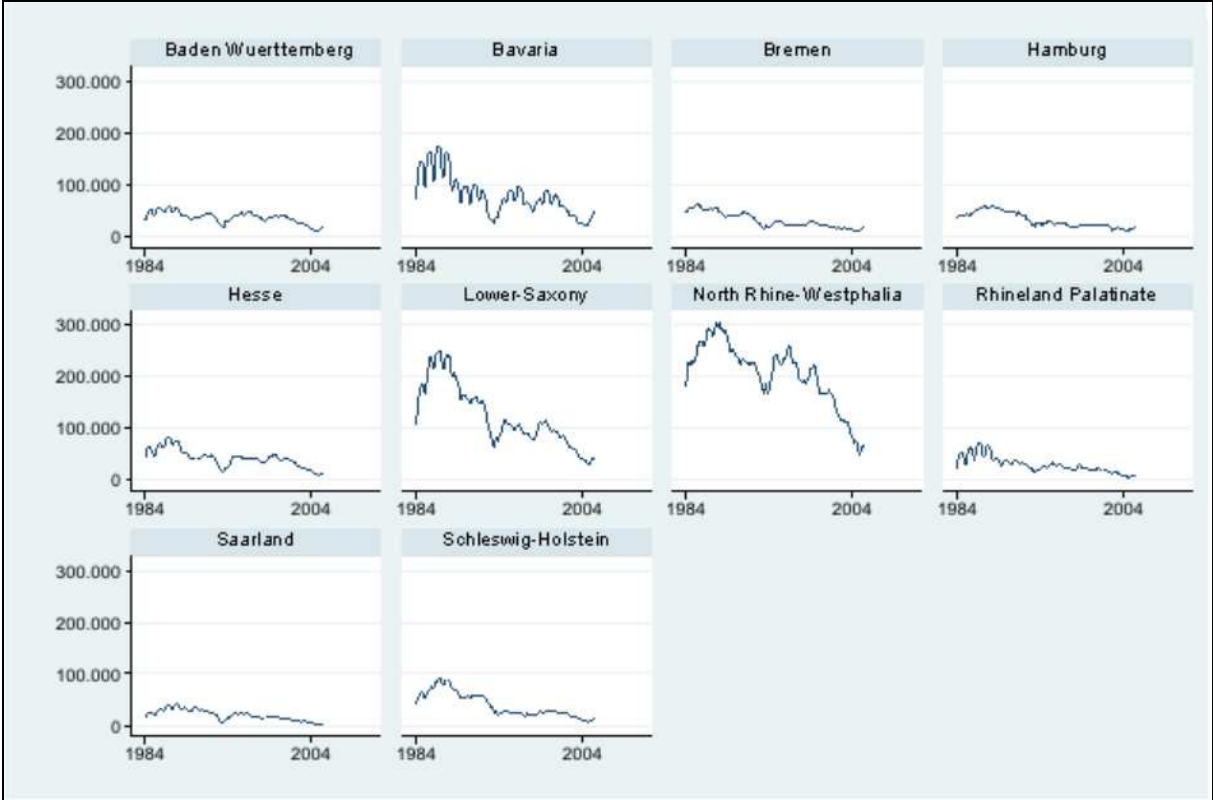
- Davidson, C., Matusza, S.J., & Nelson, D. (2010). A behavioral model of unemployment, fairness and the political economy of trade policy. Working Paper. Michigan State University.
- Fertig, M., Schmidt, C.M., & Schneider, H. (2006). Active labor market policy in Germany – Is there a successful policy strategy? *Regional Science and Urban Economics* 36, 399-430.
- Foucault, M., Madies, T., & Paty, S. (2008). Public spending interactions and local politics. Empirical evidence from French municipalities. *Public Choice* 137, 57-80.
- Frey, B.S., & Schneider, F. (1978a). An empirical study of politico-economic interaction in the United States. *Review of Economics and Statistics* 60, 174-183.
- Frey, B.S., & Schneider, F. (1978b). A politic-economic model of the United Kingdom. *Economic Journal* 88, 243-253.
- Goerke, L., Pannenberg, M., & Ursprung, H.W. (2010). A positive theory of the earnings relationship of unemployment benefits. *Public Choice* 145, 137-163.
- Graversen, B.K., & van Ours, J.C. (2008). How to help unemployed find jobs quickly: experimental evidence from a mandatory activation program. *Journal of Public Economics* 92, 2020-2035.
- Grier, K. (2008). US presidential elections and real GDP growth. *Public Choice* 135, 337-352.
- Hagen, T., & Steiner, V. (2000). *Von der Finanzierung der Arbeitslosigkeit zur Förderung von Arbeit*. Baden-Baden.
- Katsimi, M., & Sarantidis, V. (2011). Do elections affect the composition of fiscal policy in developed, established democracies? *Public Choice*, forthcoming.
- Kluve, J., Lehmann, H., & Schmidt, C.M. (2008). Disentangling treatment effects of active labor market policies: The role of labor force status sequences. *Labour Economics* 15, 1270-1295.
- Lalive, R., van Ours, J.C., & Zweimüller, J. (2008). The impact of active labour market programmes on the duration of unemployment in Switzerland. *Economic Journal* 118, 235-257.
- Lewis-Beck, M.S., & Paldam, M. (2000). Economic voting: an introduction. *Electoral Studies* 19, 113-121.
- Mueller, D.C. (2003). *Public Choice III*. Cambridge University Press: New York.
- Newey, W.K., & West, K.D. (1987). A simple, positive semi-definite, heteroskedasticity and autocorrelation consistent covariance matrix. *Econometrica* 55, 703-708.



