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Do local elections affect the spending of intergovernmental transfers? Evidence from Germany's stimulus package of 2009

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Evidence from Germany's Stimulus
Package of 2009**

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Do Local Elections Affect the Spending of Intergovernmental Transfers? Evidence from Germany's Stimulus Package of 2009

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Abstract

In this paper, we study whether local spending of intergovernmental grants is influenced by mayoral elections in the grant receiving municipality. We exploit the implementation of the German federal government's second economic stimulus package of 2009 (K2) in the state of Baden-Wuerttemberg as natural experiment. In the context of this package, all municipalities in Baden-Wuerttemberg received lump-sum grants for local public investment spending. Applying difference-in-differences and instrumental variables approaches to ensure exogeneity of the decision of mayors to run for re-election, we provide evidence that, in the absence of an election, K2 grants led to an increase in a municipality's spending on long-run investment, while municipalities in which the incumbent mayor stood for re-election used grants to increase both, long-run and rapidly visible short-run investment expenditures. Moreover, we provide evidence in favor of the flypaper effect for all municipalities, except for those in which the incumbent mayor did not seek re-election.

JEL Codes: H30, H72, H77, H81, E61, E62

Keywords: Intergovernmental Grants, Flypaper Effect, Political Budget Cycles

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1. Introduction

The political economy of intergovernmental grants between government tiers is relatively well understood. Numerous studies show that decisions as to how grants are allocated to local jurisdictions are often motivated by pork-barrel strategies at the grantor level, with the aim of incumbents to increase their chances of re-election (Cox and McCubbins 1986; Dixit and Londregan 1998; Worthington and Dollery 1998; Dahlberg and Johansson 2002; Albouy 2013). At the receiving local government level, existing literature also shows that local incumbents acquire grants strategically prior to elections aiming at increasing re-election chances (Feld and Schaltegger 2005; Borck and Owings 2003; Bracco et al. 2015; Dalle-Nogare and Kauder 2017). Whether re-election strategies of incumbents do not only influence the acquisition, but also the spending of grants at the local level has received less attention in the literature. However, a widespread literature on political budget cycles shows that incumbents use their budget strategically in order to increase their chances for re-election and change the structure of public expenditures towards spending that is highly visible to voters (Rogoff and Sibert 1988; Rogoff 1990; Brender and Drazen 2008; Drazen and Eslava 2010). In this paper, we address the question whether a grant receiving jurisdiction spends its grants in order to succeed in local elections and thus following political incentives of incumbents at the local level.

To empirically investigate this question, we use the implementation of the German federal government's second economic stimulus package (K2) during the global financial crisis of 2009 in the German state of Baden-Wuerttemberg as a natural experiment. Within the context of the economic stimulus package, all municipalities in Baden-Wuerttemberg received additional lump-sum grants for local public investment expenditures from the German federal government unexpectedly and without an application procedure. We apply a difference-in-differences framework and test whether the spending effects of these grants were different in municipalities in which a mayoral election took place during the period of the program as compared to municipalities in which no election happened.

To conclude that potential differences in the spending of grants are indeed strategically motivated, it is key that incumbents stood for re-election. To overcome the problem that the decision of an incumbent mayor to seek re-election could be driven by endogenous factors, we use an instrumental variables approach proposed by Foremny et al. (2018) to establish exogeneity of an incumbent's decision to re-run for office. According to our results, grants led to an increase in long-run investment expenditures in municipalities in which no election was held during the program period while they induced an additional increase in highly visible short-

run investment expenditures in those municipalities in which the incumbent mayor stood for re-election. Moreover, we provide evidence that grants crowded-out local public investment expenditures in municipalities in which the incumbent mayor did not seek re-election.

We contribute to the literature on the political economy of intergovernmental grants in two regards. First, we relate to the literature on political budget cycles by exploring strategic increases in expenditures prior to elections not only for a jurisdiction's standing budget, but also for the spending of grants. Second, we contribute to the literature on local expenditure effects of grants and the flypaper effect by showing that the local spending of grants and the answer to the question whether grants crowd out local expenditures can be influenced by the effects of local elections.

The remainder of the paper is organized as follows. Section 2 reviews the existing literature on the expenditure effects of grants as well as on the strategic spending behavior of incumbents that seek re-election. Section 3 describes the institutional background of the municipal level in the state of Baden-Wuerttemberg and the institutional design of the K2 stimulus program. Our identification strategy and empirical framework are outlined in Section 4. Estimation results are presented in Section 5 and tested for robustness in Section 6. Section 7 concludes.

2. Theoretical Considerations and Previous Findings

2.1 Effects of Vertical Grants on Local Expenditures

Scott (1952) and Bradford and Oates (1971a, 1971b) already brought up the question as to how local governments use grants received from the center. Bradford and Oates (1971a, 1971b) argue that local governments are expected to treat grant revenues merely as additional income to their jurisdiction. According to the preferences of the median voter, local governments thus use a fraction of the grants they receive to reduce taxes and crowd-out public spending by that fraction. However, most of the empirical evidence questions the theory of Bradford and Oates (1971a, 1971b) and shows that local governments use grants from the center to increase their spending to a larger extent than theoretically expected (Gramlich 1977). This empirical insight is known as the flypaper effect ("money sticks where it hits") (Hines and Thaler 1995). According to Hines and Thaler (1995) and Inman (2009) the flypaper effect can be explained by an information asymmetry between voters and elected officials about the structure of the local budget and the level of grants the local government received (Inman 2009).¹

¹ Similar explanations are offered by Filimon et al. (1982) and Romer et al. (1992).

Another explanation for the flypaper effect is offered by Knight (2002), who shows that policymakers at the central level allocate grants to local jurisdictions with similar spending preferences as their own ones. Accounting for this endogeneity in the allocation of federal highway aid in the US, Knight (2002) finds a crowding-out of federal grants at the local level and, thus, no evidence for the flypaper effect. Obviously, empirical studies on the spending effects of grants face the problem of various endogeneities (Baskaran 2016). Besides political preferences that may affect the allocation of grants (Knight 2002), simultaneous changes in a jurisdiction's spending obligations, socio-economic characteristics or deferrals in tax revenues could distort the empirical analyses on local spending of grant receipts (Gordon 2004; Dahlberg et al. 2008). Gordon (2004) tries to overcome the various endogeneities and uses a discontinuity in the granting formula of US school grants to account for endogeneity in the allocation of grants. Like Knight (2002), Gordon (2004) finds no evidence for the flypaper effect if she accounts for that endogeneity.

While the early quasi-experimental studies of Knight (2002) and Gordon (2004) provide evidence against the flypaper effect, more recent empirical studies report evidence in favor of the flypaper effect. In contrast to Knight (2002) and Gordon (2004), who use specific grant programs for their studies, Dahlberg et al. (2008) examine the flypaper effect for general transfers of the Swedish central government to its municipalities. Exploiting a discontinuity in the grant allocation formula, their results support the flypaper effect and indicate an almost fully scaled crowding-in of grants on local spending. Allers and Vermeulen (2016) use a reform of the Dutch fiscal equalization scheme as natural experiment and provide similar results in favor of the flypaper effect for Dutch municipalities. For German municipalities, two empirical studies support the flypaper effect. Baskaran (2016) applies a design similar to that of Dahlberg et al. (2008) and uses discontinuities in the formula the Hessian state government applies to allocate general transfers to its municipalities. Similar results are provided by Korzhenevych and Langer (2016) for municipalities in Northrhine-Westphalia and Saxony.²

This mixed empirical evidence on the flypaper effect is in line with the argument of Dahlberg et al. (2008) that the existence of the flypaper effect depends on the specific institutional setting in which intergovernmental funds are granted to local jurisdictions. They argue that the flypaper effect is more likely to occur in an integrated public sector like Sweden where revenue raising competencies are mainly assigned to the federal level (Dahlberg et al. 2008). Rios et al. (2022)

² Buettner (2006), Egger et al. (2010) and Hauptmeier (2007) study the effects of fiscal equalization in the German states of Baden-Wuerttemberg and Lower-Saxony focusing on the effects on tax rates on the local level instead of public expenditures (i.e., the flypaper-effect).

provide evidence for municipalities in Spain that confirms the reasoning that the size of the flypaper effect is influenced by local institutional and political conditions. Also, the findings of Baskaran (2016) and Korzhenevych and Langer (2016) support that reasoning as the institutional setting of Germany's fiscal federalism is closer to the integrated Swedish setting studied by Dahlberg et al. (2008) than to the US setting studied by Knight (2002) and Gordon (2004). Given the mixed empirical evidence and the role of the institutional setting the question arises whether, in addition to the institutional setting, the political economics of grants also contributes to the explanation as to whether grants crowd-out local expenditures.

2.2 Political Budget Cycles

Hines and Thaler (1995) explain the flypaper effect with information asymmetries between voters and local policymakers about the grants that a local jurisdiction receives and about the structure of the local budget. They argue that local politicians would use this information asymmetry to follow their own spending preferences instead of those of the median voter (Hines and Thaler 1995). Following the argument of Hines and Thaler (1995), it is likely that elected local officials do not only exploit information asymmetries about the local budget and grants to follow their own preferences, but also to increase their re-election chances.

Nordhaus (1975) first formalized the idea that rational politicians exploit information asymmetries of voters and manipulate macroeconomic variables to increase their re-election chances. Enhancing the theory of Nordhaus (1975), Rogoff and Sibert (1988) suggested that, in the presence of information asymmetries, politicians may use fiscal policy and increase public spending before elections to signal their competence to voters (Dubois 2016). In a subsequent study, Rogoff (1990) shows that politicians can also change the composition of the budget to signal their competence to voters. Although information asymmetries are likely to be more severe in new democracies, there is plenty of empirical evidence, that politicians in mature democracies manipulate spending to increase their re-election chances, too.³

However, Brender and Drazen (2005) and Drazen and Eslava (2010) show that there are two notable differences in mature compared to new democracies. First, transparency about the budget is higher in mature democracies. Thus, the strategy of signaling political competence through a change in spending is less likely to be successful. Second, increasing spending may be politically risky for an incumbent as fiscal preferences of voters could be conservative. Given

³ See, e.g., Veiga and Veiga (2007) for Portugal, Dalle-Nogare and Kauder (2017) for Italy, Seitz (2000), Schneider (2010), Mechtel and Potrafke (2013), Furdas et al. (2015) and Foremny et al. (2018) for Germany. For additional studies that focus on PBC in mature democracies and on the local level see Foremny et al. (2018).

these considerations, Brender and Drazen (2005) and Drazen and Eslava (2010) show that politicians in mature democracies change their strategy: Instead of signaling political competence to voters, they try to signal that their spending preferences are close to the spending preference of the median voter (Drazen and Eslava 2010). For this reason, politicians shift spending towards expenditure categories that are highly visible for voters before the election (Rogoff 1990; Drazen and Eslava 2010). Empirical evidence confirms the theoretical reasoning of Rogoff (1990) and Drazen and Eslava (2010). Katsimi and Sarantides (2012) show for a panel of 19 OECD democracies that public spending is shifted away from long-run public investment towards current expenditures before elections. Gupta et al. (2016) provides similar evidence for a sample of 67 democracies showing that public investment peaks 28 months before an election and declines thereafter with every month the next election approaches.

While the forementioned studies focus on the national level, Furdas et al. (2015) argue that the local level is even more prone for budget manipulation before elections, as local governments can target expenditures much more precisely to voter groups than upper tier governments. However, the empirical evidence for the local level shows that instead of current expenditures, short-run investment expenditures are increased before elections (Veiga and Veiga 2007; Drazen and Eslava 2010; Furdas 2015; Foremny et al. 2018).⁴ The reason the authors identify is that on the local level short-run investment projects are most visible to voters (Veiga and Veiga 2007; Drazen and Eslava 2010; Furdas 2015; Foremny et al. 2018).

Given the theory and empirical evidence, it is likely that politicians use information asymmetries about grant receipts and channel grant revenues to those expenditure categories that are visible to voters and increase short-run investment spending before elections.⁵ This leads to the first hypothesis:

Hypothesis 1: Municipalities use grant receipts to increase local short-run investment expenditures if a local election approaches.

Although incumbents who do not stand for re-election, due to reputation effects, may still be interested in using public spending to signal competence and their preferences to voters, the main motivation of incumbent politicians to manipulate fiscal policy to signal preferences close to those of the median voter is to increase their re-election chances (Rogoff 1990; Drazen and

⁴ Veiga and Veiga (2007) confirm PBC effects for Portuguese municipalities, Drazen and Eslava (2010) for local jurisdictions in Colombia, Furdas et al. (2015) and Foremny et al. (2018) for German municipalities.

⁵ The idea that local incumbents are not only using their standing budget but also grant receipts with the motivation to increase their re-election chances is not new. Aidt and Shvets (2012) as well as Dalle-Nogare and Kauder (2017) provide evidence, that incumbents attract additional grants if elections approach.

Eslava 2010). If incumbents have no intent of being reelected, their motivation of using fiscal policy to signal that their preferences are close to median voter preferences should shrink (Klein and Sakurai 2015). Thus, changing the composition of public spending before elections should be more pronounced if incumbents seek re-election. Empirical evidence confirms this crucial role of incumbents' re-election intentions on fiscal policy. Besley and Case (1995) show for US governors that incumbents care about their reputation especially if they can run for re-election. Klein and Sakurai (2015) provide empirical evidence that only those Brazilian mayors who are eligible for re-election change the composition of the budget by increasing public investment spending before an election. De Janvry et al. (2012) show that the effects of a school-program for Brazilian municipalities were higher if mayors faced a re-election possibility. That electoral accountability affects policies in Brazil is also shown by Frey (2021) and Fournais and Hall (2022). According to Klasnja and Titinui (2017), personal career paths affect an incumbent's incentives and behavior, while Alesina et al. (2019) and Baskaran et al. (2024) report effects of an incumbent's age on their political preferences. That mayors who are not eligible for re-election change the composition of their fiscal policy is shown by Veiga and Veiga (2019) and Lopes da Fonseca (2020), who report that legislatures and mayors in Portugal who could not re-run pursued more conservative fiscal policies. For municipalities in Bavaria and Baden-Wuerttemberg, Foremny et al. (2018) find higher increases in pre-election spending if the incumbent mayor seeks re-election. For Italian municipalities, Dalle-Nogare and Kauder (2017) provide evidence that mayors who are eligible for re-election attract a higher amount of grants from the central government compared to retiring mayors. This leads to the second hypothesis:

Hypothesis 2: *The increase in local short-run investment expenditures when an election approaches is higher if the incumbent mayor seeks re-election.*

Building on the literature on political budget cycles, we explore as to whether the widely studied incentives of political budget cycles influence the local deployment of intergovernmental transfers.

3. Institutional Background

To test our hypotheses, we use a sample of German municipalities of the state of Baden-Wuerttemberg as it offers a promising empirical example to study the local spending of grants for three reasons. First, it is comprised of a large and heterogenous set of jurisdictions. With 11 million inhabitants, Baden-Wuerttemberg is the third largest German state by population. It encompasses 1,101 municipalities of which 1,092 belong to counties (*kreisangehörige Gemeinde*). Nine of the state's largest cities assume the status of a county (*kreisfreie Städte*).

The size of municipalities varies between the state's largest city (Stuttgart) with 632,000 inhabitants and its smallest municipality (Böllen) with 107 inhabitants. The average municipality in Baden-Wuerttemberg has 4,803 inhabitants with 80% of the population living in municipalities with less than 100,000 inhabitants (State Statistical Office 2022).

3.1 Municipalities in Germany's Fiscal Federalism

The second reason for using municipalities in Baden-Wuerttemberg is that they are autonomous regarding public spending over sufficiently large budgets. In German federalism, municipalities are integral parts of the states. However, the German constitution provides local officials with wide-ranging political autonomy. Municipalities must provide mandatory public services that the federal and the state levels assign to them. Such mandatory municipal tasks are mainly basic administrative, safety or childcare services. Although mandatory, the constitutional principle of municipal self-administration guarantees that municipalities decide autonomously as to how to accomplish their mandatory tasks. In addition to these, municipalities can provide voluntary public goods and services. The range of the provision of voluntary public goods and services is not restricted and remains fully within the political sphere of local officials. Examples for voluntary municipal services are urban planning, cultural and sports infrastructure, local public transport, or social- and community services (Furdas et al. 2015; Foremny et al. 2018).

Figure 1: Disposable Municipal Budget Shares (excluding Social Security)

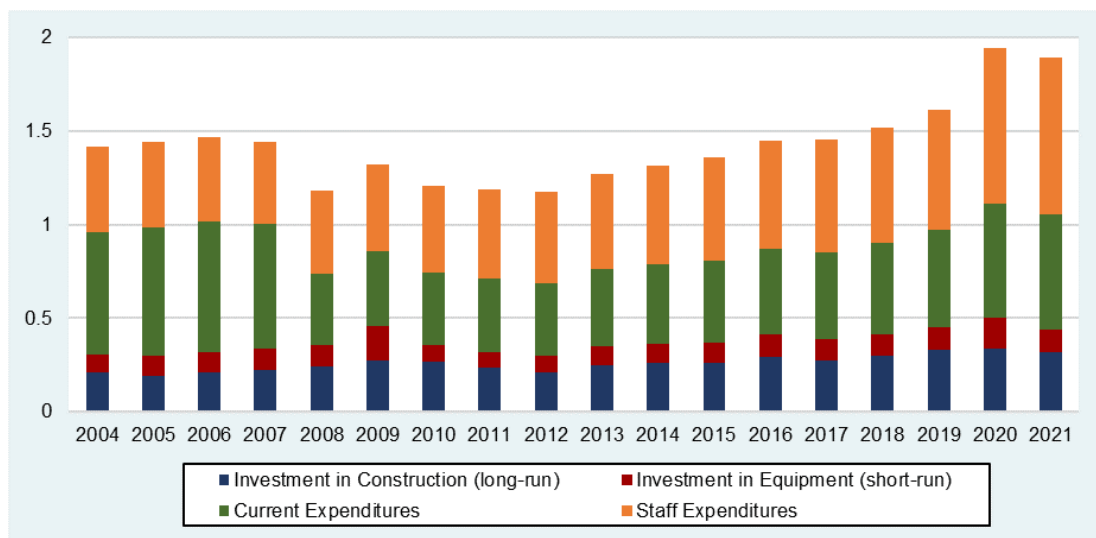


Figure shows municipal budget shares in the state of Baden-Wuerttemberg in each year between 2004 and 2021. Data is taken from the State's statistical office. All variables in 1000 Euro per capita and prices of 2005.

Corresponding to their political autonomy, municipalities in Baden-Wuerttemberg are equipped with wide-ranging fiscal autonomy. They prepare their own budget in order to fund mandatory

and voluntary tasks within the rules of the state-set budget regulations.⁶ German municipalities generate their revenue mainly through taxes and grants. The main municipal taxes are the local business and property taxes. Municipalities set the tax rates of these taxes autonomously, while the tax base is defined by the federal and state levels. In addition, municipalities receive fractions from the income and value-added taxes.

In addition to tax revenues, grants from the state level are the most important municipal revenues. According to constitutional provisions, the state is obliged to equip its municipalities with sufficient funds so that municipalities can fulfill their mandatory tasks and a minimum of voluntary tasks. For this purpose, the state government grants municipalities with general transfers. Beside general state transfers, the state and federal level grant project-based transfers to municipalities (Bury et al. 2025). Equipped with these revenue sources, municipalities are responsible for approximately 50% of accumulated state and local public expenditures within the state of Baden-Wuerttemberg (Foremny et al. 2018).

Major parts of municipal services are administrative tasks; more than two thirds of municipal spending can be attributed to staff and current expenditures. Only around one third of disposable municipal expenditures are public investment expenses. However, municipalities play a central role in overall public investment activities, as the municipal level provides approximately 60% of total public investment in fixed assets in the state of Baden-Wuerttemberg. About 90% of municipal investment expenditures are long-run investments in urban construction, while 10% are short-run investments in equipment (see Figure 1).

3.2 Role of Mayors in Municipalities in Baden-Wuerttemberg

The third reason why the municipal level in Baden-Wuerttemberg is empirically promising can be found in its local governing structures and the role of the mayor. Municipalities in Baden-Wuerttemberg are governed by a local council and a mayor. Local councils of all municipalities are elected in proportional elections for a five-year term. Council elections take place at the same date for all municipalities within the state. The councils act as local parliamentary bodies, while council members serve on an honorary basis. One of their core competencies is to vote on the municipality's budget and approve larger spending projects. Independently from local councils, mayors are elected in majoritarian elections for an eight-year term. These elections take place at individual dates for each municipality.

⁶ The most important budget regulation set by the state stipulates that municipalities in Baden-Wuerttemberg must run balanced current budgets and can incur debt only for specific investment projects (Bury and Feld 2023).

In the constitutional setting of Baden-Wuerttemberg (known as “*Süddeutsche Ratsverfassung*”) the mayor has a particularly strong role in local politics. First, he leads the local administration. Second, he chairs the local council and is entitled with voting rights within the council. This double function provides him with notable powers in local politics in four respects. First, as chief of administration he can decide on minor spending projects independently of the council.⁷ Second, as council chair the mayor has agenda setting power in local politics, while as head of administration he has information advantages over the (honorary) council members. Third, the mayor can veto council decisions if he thinks they are illegal or harmful for the municipality. Fourth, as local councils have an even number of members, the (additional) vote of the mayor is decisive in case of a tie on fiscal decisions in the council.

3.3 The Design of the K2 Package

Empirical studies about the spending of grants face the challenge of various endogeneities in their distribution that may distort empirical results about spending effects of grants (Baskaran 2016). While most of the existing quasi-experimental studies use discontinuities in granting formulas (Gordon 2004; Dahlberg et al. 2008; Baskaran 2016; Korzhenevych and Langer 2016), we use the stimulus package that the German federal government launched as a reaction to the financial crisis of 2008 as natural experiment to overcome endogeneity in the allocation of grants. To stabilize the economy during the financial crisis of 2008, the German federal government launched two stimulus packages between November 2008 and January 2009. The first package (“*Konjunkturpaket I*”) focused on tax reliefs for businesses and households and enhanced short-time work benefits to stabilize the labor market. The second stimulus package (“*Konjunkturpaket II*”, colloquially abbreviated K2) aimed at stimulating public and private investment. Due to the importance that municipalities have in public investment activities in German federalism, a central idea behind the second stimulus package was to trigger public investment at the local level. For this reason, the federal government provided 10 billion euro of federal funds to German municipalities. Since the German constitution prohibits the federal level from granting funds to municipalities directly, the federal government passed the K2 funds to the state governments. Each state government then set up its own procedures as to how to distribute the funds it received from the federal level to its municipalities.