- Nordhaus, W.D. (1975). The political business cycle.  
*Review of Economic Studies* 42, 169-190.
- Paldam, M., & Nannestad, P. (2000). What do voters know about the economy? A study of danish data, 1990-1993. *Electoral Studies* 19, 363-391.
- Potrafke, N. (2010). Globalization and labor market deregulation: empirical evidence from OECD countries. *Review of World Economics* 146, 545-571.
- Potrafke, N. (2011a). Political cycles and economic performance in OECD countries: empirical evidence from 1951-2006. *Public Choice*, forthcoming.
- Potrafke, N. (2011b). Public expenditures on education and cultural affairs in the West German states: does government ideology influence the budget composition? *German Economic Review* 12, 124-145.
- Reid, B.G. (1998). Endogenous elections, electoral budget cycles and Canadian provincial governments. *Public Choice* 97, 35-48.
- Rogoff, K., & Sibert, A. (1988). Elections and Macroeconomic Policy Cycles.  
*Review of Economic Studies* 55, 1-16
- Roodman, D. (2006). How to do xtabond2: An introduction to “Difference” and “System” GMM in Stata. *Center for Global Development. Working Paper 103*.
- Roodman, D. (2009). A note on the theme of too many instruments.  
*Oxford Bulletin of Economics and Statistics* 71, 135-158.
- Sakurai, S.N., & Menezes-Filho, A.N. (2008). Fiscal policy and reelection in Brazilian municipalities. *Public Choice* 137, 301-314.
- Sakurai, S.N., & Menezes-Filho, A.N. (2011). Opportunistic and partisan election cycles in Brazil: new evidence at the municipality level. *Public Choice*, forthcoming.
- Schneider, C. J. (2010). Fighting with one hand tied behind the back: political budget cycles in the German states. *Public Choice* 142, 125-150.
- Shi, M., & Svensson, J. (2006). Political budget cycles: Do they differ across countries and why? *Journal of Public Economics* 90, 1367-1389.
- Stock, J. H., & Watson, M. W. (2008). Heteroskedasticity-robust standard errors for fixed effect panel data regression. *Econometrica* 76, 155-174.
- Tellier, G. (2006). Public expenditures in Canadian provinces: an empirical study of politico-economic interactions governments. *Public Choice* 126, 367-385.
- Tepe, M. & Vanhuyse, P. (2009a). Educational business cycles – The political economy of teacher hiring across German states, 1992-2004. *Public Choice* 139, 61-82.