Out of the K2 stimulus package, the state government of Baden-Wuerttemberg received 1.2 billion euro for local public investment projects. The state government specified that 65% of these funds should be used for investments in education facilities and 35% were earmarked for

⁷ Local councils set the threshold up to which the mayor is entitled to autonomously decide on spending projects.

general infrastructure investment. The state government used 30% of the funds for its own investment expenditures, while it passed 70% onto municipalities. Unlike regular transfer programs the state government chose to disburse 70% of these funds to municipalities as lump-sum grants rather than application for funds. The remaining 30% of municipal funds were used to increase the state's existing investment support programs. Each municipality thus received a lump-sum grant of 245 euros per student for investment in education facilities and an additional lump-sum grant of 10 euros per inhabitant for investment in general infrastructure. To avoid manipulation, the calculation of the lump-sums was based on population and student numbers of the previous year. The Ministry of Finance informed municipalities in early 2009 about the lump-sum payments they would receive. To receive those lump-sum grants, the municipalities had to show to the state government that they would use them to finance investment projects that did not start before January 2009. To provide a timely investment stimulus, the grants had to be spent by the municipalities by the end of 2011 at the latest. Of the 1,101 municipalities in Baden-Wuerttemberg, only 23 were unable to meet these requirements and therefore waived the lump-sum payments. All other 1,078 municipalities in Baden-Wuerttemberg received lump-sum payments (State Court of Auditors 2013).⁸ The specific projects that the municipalities implemented with the additional funds were determined autonomously by the municipalities. Initial anecdotal evidence shows that municipalities in which a mayoral election was pending invested the funds, e.g., in the renovation of the façade of a fire station, the modernization of the existing sports facility or the renovation of the foyer of a town hall (see Table 1).⁹

Table 1: Number and Average Financial Volume of (State and Municipal) Projects co-funded by K2-Grants

	Number of Projects	Average Financial Volume (total)
Total K2	5514	757,524.23
Energetic Redevelopment Measures	1407	235,430.34
Replacements	230	251,932.42
Other	3878	242,946.55

Identification Strategy

Given these characteristics of the K2 program, we can use it as natural experiment to identify the expenditure effects of grants at the local level. The main reason why the K2 program is a

⁸ For a detailed description of the administration of the K2 program in Baden-Wuerttemberg see Schneider et al. (2011) and State Court of Auditors (2013).

⁹ Examples from the Cities of Ditzingen, Stutensee and Biberach.

suitable natural experiment to identify the causal effects of grant revenues is that, unlike regular transfer programs, the K2 program does not suffer from the usual endogeneities in the allocation of grants. This is the case for three reasons. First, since all municipalities received lump-sum transfers only depending on their population and student numbers, transfers were granted independently of any other underlying and unobservable socioeconomic characteristics of the receiving municipality.¹⁰ Second, political preferences or partisan effects (Knight 2002) clearly did not play a role in the lump-sum allocation of K2 grants to all municipalities.

Third, the K2 program was a reaction to the exogenous shock of the global financial crisis of 2008 and 2009. Thus, municipalities could not form expectations about a possibly upcoming grant program. If the municipalities had expected such a program, it could not be ruled out that they would have adjusted their expenditure and budget planning in anticipation of an upcoming program. Its estimated expenditure effects would then no longer be exogenous. Instead, they could again suffer from endogeneity due to strategic behavior of local governments or underlying socioeconomic factors. However, besides the fact that the K2 program resulted out of the clearly unexpected exogenous shock of the global financial crisis, the federal government and the German Bundestag approved the K2 program only in January 2009. At that time, municipalities in Baden-Württemberg already had to have completed their budget planning for 2009 due to the state's budgetary regulations. The K2 program therefore represents the rare case of an exogenous grant program to local governments which renders it a suitable natural experiment for causal identification of local spending effects of additional grant revenues.

3.4 Baseline Econometric Framework

To estimate the local expenditure effects of K2 grants, we use a two-way fixed effects model and apply a generalized Difference-in-Differences approach (Hansen 2007). Thus, we estimate the effect of K2 grants on municipal expenditures for each of the 1,101 municipalities i in year t . Because of the educational lump-sum, the per capita K2 grants vary between municipalities. Thus, although almost all municipalities in our sample received K2 grants at the same point in time, the treatment intensity varies between municipalities which gives us sufficient variation to estimate different treatment effects across municipalities.¹¹ To account for the persistence of budgetary and socio-economic structures, we use a five-year pre-treatment period, starting in 2004. Therefore, our baseline model takes the form:

¹⁰ For a discussion of such effects see Dahlberg et al. (2008, p. 2322).

¹¹ The approach of using treatment intensity as variation for difference-in-differences estimation is, among others, applied by Acemoglu et al. (2004).

$$EXP_{i,t} = \sum_{k=1}^3 \beta_k \sum_{t=-2}^1 (K2_{i,t}) + Transfers_{i,t} + Controls_{i,t} + EXP_{i,t-1} + \delta_i + \tau_t + u_{i,t} \quad (1)$$

where

$$EXP_{i,t} = \begin{cases} Investment\ in\ Construction_{i,t} \\ Investment\ in\ Equipment_{i,t} \end{cases}$$

where the dependent variable are expenditures¹² for local public investment of each municipality i in year t . We use local public investment as dependent variable for two reasons. First, K2 grants aimed at stimulating local investment. Second, we are interested in spending that is visible to voters. Existing empirical evidence shows that, at the local level, this is primarily public investment (Veiga and Veiga 2007; Drazen and Eslava 2010; Furdas 2015; Foremny et al. 2018). As local public investment can take different forms that are visible to voters at different speeds, we distinguish between long-run construction investment and short-run investment in equipment. Another reason why we distinguish between the two investment categories is that mayors can decide on smaller expenditure independent from the council. They can therefore use the funds rather in line with their strategic interests than would be the case if they had to involve the council in the spending decision. Thus, they might favor (short-term) investment in equipment when an election is imminent.

We use the absolute amounts of investment spending instead of, e.g., spending shares, as large parts of municipal budgets are preconditioned by a municipality's mandatory tasks. Changes in investment spending due to additional transfers may therefore only result in minor changes of budget shares, which makes absolute amounts the more sensitive variable.

Our main explanatory variable is K2 grants received by each municipality. Since the municipalities were required to spend the grants by the end of 2011 at the latest, we include two-year lagged effects of K2 grants into our model. Therefore, our main coefficients of interest are β_k with β_1 indicating the expenditure effects of K2 grants in the year 2009, β_2 indicating the expenditure effects of K2 grants in the year 2010 and β_3 indicating the expenditure effects of K2 grants in the year 2011.

Although the K2 program meets the requirements for a natural experiment, there are several confounding factors that could distort the estimated spending effects of K2 grants.¹³ First, in addition to the K2 grants, municipalities received other grants from state and federal

¹² For comparability, we express all monetary variables in 1000 Euros per capita and prices of 2005.

¹³ We show correlation estimates regarding potential factors influencing K2 grants in Table A12 in the Appendix. It nicely shows that mainly those variables have significant effects that enter the calculation formula of K2 grants. One exception is the share of left-wing votes in the council which does however not make particular sense.

governments between 2009 and 2011. As these grants influence a municipality's spending behavior, ignoring them in our analysis would distort the estimated spending effects of the K2 grants. In addition, a municipality's spending structure, and thus the spending of K2 grants, may be influenced by the grants that a municipality received in previous periods. We thus control for all further transfers that municipalities received in the five years before the K2 program was launched. Therefore, the vector *Transfers* includes all other transfers that a municipality received from the state and federal governments. The three transfer types include non-earmarked general transfers as well as grants earmarked for investment and grants earmarked for current expenditures.

The vector *Controls* comprises a set of additional fiscal, economic, political and demographic controls likely to affect municipal expenditures. In addition to the transfers a municipality receives, its expenditure structure is likely to be affected by its initial fiscal position (Dahlberg et al. 2008; Baskaran 2016). We therefore control for each municipality's initial fiscal position and control for the deficits and the debt stocks of each municipality. As grant revenues can affect current values of debt and deficits, we focus on a municipality's initial fiscal position and use lagged values for municipal deficits and debt to avoid endogeneity.

Aside fiscal factors, local public finances and local expenditure structures can be influenced by economic shocks (Furdas et al. 2015). This is particularly the case for the period from 2009 to 2011 when the impact of the global financial crisis hit municipalities in Baden-Wuerttemberg. As the financial crisis affected these municipalities to varying degrees, we account for the economic situation of each municipality separately and include unemployment figures and the tax strength of each municipality as control variables into the model.

Potrafke (2011) shows that left-wing politicians design public budgets in different manners as compared to right-wing politicians. To capture such ideological effects, we include the share of left-wing votes in the council election of 2009 as further control variable. We use the share of left-wing votes in the council instead of the party affiliation of the mayor, because mayors, especially in small municipalities, are often independent from party platforms.

Finally, the demographics of a municipality may influence its spending structure as the demand for specific public goods and services differs in municipalities with young populations from that in municipalities with old populations (Klein and Sakurai 2015; Brender and Drazen 2005; Veiga and Veiga 2007). Besides demographics, the size and the settlement density of the municipality can also influence local expenditure structures (Klein and Sakurai 2015; Porto and Porto 2000). To account for these influences on local spending, we control for a municipality's

share of population younger than 25, its share of population older than 65, and for its population density. The share of population younger than 25 also serves as a proxy variable for the number of students in a municipality, which likely influences local preference for education spending and thus the local spending structure. In addition, it feeds directly into the calculation of K2 grants. Since the number of students thus affects both, the dependent variable, and the main independent variable of the model, we need to control for its effects on the municipal spending structure in order to avoid endogeneity. However, as the number of students directly entered in the calculation of K2 grants, we cannot include it as additional control variable without causing a multicollinearity problem. We therefore use the share of the population under 25 as a proxy for the number of students in a municipality and, thus, as an indicator for a municipality's preference for education spending.¹⁴ To account for further unobserved variables, we include municipality fixed effects δ and year fixed effects τ into the model.

As fiscal and political variables are persistent (Claeys 2006; Klein and Sakurai 2015), our data is likely to be cross-sectionally and serially correlated, both causing biased estimation results. A panel like ours with a small time-dimension and a large N-dimension is especially prone for such a bias (Nickell 1981). For this reason, we apply Pesaran's (2004) test for cross-sectional dependence and run augmented Dickey-Fuller (ADF) and Philips-Perron (PP) tests to check our data for serial correlation (see Table A1 for results). The Pesaran test for cross-sectional dependence clearly rejects the null hypothesis of cross-sectional independence. Therefore, we use heteroskedasticity robust standard errors and cluster them at the municipal level. Although the panel ADF and PP tests for serial correlation reject the null hypothesis that all panels contain unit roots, we cannot rule out that single panels still suffer from serial correlation. We apply three approaches to avoid unit-roots in all panels. First, we estimate the model using first differences instead of level data. Second, in order to avoid autocorrelation that results out of the persistence of fiscal data, we include municipality specific time trends into the model. Third, following Dalle-Nogare and Kauder (2017), we estimate static and dynamic specifications of our model. For the dynamic specification, we include a lagged dependent variable $EXP_{i,t-1}$ that serves as additional control for unobserved persistent factors that influence a municipality's local spending. Including a lagged dependent variable can lead to biased OLS estimates as the lagged dependent variable may be correlated with the error term, which would violate the strict exogeneity assumption (Arellano and Bond 1991; Blundell and Bond 1998, 2000). To estimate the dynamic specification of our model, we follow the procedure proposed by Blundell and

¹⁴ In an extended model specification, we also include the number of students themselves in our estimating equation to check the robustness of the results (see Tables A6).

Bond (1998, 2000) and use a Systems GMM estimator with lags of the dependent variable in levels as instruments for the differenced equation (Klein and Sakurai 2015) and apply the Windmeijer (2005) correction for standard errors that is robust to heteroskedasticity, autocorrelation and cross-sectional dependence of the error terms.

3.5 Incorporating Election Effects

In the next step of the analysis, we examine whether the local spending effects of the K2 grants were influenced by a local election that took place in a municipality. Due to the strong role of mayors in the institutional setting of Baden-Wuerttemberg's municipalities, we focus on the effects of mayoral elections. Moreover, the elections of local councils took place on the 7th July 2009 for all municipalities in Baden-Wuerttemberg, while the K2 grants were not disbursed until mid-year 2009 and thus after the council elections. We use time-fixed effects to still account for possible effects of council elections on the spending behavior of municipalities (Foremny et al. 2018). To estimate the effect of mayoral elections on the expenditure effects of K2 grants, we add an interaction term of the K2 grant variables with a dummy variable $Election_{i,2010/2011}$ that is zero and becomes one if there was a mayoral election in municipality i in 2010 or 2011. We consider mayoral elections that took place in 2010 and 2011 because municipalities did not receive their K2 grants until mid-2009. Achieving visible spending effects of the grants for voters before mayoral elections that took place in 2009 was therefore hardly possible due to the duration of public investment projects, even for the case of short-run investment. In the robustness section, we check the sensitivity of our results and include mayoral elections taking place in the second half of 2009, which leaves our results unchanged. Moreover, all expenditure projects had to be completed by the end of 2011. Mayors being up for re-election from 2012 onwards thus had an interest in investing in long-term construction projects, while mayors who imminently stood for re-election had a particular interest in a change in the composition of grant spending. Hence, we amend our baseline equation to:

$$EXP_{i,t} = \sum_{k=1}^3 \beta_k \sum_{t=-2}^1 (K2_{i,t}) + \gamma Election_{i,t} + \sum_{n=1}^3 \rho_n \sum_{t=-2}^1 (K2_{i,t} * Election_{i,2010/2011}) \\ + Transfers_{i,t} + Controls_{i,t} + EXP_{i,t-1} + \delta_i + \tau_t + u_{i,t} \quad (2)$$

The coefficient β_k now indicates the effect of K2 grants on municipal expenditures for the case that no mayoral election took place in a municipality in the years 2010 and 2011, while the coefficient ρ_n indicates whether the expenditure effect of K2 grants was significantly different if there was a mayoral election in a municipality in the year 2010 or 2011. We focus on the effects of the imminent election on the spending of additional grants only. The reason for this

is that an incumbent can neither know whether he will succeed in the imminent election, nor, even if he gets re-elected, whether he will rerun in elections after next. Therefore, it is unlikely that a mayor uses additional grants strategically not for the imminent, but the election after next.

In order to identify the causal effects of mayoral elections on the spending of K2 grants, it is crucial that the timing of mayoral elections is exogenous (Furdas et al. 2015; Foremny et al. 2018). As the timing of mayoral elections is determined by state law and elections take place automatically at the end of a mayors eight-year term, this is the case for the mayoral elections in Baden-Wuerttemberg. However, Foremny et al. (2018) point out that a mayor's term can end prematurely when the mayor resigns from office.¹⁵ Although the resignation of a mayor is a rare event in Baden-Wuerttemberg, we follow Foremny et al (2018) and only consider elections following fully completed mayoral terms to ensure that the timing of the election is determined solely by law and is thus fully exogenous. The distribution of mayoral elections in Baden-Wuerttemberg in the period between 2009 and 2011 is shown in Figure 2.

Figure 2: Number of Mayor Elections

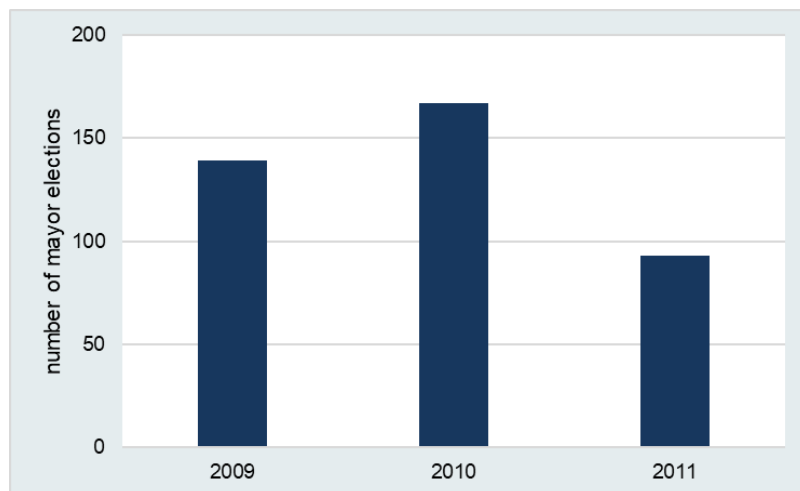


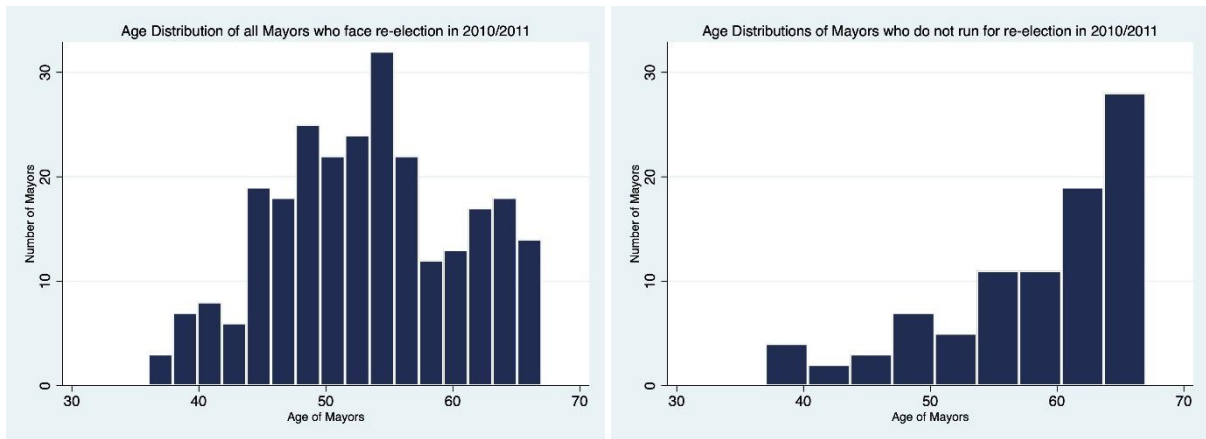
Figure 2 shows the number of mayoral elections in the state of Baden-Wuerttemberg in each year between 2009 and 2011. Election data is hand-collected and taken from the state public administration gazette.

While the timing of mayoral elections can be considered exogenous, this is not the case for an incumbent's decision to seek re-election. Instead, Foremny et al. (2018) argue that a mayor's decision to re-run for office may be influenced by the fiscal or socioeconomic situation of the municipality. For example, an incumbent might decide against running again if the municipality is hit by a fiscal shock that simultaneously affects his decision and the municipality's spending

¹⁵ The state regulations of Baden-Wuerttemberg do not foresee the possibility of recalling a mayor. Foremny et al (2018) argue that a mayor would either resign due to sickness, which again would constitute an exogenous end of his term, or due to political reasons. The main political reason for mayoral resignation in Baden-Wuerttemberg is that the mayor takes office in a larger city. Even in this case, the timing of the election would still be exogenous as it is determined by the election date of another city. In any case, a resigned mayor will not return to office if his term ended prematurely (Foremny et al. 2018).

structure (Foremny et al. 2018). Such concerns are particularly important for our study design because several municipalities were exposed to changing economic circumstances due to the impact of the global financial crisis over the period from 2009 to 2011. Thus, we cannot rule out the possibility that the decision of mayors who faced re-election in 2010 and 2011 to run again was partly influenced by such endogenous factors. We therefore follow Foremny et al. (2018) and apply their instrumental variables approach to deal with the potential endogeneity in the re-running decision of incumbent mayors.

Figure 3: Age Distribution of Mayors and of Mayors Who Do Not Re-run for Office



Left hand side figure shows the age distribution of all mayors in Baden-Wuerttemberg who faced re-election in 2020/2011. Right hand side figure shows the age distribution of those mayors who decided not to re-run in 2020/2011. Data is hand-collected and taken from the state public administration gazette.

Foremny et al. (2018) propose to use the institutional design of the state of Baden-Wuerttemberg to construct instrumental variables that explain a mayor's decision to re-run but have no influence on a municipality's expenditure structure and thus, the error term of equation 2. The first instrument they propose is a dummy variable that is one if the mayor is eligible to receive a pension and zero otherwise. In the institutional setting of Baden-Wuerttemberg a mayor is eligible to receive a pension if he served for two full terms as mayor or if he served as civil servant for a particular number of years and completed at least one full term as mayor. Foremny et al. (2018) argue that mayors who are eligible for pension have weaker incentives to seek re-election. However, most mayors serve more than two terms. Thus, being eligible for a pension seems to be a necessary, but not a sufficient incentive for a mayor to decide not to run again. Therefore, like Foremny et al. (2018), we construct a dummy variable that is one if the mayor is older than 60 years in the election year as second instrumental variable. A look at our data (Figure 3) shows that the age distribution of all mayors who faced election in 2010 and 2011 differs from that of mayors who faced election but decided not to re-run. Mayors older than 60 years were more likely not to re-run for office as compared to younger incumbents.

Like in Foremny et al. (2018), the implementation of an instrumental variables approach is not straightforward in our empirical setting, since the indicator variable that denotes whether an incumbent seeks re-election enters our estimation equation directly and in interaction with the K2 grant variable. We therefore need separate first stage regressions for the indicator variable and for its interaction with the K2 grant variable (Foremny et al. 2018; Wooldridge 2010; Angrist and Pischke 2009). The respective first stage regressions¹⁶ thus take the form:

$$\begin{aligned}
 Rerun_{i,2010/2011} &= \alpha_0 + \alpha_1 \text{Mayor over 60}_{i,t} + \alpha_2 \text{Mayor pensionable}_{i,t} + \alpha_3 K2_{i,t} \\
 &+ \alpha_4 (\text{Mayor over 60}_{i,t} * K2_{i,t}) + \alpha_5 (\text{Mayor pensionable}_{i,t} * K2_{i,t}) \\
 &+ \alpha_6 \text{Transfers}_{i,t} + \alpha_7 \text{Controls}_{i,t} + \delta_i + \tau_t + \mu_{i,t}
 \end{aligned} \tag{3a}$$

$$\begin{aligned}
 Rerun_{i,2010/2011} * K2_{i,t} = IT &= \omega_0 + \omega_1 \text{Mayor over 60}_{i,t} + \omega_2 \text{Mayor pensionable}_{i,t} + \omega_3 K2_{i,t} \\
 &+ \omega_4 (\text{Mayor over 60}_{i,t} * K2_{i,t}) + \omega_5 (\text{Mayor pensionable}_{i,t} * K2_{i,t}) \\
 &+ \omega_6 \text{Transfers}_{i,t} + \omega_7 \text{Controls}_{i,t} + \delta_i + \tau_t + \mu_{i,t}
 \end{aligned} \tag{3b}$$

To be valid instruments, the two instrumental variables must meet the conditions of instrument relevance and instrument validity. The instrument relevance condition would be violated if the two variables could not explain an incumbent's decision to seek re-election. The results of the first stage regressions (see Table A4) and the corresponding F-tests show that the combination of the two instruments is able to explain the decision of an incumbent to seek re-election. This is also confirmed when we control for structural and fiscal factors of the municipality. The control variables show neither an economically nor a statistically significant effect on the dummy variable that indicates whether the incumbent seeks re-election, while the two instruments continue to show an economically and statistically highly significant effect.