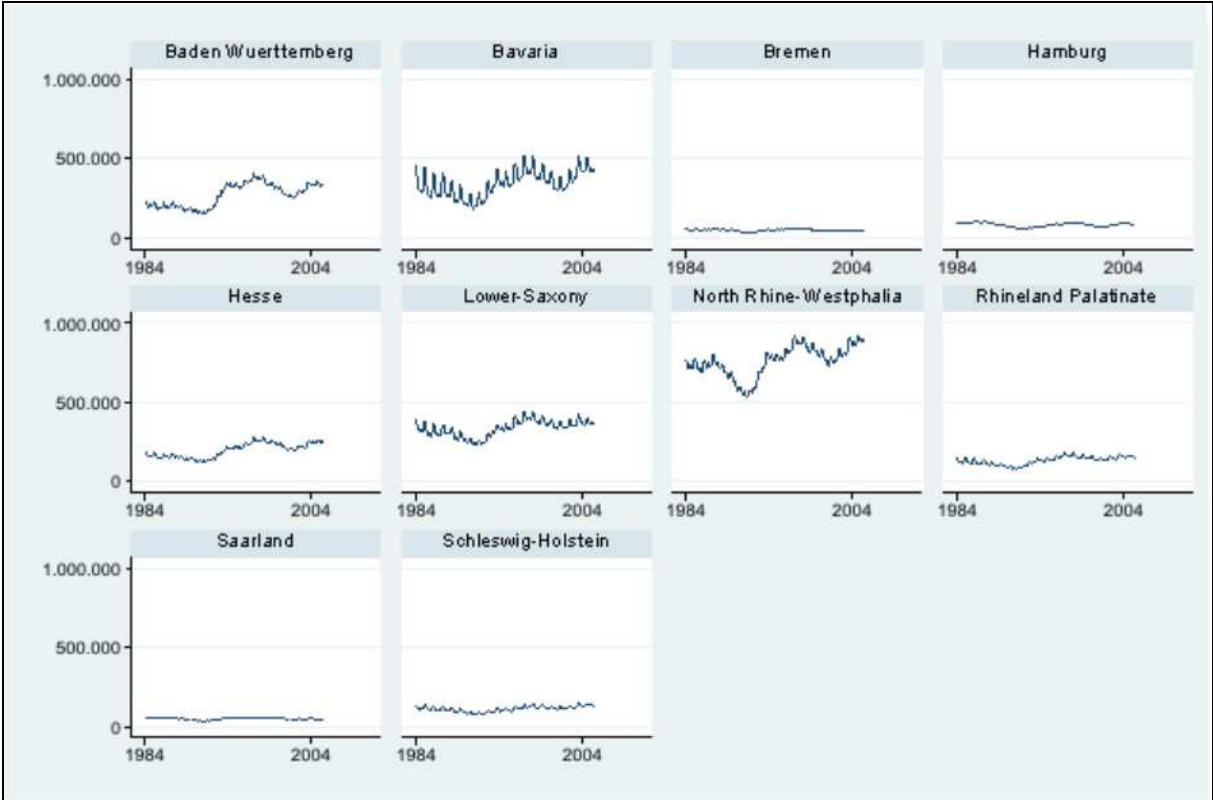
- Thomsen, S.L. (2007). *Evaluating the employment effects of job creation schemes in Germany*. Physica Verlag.
- Veiga, L.G., & Veiga, F.J. (2007). Political business cycles at the municipal level. *Public Choice* 131, 45-64.
- Wooldridge, J. M. (2002). *Econometric analysis of cross section and panel data*. MIT Press, Cambridge.

Figure 1: Number of individuals in job-creation schemes in the West German states in the period 1984:12-2004:11.



Source: German Federal Employment Office

Figure 2: Number of unemployed persons in the West German states in the period 1984:12-2004:11.



Source: German Federal Employment Office

Table 1. Descriptive Statistics.

| Variable                        | Obs. | Mean      | Std. Dev. | Min      | Max      | Source                     |
|---------------------------------|------|-----------|-----------|----------|----------|----------------------------|
| <b>Monthly data</b>             |      |           |           |          |          |                            |
| Job Creation Schemes            | 2390 | 6326.23   | 6440.11   | 172      | 30711    | Federal Employment Agency  |
| Unemployed Persons              | 2390 | 231364.50 | 211696.90 | 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            |
| Election (12) predetermined     | 2390 | 0.22      | 0.41      | 0        | 1        | own calculation            |
| Election (12) endogenous        | 2390 | 0.02      | 0.13      | 0        | 1        | own calculation            |
| Federal Election (12)           | 2390 | 0.25      | 0.43      | 0        | 1        | own calculation            |
| Left                            | 2390 | 0.61      | 0.47      | 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)            |
| <b>Annual data</b>              |      |           |           |          |          |                            |
| Job Creation Schemes            | 200  | 6308.09   | 6401.36   | 236.27   | 29536.92 | Federal Employment Agency  |
| Unemployment rate               | 200  | 9.58      | 2.68      | 3.729167 | 16.77917 | 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            |
| Election (12) predetermined     | 200  | 0.23      | 0.42      | 0        | 1        | own calculation            |
| Election (12) endogenous        | 200  | 0.02      | 0.14      | 0        | 1        | own calculation            |
| Federal Election (12)           | 200  | 0.25      | 0.43      | 0        | 1        | own calculation            |
| Left                            | 200  | 0.62      | 0.47      | 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)            |
| Total population (in thousands) | 200  | 6289.68   | 5241.20   | 660.10   | 18075.10 | Federal Statistical Office |
| Enterprises                     | 200  | 4210.855  | 3799.453  | 331      | 11905    | Federal Statistical Office |
| Employees in Enterprises        | 200  | 627775.1  | 579617.1  | 60608    | 2037956  | Federal Statistical Office |
| Fiscal equalization             | 200  | -52.11486 | 1009.377  | 2734.389 | 1889.04  | Federal Statistical Office |