The instrument validity condition would be violated if the instrumental variables were simultaneously correlated with the indicator variable and the error term of the second-stage equation, i.e., if the age of 60 years and the pension entitlement of a mayor would have a direct impact on a municipality's expenditure structure. This could be the case for both variables, for example if the mayor's spending preferences change due to age or after becoming eligible for retirement. We therefore conduct various over- and weak-identification tests to test the validity of the instrumental variables, which confirm the applicability of our instruments. As both

¹⁶ First stage results are reported in Table A4 in the Appendix.

conditions are fulfilled, we insert the predicted values of the indicator variable that denotes whether an incumbent seeks re-election $\overline{Rerun}_{i,2010/2011}$ (Eq. 3.1) and the predicted values of the interaction of the indicator variable with the K2 grants variable $\overline{K2_{i,t} * Rerun}_{i,2010/2011}$ (Eq. 3.2) into equation (2), which yields our second stage equation:

$$\begin{aligned}
 EXP_{i,t} = & \sum_{k=1}^3 \beta_k \sum_{t=-2}^1 (K2_{i,t}) + \varphi Election_{i,t} + \overline{\theta Rerun}_{i,2010/2011} \\
 & + \sum_{n=1}^3 \vartheta_n \sum_{t=-2}^1 (K2_{i,t} * Election_{i,2010/2011}) + \sum_{n=1}^3 \pi_n \sum_{t=-2}^1 (\overline{K2_{i,t} * Rerun}_{i,2010/2011}) \\
 & + Transfers_{i,t} + Controls_{i,t} + EXP_{i,t-1} + \delta_i + \tau_t + u_{i,t}
 \end{aligned} \tag{4}$$

where the coefficient β_k indicates the expenditure effects of K2 grants in a municipality if there is no mayoral election in 2010 or 2011, while the coefficient ϑ_n indicates whether the expenditure effects of K2 grants were significantly different if there was a mayoral election in a municipality and the incumbent mayor did not re-run. Finally, the coefficient π_n indicates whether the expenditure effects of K2 grants were significantly different if there was a mayoral election in a municipality in the year 2010 or 2011 and the incumbent mayor sought re-election.

3.6 Common Trends Assumption

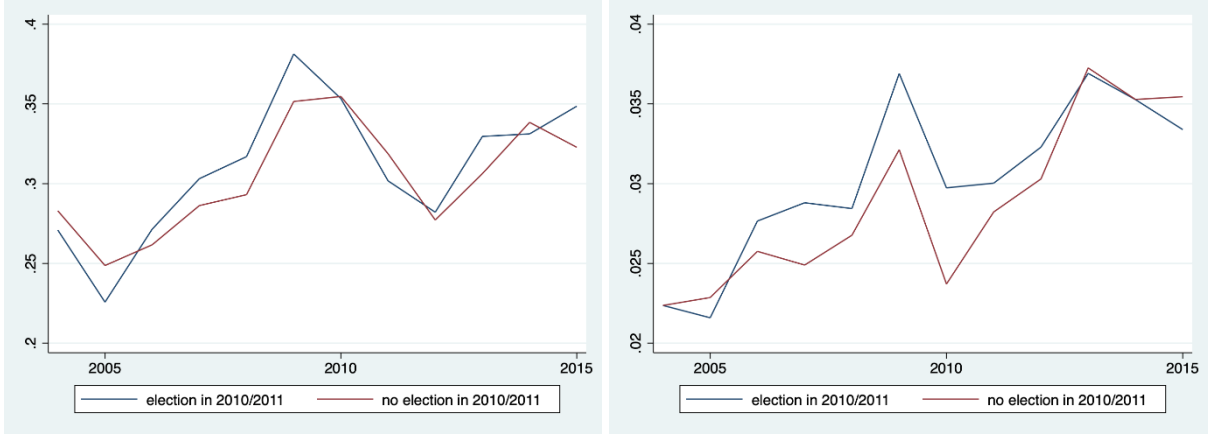
For the validity of our econometric strategy of a generalized difference-in-differences approach, we need to ensure that, after controlling for all relevant confounding fiscal and socioeconomic factors, the common trends assumption is fulfilled (Roth et al. 2023). Municipalities must show common trends in their long- and short-run investment expenditures in the years before 2009, independently of the amount of K2 grants received. In addition, the trends in long- and short-run investment spending of municipalities with mayoral elections in 2010 and 2011 must not differ from those of the other municipalities prior to 2009. A violation of the common trends assumption is a particular threat in our context as the literature on political budget cycles provides ample evidence for varying trends in the expenditure structure of municipalities before elections. Therefore, we must ensure that we control for all relevant confounding factors that would explain differences in the trends of local investment spending. To test whether this is the case and the common trends assumption is fulfilled in our econometric design, we run placebo regressions and estimate pre-treatment effects of K2 transfers and mayoral elections on municipal long- and short-run investment expenditures. Estimation results are reported in Table A3 in the Appendix. We find no significant pre-treatment effects neither for K2 transfers nor

for mayoral elections, which indicates that the common-trends assumption is fulfilled. In addition to formal testing, Figure 4 shows the trends in investment in construction and equipment for municipalities with and without an election in 2010 and 2011.

Figure 4: Trends in Investment in Construction and Investment in Equipment for Municipalities with and without Mayor Elections in 2010/2011

Panel A: Construction

Panel B: Equipment



Left hand figure shows per capita investment in construction for municipalities with and without a mayoral election in 2010/2011. Right hand figure shows per capita investment in equipment for municipalities with and without a mayoral election in 2010/2011. Variables in prices of 2005.

3.7 Data

Our dataset comprises fiscal and structural data of all 1,101 municipalities in the German state of Baden-Wuerttemberg over the period between 2000 and 2015 which provides us with a total of 16,515 observations. Fiscal data, except data on K2 grants, comes from the municipal database of the State Statistical Office. Data on K2 grants are taken from Schneider et al. (2011), who obtained the data from the Finance Ministry of the state of Baden-Wuerttemberg. Data on unemployment comes from the database of the Federal Employment Agency. Population and demographic information data is obtained from the database of the Federal Statistical Office. For our baseline estimations, we use a five-year pre-treatment and a four-year post-treatment period, which gives us a total of 13,212 observations that effectively enter our analysis.

Summary statistics of the main fiscal variables are reported in Table 2. A major challenge was the collection of data on all mayoral elections that took place from 2009 to 2011. Information about election dates for all 1,101 municipalities and whether the incumbent stood for re-election are hand-collected from the state public administration gazette (*“Staatsanzeiger Baden-Wuerttemberg”*). In addition, we hand-collected data on the age and biographies of incumbents

using basic data from Foremny et al. (2018), the state public administration gazette, local newspapers and websites of municipalities to construct the instrumental variables.

Table 2: Sample Description of Fiscal Variables

Variable	Obs.	Min.	Max.	Mean	Std. Dev.	Source
Investment in Construction	16,515	-0.461	8.191	0.305	0.280	State Statistical Office
Investment in Equipment	16,515	-0.030	0.613	0.029	0.033	State Statistical Office
K2 Transfers	1,101	0.000	0.165	0.043	0.016	Schneider et al. (2011)
Investment Transfers	16,515	-0.217	7.984	0.087	0.162	State Statistical Office
Current Exp. Transfers	16,515	0.000	0.834	0.111	0.047	State Statistical Office
Equalization Transfers	16,515	-0.099	2.025	0.322	0.136	State Statistical Office

All variables in 1000 Euro per capita and in prices of 2005.

4. Results

Estimation results of the effects of K2 grants on municipal investment spending are presented in Table 3. First, we report baseline estimates on the general expenditure effects of K2 grants on local investment spending. We then decompose the general expenditure effects of K2 grants stepwise by including interaction terms for mayoral elections and re-election intentions of incumbents.

4.1 General Expenditure Effects of K2 Grants

Column 1 of Table 3 shows the effects of K2 grants on the long-run investment spending of municipalities in Baden-Wuerttemberg (see Table A2 for coefficients of control variables). Our results indicate that municipalities increased their spending for long-run investment projects one year after they received the K2 grants. The reaction coefficient of 0.958 indicates that, in per capita terms, local governments increased their long-run investment spending by 95 cents for each euro of K2 grants received. However, our estimates for the expenditure effects of K2 grants on the short-run investment expenditures of municipalities (column 5 of Table 3) provide evidence that local governments reduced their expenditures for short-run investment projects by 34 cents for every euro of K2 grants they received in the second year after receiving the grant. Thus, our results indicate that municipalities partially offset the spending impulse of K2 grants on long-run investment spending by reducing their short-run investment expenditures afterwards. Combining the expenditure effects of K2 grants on long and short-run investment spending, our results indicate that municipalities increased combined local investment spending by only 62 cents after receiving an additional euro of K2 grants.

Table 3: FE and IV Estimation Results (Static and Dynamic, Second Stage)

Dependent Variable:	Investment in Construction (long-run investment)				Investment in Equipment (short-run investment)			
	OLS FE	OLS FE	2SLS	GMM	OLS FE	OLS FE	2SLS	GMM
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
2009								
K2 Transfer	-0.548 (0.561)	-0.447 (0.587)	-0.578 (0.552)	-0.635 (0.552)	-0.084 (0.111)	-0.115 (0.109)	-0.078 (0.108)	-0.027 (0.105)
K2*Election		-0.409 (0.635)				0.111 (0.178)		
K2*Election Mayor quits			-2.740 (1.965)	-2.758 (2.123)			-0.189 (0.313)	-0.051 (0.341)
K2*Election Mayor re-runs			3.720 (2.617)	4.081 (2.727)			0.459 (0.422)	0.291 (0.436)
2010								
K2 Transfer	0.958** (0.472)	1.097** (0.484)	0.963** (0.459)	0.826* (0.433)	-0.010 (0.109)	-0.034 (0.117)	0.001 (0.106)	-0.071 (0.071)
K2*Election		-0.546 (0.584)				0.088 (0.169)		
K2*Election Mayor quits			-2.408 (1.535)	-2.775 (1.687)			-0.335 (0.291)	-0.230 (0.303)
K2*Election Mayor re-runs			2.990 (2.039)	3.779* (2.117)			0.649* (0.395)	0.636* (0.395)
2011								
K2 Transfer	0.101 (0.491)	0.193 (0.503)	0.082 (0.481)	0.078 (0.487)	-0.338** (0.138)	-0.316** (0.136)	-0.262** (0.111)	-0.262** (0.120)
K2*Election		-0.409 (0.635)				-0.074 (0.153)		
K2*Election Mayor quits			-0.655 (1.816)	-0.723 (1.660)			-0.072 (0.248)	-0.032 (0.274)
K2*Election Mayor re-runs			0.538 (2.419)	0.687 (2.177)			-0.009 (0.343)	0.073 (0.373)
Controls	✓	✓	✓	✓	✓	✓	✓	✓
FE	✓	✓	✓	✓	✓	✓	✓	✓
Dynamic Model				✓				✓
Underidentification Test (Kleibergen-Paap rk LM)			18.325	18.252			18.325	18.079
Weak Identification Test (Kleibergen-Paap rk Wald F)			3.466	3.458			3.466	3.464
Overidentification Test (Hansen J p value)			0.882	0.890			0.319	0.536
R2	0.397	0.452	0.451	0.471	0.023	0.023	0.024	0.220
Observations	11,964	11,964	11,964	11,964	11,964	11,964	11,964	11,964

All variables in 1000 Euro per capita and in prices of 2005. Standard errors clustered on the municipal level and shown in parentheses. ***, **, * indicate statistical significance on the 1%, 5% and 10% level. We use the Stata routines xtreg and ivreg2 and control for each municipality's deficit, unemployment, resident density, share of population below the age of 25, share of population above the age of 65, tax strength, debt stock, share of left-wing votes in council elections, earmarked grants for investment and current expenditures and municipal equalization grants.

4.2 Expenditure Effects of Elections

Columns 2 and 6 of Table 3 exhibit estimation results after incorporating the effects of mayoral elections into the baseline regression. The coefficient that indicates the increasing effect of K2 grants on long-run investment spending becomes larger for those municipalities without elections if we include an interaction term of K2 grants with the election dummy variable that captures the expenditure effects of K2 grants in municipalities in which an election took place. At the same time, the coefficient that indicates the reduction of short-run expenditures becomes smaller for those municipalities without elections.

4.3 Expenditure Effects of Re-Running vs. Retiring Incumbents

In the next step of the analysis, we disaggregate the expenditure effect of K2 grants in the case an election was held in a municipality by whether the incumbent was seeking re-election.¹⁷ Second stage results of the instrumental variables approach are reported in Table 3. Columns 3 and 7 of Table 3 show the results of the static model using a two stage least squares estimator (2SLS). Columns 4 and 8 of Table 3 show the results of the dynamic model estimated with a Systems-GMM estimator. We find no evidence for significantly different expenditure effects of K2 grants on long-run investment spending in the case of an election in which the incumbent mayor did not seek re-election (columns 3 and 4). In municipalities in which the incumbent stood for re-election, our estimates indicate a higher expenditure effect of K2 grants on long-run investment spending. However, only in the dynamic specification of our model this effect is statistically significant (column 4).

Expenditure effects on short-run investment spending are reported in columns 7 and 8 of Table 3. For municipalities in which the incumbent mayor did not seek re-election, we find no evidence for significantly different expenditure effects of K2 grants compared to municipalities in which no election took place. However, our results show that the expenditure effect of an additional euro of K2 grants on short-run investment expenditures was significantly higher in municipalities in which the incumbent mayor stood for re-election in 2010 or 2011. In these municipalities, the expenditure effect of K2 grants on short-run investment was 64 cents higher in the year after the grant receipt compared to the municipalities in which there was no election and to municipalities in which there was an election, but the incumbent did not seek re-election. This effect is statistically significant in both, the static and the dynamic specifications of our

¹⁷ Table 3 directly passes to the instrumental variables estimates. FE estimates of incumbency effects with different model specifications are reported in Table A9 in the Appendix.

model. Note, that the significantly different spending effect of short-run investment indicates, that the legal provision that mayors are entitled to decide autonomously on minor investment cases does not lead to a general bias towards spending the K2 grants for short-run investment. Instead, mayors only use their autonomy when they have a strategic interest to do so.

4.4 Marginal Effects of Elections and Incumbency

The impact of a re-running incumbent on the expenditure effects of K2 grants becomes even clearer when we look at the marginal effects of the three different scenarios. Marginal effects are reported in Table 4.

Table 4: Marginal Effects of Interaction Terms

Dependent Variable:	Investment in Construction (long-run investment)			Investment in Equipment (short-run investment)		
Estimator:	FE OLS	2SLS	GMM	FE OLS	2SLS	GMM
	(1)	(2)	(3)	(4)	(5)	(6)
2009 ($t=0$)						
A: No Election	-0.448 (0.588)	-0.578 (0.552)	-0.635 (0.552)	-0.115 (0.108)	-0.078 (0.108)	-0.027 (0.105)
B: Elec. Mayor quits	-1.993 (1.539)	-3.319 (2.598)	-3.393 (2.220)	-0.511 (0.478)	-0.267 (0.328)	-0.078 (0.355)
C: Elec. Mayor re-runs	-0.378 (0.673)	0.402 (0.929)	0.689 (0.802)	0.191 (0.148)	0.192 (0.184)	0.213 (0.165)
2010 ($t+1$)						
D: No Election	1.097** (0.485)	0.963** (0.459)	0.826* (0.433)	-0.035 (0.117)	0.001 (0.106)	-0.071 (0.071)
E: Elec. Mayor quits	-0.651 (1.347)	-1.445 (1.580)	-1.948 (1.727)	-0.479 (0.465)	-0.334 (0.300)	-0.302 (0.305)
F: Elec. Mayor re-runs	1.066 (0.709)	1.545* (0.877)	1.831** (0.752)	0.260** (0.129)	0.315* (0.171)	0.335** (0.139)
2011 ($t+2$)						
G: No Election	0.193 (0.504)	0.082 (0.481)	0.078 (0.487)	-0.316** (0.135)	-0.262** (0.111)	-0.262** (0.120)
H: Elec. Mayor quits	-1.076 (1.245)	-0.573 (1.918)	-0.645 (1.752)	-0.704 (0.489)	-0.335 (0.263)	-0.295 (0.287)
I: Elec. Mayor re-runs	0.164 (0.695)	-0.035 (0.838)	0.042 (0.737)	-0.303** (0.148)	-0.344* (0.189)	-0.222 (0.181)

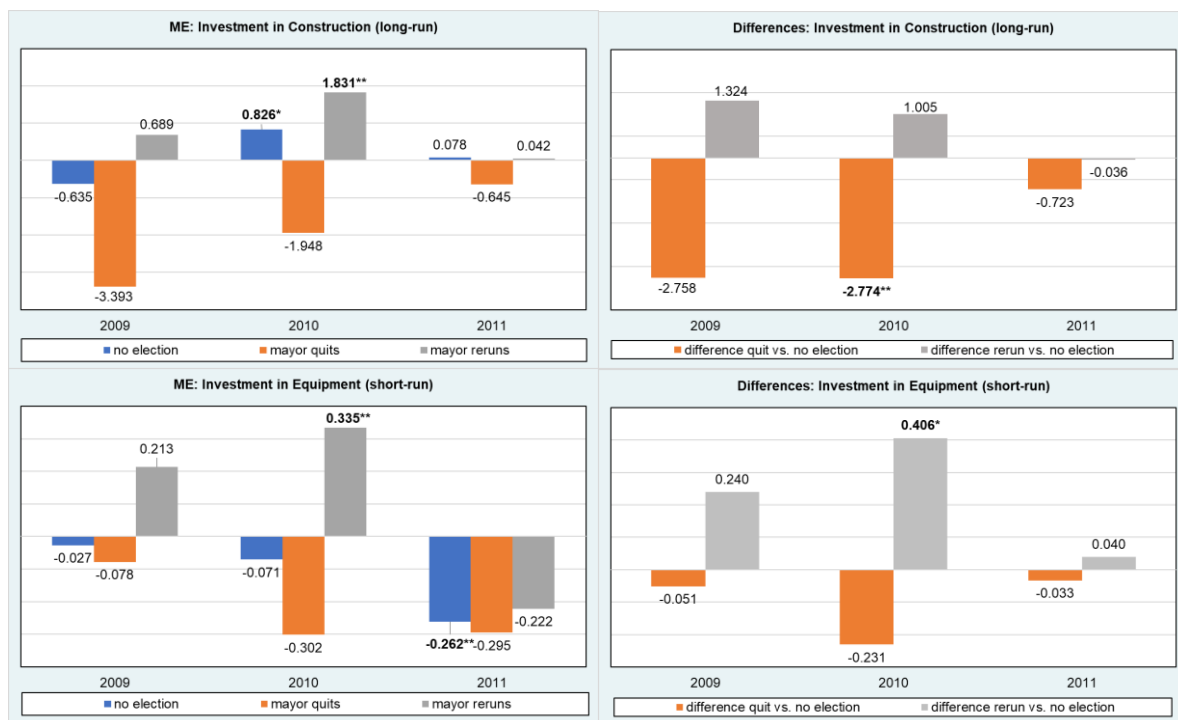
Marginal effects of estimations reported in Table 3. Standard errors clustered at the municipal level and shown in parentheses. All variables in 1000 Euro per capita and in prices of 2005, ***, **, * indicate statistical significance on the 1%, 5% and 10% level. We use the Stata routine margins.

Our results indicate that municipalities in which no election took place increased their long-run investment expenditures after receiving K2 grants in the year after they received the grant. An additional euro of K2 grants induced an increase of long-term investment spending between

1.09 euro and 83 cents. However, these municipalities subsequently reduced their short-run investment expenditures by 26 cents per euro of K2 grants in the following year. In total, in municipalities where no election took place, an additional euro of K2 grants resulted in an increase of local investment spending between 56 cents and 70 cents only.

The expenditure effects of K2 grants changed if a mayoral election was held in 2010 or 2011, depending as to whether the incumbent mayor stood for re-election. If an election was held and the incumbent did not run again, we find no evidence that K2 grants led to any change in local investment spending, neither for short-run nor for long-run investment. If an election was held and the incumbent mayor stood for re-election, municipalities increased both long-run and short-run investment spending after receiving K2 grants.

Figure 4: Marginal Effects and Differences of K2-Transfers on Local Expenditures in the Presence of Local Elections



Marginal effects of transfers dependent on mayoral elections shown for long-run construction investment (top figures) and short-run investments in equipment (bottom figures). Marginal effects are depicted in the respective lhs figure, difference estimates are depicted in rhs figures. Numbers in top/below of each figure indicate marginal effects and are taken from the dynamic models in Table 4 for marginal effects. ***, **, * indicate statistical significance on the 1%, 5% and 10% level.

An additional euro of K2 grants led to an increase in long-run investment spending by between 1.50 and 1.80 euro, while the size of the expenditure effect is not significantly different from the expenditure effects in municipalities where no election took place (Figure 4). Other than in municipalities where no election took place, municipalities in which the incumbent mayor stood for re-election in 2010 or 2011 additionally increased short-run investment spending after

receiving K2 grants by between 31 and 33 cents per euro of grants. Moreover, we find no clear evidence for a reduction of short-term investment expenditure in the second year after the grant receipt for those municipalities in which an election took place and the incumbent mayor stood for re-election.

Table 5 provides for an overview over the empirical results of our analysis, which are generally in line with our theoretical expectations. Municipalities where no elections took place in 2010 or 2011 used K2 grants and increased long-run investment expenditures in the year after the grant receipt. Mayors at the end of their terms who had no re-election interests did not change their municipality's expenditure structure at all. Mayors who were seeking re-election used K2 transfers and did not only increase expenditures for long-run public investment, but also for rapidly visible short-run investment spending. With regard to our hypotheses, our results provide empirical evidence that municipalities used grant revenues to increase their short-run expenditures only if an election approached and the incumbent stood for re-election.

Table 5: Overview of Results

	No Election		Mayor Quits		Mayor Re-Runs	
	long-run Investment	short-run Investment	long-run Investment	short-run Investment	long-run Investment	short-run Investment
2009	0	0	0	0	0	0
2010	+	0	0	0	+	+
2011	0	-	0	0	0	0

Own depiction. Results taken from the dynamic specification of our model.