Table 2. Regression Results. Dependent Variable: Growth rate of the number of job creation schemes. Heteroskedastic and autocorrelation consistent (HAC) Newey-West type standard errors. Monthly data.

|                                       | (1)     | (2)        | (3)       |
|---------------------------------------|---------|------------|-----------|
|                                       | FGLS    | FGLS       | FGLS      |
| Election (12)                         | 0.0043* | 0.0039**   | 0.0027*   |
|                                       | [1.91]  | [2.30]     | [1.86]    |
| Post-Election (12)                    | 0.0007  | 0.0009     | 0.0005    |
|                                       | [0.40]  | [0.52]     | [0.40]    |
| Left                                  | 0.0009  | 0.0018     | 0.0012    |
|                                       | [0.64]  | [1.35]     | [1.42]    |
| Lags Dependent Variable               |         | Lag 1.-12. |           |
| Lags Unemployed Persons               |         | Lag 1.-12. |           |
| Lagged Dependent Variable (t-1)       |         |            | 0.3975*** |
|                                       |         |            | [11.52]   |
| $\Delta \ln$ Unemployed Persons (t-4) |         |            | 0.0428    |
|                                       |         |            | [1.63]    |
| Fixed State Effects                   | Yes     | Yes        | Yes       |
| Fixed Year Effects                    | Yes     | Yes        | Yes       |
| Fixed Monthly Effects (Seasonality)   | Yes     | Yes        | Yes       |
| Observations                          | 2380    | 2279       | 2359      |
| Number of N                           | 10      | 10         | 10        |
| R-Squared (overall)                   | 0.22    | 0.38       | 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 job creation schemes. Heteroskedastic and autocorrelation consistent (HAC) Newey-West type standard errors. Monthly data.

Regular and irregular elections.

|                                       | (1)                | (2)                 | (3)                  | (4)                  |
|---------------------------------------|--------------------|---------------------|----------------------|----------------------|
|                                       | FGLS               | FGLS                | FGLS                 | FGLS                 |
| Election (regular)                    | 0.0046**<br>[2.48] | 0.0046**<br>[2.38]  | 0.0029**<br>[2.36]   | 0.0029**<br>[2.31]   |
| Election (irregular)                  | -0.0033<br>[0.60]  | -0.0028<br>[0.53]   | -0.0025<br>[0.66]    | -0.0023<br>[0.60]    |
| Left                                  | 0.0004<br>[0.25]   |                     | 0.0008<br>[0.86]     |                      |
| SPD/FDP                               |                    | 0.0009<br>[0.73]    |                      | 0.0004<br>[0.50]     |
| SPD/GR                                |                    | 0.0028<br>[1.54]    |                      | 0.0014<br>[1.25]     |
| CDU/SPD                               |                    | 0.0043***<br>[4.79] |                      | 0.0022**<br>[2.80]   |
| CDU/FDP                               |                    | 0.0004<br>[0.27]    |                      | -0.0003<br>[0.31]    |
| CDU                                   |                    | 0.0005<br>[0.14]    |                      | -0.0006<br>[0.31]    |
| Lagged Dependent Variable             |                    |                     | 0.3971***<br>[11.27] | 0.3963***<br>[11.07] |
| $\Delta \ln$ Unemployed Persons (t-4) |                    |                     | 0.0423<br>[1.62]     | 0.0423<br>[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                          | 2380               | 2380                | 2359                 | 2359                 |
| Number of N                           | 10                 | 10                  | 10                   | 10                   |
| R-Squared (overall)                   | 0.20               | 0.20                | 0.33                 | 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 job creation schemes. Heteroskedastic and autocorrelation consistent (HAC) Newey-West type standard errors. Monthly data.