4.5 Crowding-out Effects of K2 Grants on Local Investment Spending

The different expenditure effects of K2 grants under each of the election scenarios raise the question as to whether K2 grants have crowded out local investment spending. Especially in municipalities where no election was held and in municipalities where the incumbent did not seek re-election, our results of a subsequent reduction of short-run investment expenditures could signal crowding-out effects. To infer potential crowding-out effects empirically, we test whether the joint intertemporal effects of K2 grants on combined short-run and long-run investment spending are significantly different from one. Results of the Chi2 tests are reported in Table 6. For municipalities where no election took place, we find no evidence that K2 grants led to a crowding-out of combined investment expenditures. Although combined expenditure effects range only between 56 cents and 70 cents per additional euro of K2 grant (see Table 4), this effect is not significantly different from one. Therefore, despite the subsequent reduction

of short-run investment expenditures, we cannot draw the conclusion of a statistically significant crowding-out of local investment spending.

In contrast, in municipalities where an election was held and the mayor did not run again, the joint intertemporal effect of K2 grants on combined investment expenditures is significantly different from one, which indicates that K2 grants indeed crowded-out local investment spending in these municipalities. For municipalities where an election was held in which the incumbent ran again, the joint intertemporal effect on combined investment expenditures is not significantly different from one in the static model, which confirms the strong expenditure effects of K2 grants in these municipalities. In the dynamic model, the joint intertemporal effect on combined investment spending is different, but greater than one. Therefore, our estimations provide evidence that K2 grants crowded-out local investment spending only in those municipalities in which an election was held and the incumbent mayor did not seek re-election. For all other municipalities, our results provide evidence in favor of the flypaper effect.

Table 6: Crowding-out Effects of K2 Grants

	Static Model (2SLS)			Dynamic Model (GMM)			Crowding Out?
	Est. Sign. Effect >0	Chi2	p-value	Est. Sign. Effect >0	Chi2	p-value	
No Election	0.701	2.06	0.015	0.564	2.45	0.118	No
Election Mayor quits	0.000	4.27	0.039*	0.000	4.33	0.037**	Yes
Election Mayor re-runs	1.516	2.48	0.115	2.166	3.35	0.067*	No

Results show Chi2-test statistics of the jointly estimated intertemporal effects of K2 grants on combined long-run and short-run investment expenditures. The H0 of the test states that the combined effect is not significantly different from one.

5. Robustness

We test our results for sensitivity to various changes of the model. Since investment projects take time to become visible, we include the mayoral elections that took place in 2010 and 2011 in our estimation. However, mayors who stood for re-election in the second half of 2009 could also have had an interest in announcing investment projects to signal their preferences to voters. As a first robustness check, we thus include mayoral elections that took place in the second half of 2009 into our estimates. Results are summarized in Tables A5 in the Appendix. The inclusion of the 2009 elections confirms the incumbency effects we found for elections in 2010 and 2011.

As a second robustness check, we include the number of students in a municipality as additional control variable into our estimation equation. In addition to the share of the population under the age of 25, the number of students can also influence the municipal expenditure structure. However, the number of students was used to calculate the K2 grants a municipality received.

Therefore, we opted against including the variable into our baseline regression to avoid multicollinearity. The reaction coefficients reported in Tables A6 support our concerns with regard to potential multicollinearity. Nevertheless, including the number of students does not change our empirical results, as can be seen in the estimates reported in Tables A6.

Thirdly, some municipalities had particularly high or particularly low tax revenues or investment expenditures in the years 2009 to 2011 due to varying extraordinary events. To ensure that these outliers are not driving our estimation results, we exclude them from our regressions. Estimates excluding outliers are summarized in Tables A7. Our results are robust for the exclusion of these outliers.

Fourth, difference-in-differences estimates may be sensitive to the pre-treatment period chosen. We therefore vary the selected pre-treatment period of five years and run our regressions with shorter and longer pre- and post-treatment periods. Results are reported in Tables A8. Changing the length of the pre- and post-treatment period does not change the results of our analysis.

Existing evidence (Baskaran et al. 2024) shows that the age of political decision-makers can have an impact on spending decisions. As a fifth robustness check, we therefore use the age of the incumbent as a control variable rather than an instrument. Results are reported in Table A10. While the results remain unchanged, the quality of the instrumental regression decreases.

Finally, we consider longer-run incentives for mayors beyond the imminent election.¹⁸ These might occur if incumbents, in particular those with high re-election chances, choose projects that mature after the election, e.g., in order to gain reputation for competence. Indeed, popular incumbents with large prior margins may internalize a longer time horizon. Moreover, with project-completion lags, short-run allocations are initial payments on longer-run capital thus weakening interpretations that observed short-run spending is purely electoral. In order to somewhat address these concerns, given our data restrictions, we include the number of years until next elections as a proxy for incentives beyond the immediate years 2009 to 2011, and the number of years an incumbent already holds office as proxy as to how well-established an incumbent is. The results are reported in Table A11. Indeed, years until next election and years in office have statistically significant, but quantitatively small effects while our main variables of interest, i.e., the re-election effects remain robust.

¹⁸ We owe these arguments to a referee and are very grateful that he insisted to consider them more formally in a robustness check.

6. Conclusion

Incumbents who seek re-election use public expenditures strategically prior to elections to signal to voters that their political preferences are similar to those of the median voter. In this paper, we ask whether re-election concerns also affect the local spending of intergovernmental grants a municipality receives before an election. The literature on the expenditure effects of intergovernmental grants shows that the information asymmetry about the public budget is one of the explanations behind the phenomenon of the flypaper effect. We argue that this information asymmetry enables incumbents to spend grant revenues strategically aiming at increasing their re-election chances. Thus, following the literature on political budget cycles, incumbents seeking re-election should use grant revenues that they receive prior to elections especially for expenditures becoming swiftly visible to voters.

We use the implementation of the German federal government's economic stimulus package of 2009 in the state of Baden-Wuerttemberg as natural experiment to causally estimate whether municipalities in which the incumbent mayor stood for re-election during the spending period spent grants which they received to stimulate local public investment differently as compared to municipalities in which no election took place. To account for the possible endogeneity in the decision of an incumbent mayor to seek re-election, we apply an instrumental variables approach proposed by Foremny et al. (2018).

Our empirical results indicate that municipalities in which the incumbent mayor stood for re-election used grant receipts to increase their short-run investment expenditures that become visible to voters rapidly in addition to an increase in their long-run investment expenditures, while municipalities in which no election took place only increased their long-run public investment spending after receiving grants. Moreover, we provide evidence that the lump-sum grants of the economic stimulus package crowded-out local public investment spending in those municipalities in which the incumbent mayor did not seek re-election. Given these results, our empirical findings support the hypothesis that re-election concerns of incumbents did not only affect a jurisdiction's regular budget prior to an election. Instead, we provide evidence that re-election strategies of incumbents can also influence how intergovernmental grants are spent by the receiving jurisdiction. By these means, our results contribute to a better understanding of the reasons behind the different empirical findings on the flypaper effect and, thus, on crowding-out effects of local expenditures.

Our analysis faces the limitation that we study the case of a unique and limited grant program in the institutional setting of the municipal level in Baden-Wuerttemberg. Therefore, further empirical evidence, both for additional countries and for more generalizable grant programs, is needed in order to allow for a broader and generalizable understanding of the impact of re-election strategies of incumbents on the expenditure effects of grants. However, the variety of intergovernmental grant systems around the world should provide the empirical basis for further analyses. What also remains open in our study is as to whether the crowding out of local investment spending induced budgetary shifts in a municipality's current expenditures or in its tax policy. Also beyond the scope of our analysis is the question as to whether an incumbents' strategy to use grants for an increase in short-term investment was successful. Both questions provide scope for future research.

Literature

- Acemoglu, D., Autor, D. H. and Lyle, D. (2004) Women, War, and Wages: The Effect of Female Labor Supply on the Wage Structure at Midcentury. *Journal of Political Economy*, 112: 497-551.
- Aidt, T. and Shvets, J. (2012) Distributive Politics and Electoral Incentives: Evidence from Seven US State Legislatures. *American Economic Journal: Economic Policy*, 4: 1-29.
- Albouy, D. (2013) Partisan Representation in Congress and the Geographic Distribution of Federal Funds. *Review of Economics and Statistics*, 95: 127-141.
- Alesina, A., Cassidy, T. and Troiano, U. (2019) Old and Young Politicians. *Economica*, 86: 689-727
- Allers, M. and Vermeulen, W. (2016) Capitalization of Equalizing Grants and the Flypaper Effect. *Regional Science and Urban Economics*, 58: 115-129.
- Angrist, J.D. and Pischke, J.-S. (2009) *Mostly Harmless Econometrics: An Empiricist's Companion*. Princeton University Press, Princeton.
- Arellano, M. and 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.
- Baskaran, T. (2016) Intergovernmental Transfers, Local Fiscal Policy, and the Flypaper Effect: Evidence from a German State. *FinanzArchiv /Public Finance Analysis*, 72: 1-40.
- Baskaran, T., Hessami, Z. and Schirner, S. (2024) Young Versus Old Politicians in Local Politics. *Journal of Economic Behavior & Organization* 22: 88-106.
- Besley, T. and Case, A. C. (1995) Does Electoral Accountability Affect Economic Policy Choices?. *Quarterly Journal of Economics*, 110: 769-798.
- Blundell, R. and Bond, S. (1998) Initial Conditions and Moment Restrictions in Dynamic Panel Data Models. *Journal of Econometrics*, 68: 29-51.
- Blundell, R. and Bond, S. (2000) GMM Estimation with Persistent Panel Data: An Application to Production Functions. *Econometric Reviews*, 19: 321-340.