Federal elections considered.

|                                     | (1)       | (2)                 | (3)       | (4)       |
|-------------------------------------|-----------|---------------------|-----------|-----------|
|                                     | FGLS      | FGLS                | FGLS      | FGLS      |
| Election (12)                       | 0.0044*   | 0.0043*             | 0.0028*   | 0.0028*   |
|                                     | [1.99]    | [1.95]              | [1.96]    | [1.94]    |
| Post-Election (12)                  | 0.0007    | 0.0006              | 0.0005    | 0.0005    |
|                                     | [0.36]    | [0.33]              | [0.37]    | [0.34]    |
| Federal Election                    | 0.0132*** | 0.0132***           | 0.0099*** | 0.0099*** |
|                                     | [5.77]    | [5.77]              | [6.51]    | [6.51]    |
| Left                                | 0.0010    |                     | 0.0013    |           |
|                                     | [0.69]    |                     | [1.50]    |           |
| SPD/FDP                             |           | 0.0007              |           | 0.0003    |
|                                     |           | [0.56]              |           | [0.38]    |
| SPD/GR                              |           | 0.0029              |           | 0.0015    |
|                                     |           | [1.58]              |           | [1.31]    |
| CDU/SPD                             |           | 0.0040***           |           | 0.0020**  |
|                                     |           | [4.42]              |           | [2.50]    |
| CDU/FDP                             |           | -0.0002             |           | -0.0008   |
|                                     |           | [0.20]              |           | [1.04]    |
| CDU                                 |           | -1×10 <sup>-5</sup> |           | -0.001    |
|                                     |           | [0.00]              |           | [0.53]    |
| Lagged Dependent Variable           |           |                     | 0.3896*** | 0.3887*** |
|                                     |           |                     | [11.72]   | [11.48]   |
| Δ ln Unemployed Persons (t-4)       |           |                     | 0.0427    | 0.0427    |
|                                     |           |                     | [1.61]    | [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)                 | 0.21      | 0.21                | 0.33      | 0.33      |

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 job creation schemes. Heteroskedastic and autocorrelation consistent (HAC) Newey-West type standard errors and dynamic bias corrected estimator. Annual data.

|                                       | (1)                | (2)                 | (3)                           | (4)                           |
|---------------------------------------|--------------------|---------------------|-------------------------------|-------------------------------|
|                                       | FGLS               | FGLS                | FGLS                          | FGLS                          |
| Election                              | 0.0434**<br>[2.45] | 0.0437*<br>[1.93]   | 0.0373**<br>[2.30]            | 0.037<br>[1.56]               |
| Post-Election                         | 0.009<br>[0.30]    | 0.0002<br>[0.01]    | 0.005<br>[0.17]               | -0.0022<br>[0.09]             |
| Left                                  | 0.0116<br>[0.28]   | 0.022<br>[0.56]     | 0.0018<br>[0.04]              | 0.0146<br>[0.37]              |
| $\Delta \ln$ Unemployment rate (t-1)  | 0.6593**<br>[3.00] | 0.7215***<br>[2.82] | 0.7648***<br>[3.29]           | 0.8166***<br>[3.10]           |
| $\Delta \ln$ Total Population         |                    |                     | 5.576<br>[1.20]               | 4.1689<br>[0.75]              |
| $\Delta \ln$ Enterprises              |                    |                     | 0.8793<br>[1.45]              | 0.8633<br>[1.01]              |
| $\Delta \ln$ Employees in Enterprises |                    |                     | 0.0127<br>[0.02]              | 0.0725<br>[0.06]              |
| Fiscal Equalization                   |                    |                     | $-8 \times 10^{-6}$<br>[0.41] | $-6 \times 10^{-6}$<br>[0.34] |
| Lagged Dependent Variable             |                    | 0.1552**<br>[2.08]  |                               | 0.1290*<br>[1.69]             |
| Fixed State Effects                   | Yes                | Yes                 | Yes                           | Yes                           |
| Fixed Year Effects                    | Yes                | Yes                 | Yes                           | Yes                           |
| Observations                          | 190                | 180                 | 190                           | 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%