- Borck, R. and Owings, S. (2003) The Political Economy of Intergovernmental Grants. *Regional Science and Urban Economics*, 33: 139-156.
- Bracco, E., Lockwood, B., Porcelli, F. and Redoano, M. (2015) Intergovernmental Grants as Signals and the Alignment Effect: Theory and evidence. *Journal of Public Economics*, 123: 78-91.
- Bradford, D. and Oates, W. E. (1971a) The Analysis of Revenue Sharing in a New Approach to Collective Fiscal Decisions. *Quarterly Journal of Economics*, 85: 416-439.
- Bradford, D. and Oates, W. E. (1971b) Towards a Predictive Theory of Intergovernmental Grants. *American Economic Review*, 61 (2): 440-448.
- Brender A. and Drazen, A. (2005) Political Budget Cycles in New versus Established Democracies. *Journal of Monetary Economics*, 52: 1271-1295.
- Brender, A., and Drazen, A. (2008) How Do Budget Deficits and Economic Growth Affect Re-election Prospects? Evidence from a Large Panel of Countries. *American Economic Review* 98: 2203-2220.
- Buettner, T. (2006) The Incentive Effects of Fiscal Equalization on Tax Policy. *Journal of Public Economics*, 90: 477-497.
- Bury, Y., and Feld, L. P. (2023) Fiscal Federalism in Germany. In: J.-F. Tremblay (ed.), *The Forum of Federations Handbook of Fiscal Federalism*, Springer Nature, Berlin et al, 159-211.
- Bury, Y., Feld, L. P. and Köhler, E. A. (2025) Do Party Ties Increase Transfer Receipts in Cooperative Federalism? Evidence from Germany. *European Journal of Political Economy* 86: Article 102630.
- Claeys. P. (2006) Policy Mix and Debt Sustainability: Evidence from Fiscal Policy Rules. *Empirica*, 33: 89-112.
- Cox, G. W. and McCubbins, M. D. (1986) Electoral Politics as a Redistributive Game. *Journal of Politics*, 48: 370-389.
- Dahlberg, M. and Johansson, E. (2002) On the Vote-Purchasing Behavior of Incumbent Governments. *American Journal of Political Science*, 96: 27-40.
- Dahlberg, M., Mörk, E., Rattsø, J. and Ågren, H. (2008) Using a Discontinuous Grant Rule to Identify the Effect of Grants on Local Taxes and Spending. *Journal of Public Economics* 92: 2320-2335.
- Dalle-Nogare, C. and Kauder, B. (2017) Term Limits for Mayors and Intergovernmental Grants: Evidence from Italian Cities. *Regional Science and Urban Economics*, 64: 1-11.
- De Janvry, A., Finan, F. and Sadoulet, E. (2012) Local electoral incentives and decentralized program performance. *Review of Economics and Statistics* 94: 672-685.
- Dixit, A. and Londregan, J. (1998) Fiscal Federalism and Redistributive Politics. *Journal of Public Economics*, 68: 153-180.
- Drazen, A. and Eslava, M. (2010) Electoral Manipulation via Voter-Friendly Spending: Theory and Evidence. *Journal of Development Economics*, 92: 39-52.
- Dubois, E. (2016) Political Business Cycles 40 Years after Nordhaus. *Public Choice*, 116: 235-259.
- Egger, P., Köthenbürger, M. and Smart, M. (2010) Do Fiscal Transfers Alleviate Business Tax Competition? Evidence from Germany. *Journal of Public Economics*, 94: 235-246.

- Feld, L. P. and Schaltegger, C. A. (2005) Voters as a Hard Budget Constraint: On the Determination of Intergovernmental Grants. *Public Choice*, 123: 147-169.
- Ferraz, C. and Finan, F. (2011) Electoral accountability and corruption: Evidence from the audits of local governments. *American Economic Review*, 101: 1274-1311.
- Filimon, R., Romer, T. and Rosenthal, H. (1982) Asymmetric Information and Agenda Control: The Bases of Monopoly Power in Public Spending. *Journal of Public Economics*, 17: 51-70.
- Foremny, D., Freier, R., Moessinger, M.-D. and Yeter, M. (2018) Overlapping Political Budget Cycles. *Public Choice*, 177: 1-27.
- Fourinaies, A. and Hall, A.B. (2022) How Do Electoral Incentives Affect Legislator Behavior? Evidence from U.S. State Legislatures. *American Political Science Review* 116: 662-676.
- Frey, A. (2021) Do Reelection Incentives Improve Policy Implementation? Accountability versus Political Targeting. *Quarterly Journal of Political Science* 16: 35-69.
- Furdas, M. D., Homolkova, K. and Kis-Katos, K. (2015) Local Political Budget Cycles in a Federation: Evidence from West German Cities. *IZA Discussion Paper No. 8798*.
- Gordon, N. (2004) Do Federal Grants Boost School Spending? Evidence from Title I. *Journal of Public Economics*, 88: 1771-1792.
- Gramlich, E. (1977) Intergovernmental Grants: A Review of the Empirical Literature. In: W. E. Oates (ed.) *The Political Economy of Federalism*, Lexington Books, Lexington, 219-239.
- Gupta, S., Liu, E. X. and Mulas-Granados, C. (2016) Now or Later? The Political Economy of Public Investment. *European Journal of Political Economy*, 101: 101-114.
- Hansen, C. (2007) Generalized Least Squares Inference in Panel and Multilevel Models with Serial Correlation and Fixed Effects. *Journal of Econometrics*, 140: 670-694.
- Hauptmeier, S. (2007) The Impact of Fiscal Equalization on Local Expenditure Policies – Theory and Evidence from Germany. *ZEW Center for European Economic Research Discussion Paper No. 07-081*.
- Hines, J. and Thaler, R. (1995) Anomalies: The Flypaper Effect. *Journal of Economic Perspectives*, 9: 217-226.
- Inman, R. P. (2009). Flypaper Effect. In: *The New Palgrave Dictionary of Economics*. Palgrave Macmillan, London.
- Katsimi, M. and Sarantides, V. (2012) Do Elections Affect the Composition of Fiscal Policy in Developed, Established Democracies? *Public Choice*, 151: 325-362.
- Klasnja, M. and Titunik, R. (2017) The Incumbency Curse: Weak Parties, Term Limits, and Unfulfilled Accountability. *American Political Science Review* 111: 129-148.
- Klein, F. A. and Sakurai S. N. (2015) Term Limits and Political Budget Cycles at the Local Level: Evidence from a Young Democracy. *European Journal of Political Economy*, 37: 21-36.
- Knight, B. (2002) Endogenous Federal Grants and Crowd-out of State Government Spending: Theory and Evidence from the Federal Highway Aid Program. *American Economic Review*, 92: 71-92.
- Korzhenevych, A. and Langer, S. (2016) The Flypaper Effect in Germany: An East-West Comparison. *CEPIE Working Paper No. 10/16*.

- Lopes da Fonseca, M. (2020) Lame ducks and local fiscal policy: Quasi-experimental evidence from Portugal. *The Economic Journal* 130: 511-533.
- Mechtel, M. and Potrafke, N. (2013) Electoral Cycles in Active Labour Market Policies. *Public Choice*, 156: 181-194.
- Nickell, S. J. (1981) Biases in Dynamic Models with Fixed Effects. *Econometrica*, 49: 1417-1426.
- Nordhaus, W. D. (1975) The Political Business Cycle. *Review of Economic Studies*, 42: 169-190.
- Pesaran, M. H. (2004) General Diagnostic Test for Cross Section Dependence in Panels. *CESifo Working Paper*, No. 1229.
- Porto, A and Porto, N. (2000) Fiscal Decentralization and Voter's Choices as Control. *Journal of Applied Economics*, 3: 135-167.
- Potrafke, N. (2011) 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.
- Rios, V., Hortas-Rico, M. and Pascual, P. (2022) What Shapes the Flypaper Effect? The Role of the Political Environment in the Budget Cycle. *Local Government Studies*, 48: 793-820.
- Rogoff, K. (1990) Equilibrium Political Budget Cycles. *American Economic Review*, 80: 21-36.
- Rogoff, K. and Sibert, A. (1988) Elections and Macroeconomic Policy Cycles. *Review of Economic Studies*, 55: 1-16.
- Romer, T., Rosenthal, H. and Munley, V. (1992) Economic Incentives and Political Institutions: Spending and Voting in School Budget Referenda. *Journal of Public Economics* 4: 1-33.
- Roth, J., Sant'Anna P.H.C., Bilinski, A. and Poe, J. (2023) What's trending in Difference-in-Differences? A Synthesis of Recent Econometrics Literature. *Journal of Econometrics*, 235: 2218-2244.
- Schneider, C. J. (2010) Fighting with One Hand Tied Behind the Back: Political Budget Cycles in the West German States. *Public Choice*, 142: 125-150.
- Schneider, J., Grohs, S. and Knill, C. (2011) Wer hat dem wird gegeben? Die Implementation des Konjunkturprogramms auf kommunaler Ebene. *Der moderne Staat – Zeitschrift für Public Policy, Recht und Management*, 4: 423-444.
- Scott, A. (1952) The Evaluation of Federal Grants. *Economica*, 19: 377-394.
- Seitz, H. (2000) Fiscal Policy, Deficits and Politics of Subnational Governments: The Case of German Länder. *Public Choice*, 102: 1367-1389.
- State Court of Auditors (2013) Sonderbericht zur Umsetzung des Zukunftsinvestitionsgesetzes: Bildungs- und Infrastrukturpauschalen. *State Court of Auditors Special Report February 2011*.
- State Statistical Office (2023) Bevölkerung und Erwerbstätigkeit. *Statistische Berichte Baden-Wuerttemberg No. 3122 22001*.
- Veiga, F. J. and Veiga, L. G. (2007) Political Business Cycles at the Municipal Level. *Public Choice* 131: 45-64.

- Veiga, L. and Veiga, F. (2019) The effects of electoral incentives on fiscal policy: Evidence from a legislative change at the local government level. *Journal of Law, Economics & Organization* 35: 394-421.
- Windmeijer, F. (2005) A Finite Sample Correction for the Variance of Linear Efficient Two-Step GMM Estimators. *Journal of Econometrics*, 126: 25-51.
- Wooldridge, J.M. (2010) *Econometric Analysis of Cross Section and Panel Data*. MIT Press, Cambridge.
- Worthington, A. and Dollery, B. (1998) The Political Determination of Intergovernmental Grants in Australia. *Public Choice* 98: 299-315.

Appendix

Table A1: Time Series Characteristics of Expenditure Variables (With and Without Trend)

Variable	ADF Test	ADF Test with Trend	PP Test	PP Test with Trend	Pesaran CD Test
Investment in Construction	20.352***	14.508***	72.254***	59.622***	134.54***
Investment in Equipment	21.172***	13.321***	120.185***	111.465***	143.95***

All variables in 1000 Euro per capita and in prices of 2005. The ADF and the PP test have the H0 that all panels contain unit-roots. The H0 that all panels contain unit-roots can be rejected at the levels of the variables. Modified Inverse Chi-squared coefficients reported. The Pesaran Test for cross-sectional dependence has the H0 of cross-sectional independence between municipalities. ***, **, * indicate statistical significance on the 1%, 5% and 10% level.

Table A2: Coefficients of Control Variables (Baseline Regression)

	Investment in Construction (long-run investment)	Investment in Equipment (short-run investment)
	(1)	(2)
K2 Transfers (t=0)	-0.548 (0.561)	-0.084 (0.111)
K2 Transfers (t+1)	0.958** (0.472)	-0.010 (0.109)
K2 Transfers (t+2)	0.101 (0.492)	-0.338** (0.138)
Deficit	0.288*** (0.046)	0.009*** (0.003)
Deficit (t-1)	-0.023** (0.011)	-0.002* (0.001)
Unemployment	-0.016 (0.014)	-0.002 (0.003)
Resident Density	-0.055 (0.036)	-0.003 (0.006)
Population below 25	0.004 (0.003)	-0.001 (0.001)
Population above 65	-0.001 (0.003)	0.001 (0.001)
Share Left-Wing	0.123 (0.135)	0.035 (0.024)
Tax Strength	0.088*** (0.017)	0.002*** (0.001)
Debt Stock	-0.209*** (0.055)	0.001 (0.005)
Earmarked grants for investment	0.960*** (0.037)	0.015*** (0.004)
Earmarked grants for current expenditures	-0.017 (0.154)	-0.017 (0.038)
Municipal equalization grants	0.332*** (0.068)	0.028*** (0.007)
Municipality Fixed Effects	✓	✓
Time Fixed Effects	✓	✓
Dynamic Model	0.397	0.023
Observations	11,964	11,964

All variables in 1000 Euro per capita and in prices of 2005. Standard errors clustered on the municipal level and shown in parentheses. ***, **, * indicate statistical significance on the 1%, 5% and 10% level. We use the Stata routine xtreg.

Table A3: Placebo Estimations of Pre-Treatment Trends

	Investment in Construction (long-run investment)		Investment in Equipment (short-run investment)	
	(1)	(2)	(3)	(4)
K2 Transfer (t-3)	0.134 (0.498)		0.073 (0.105)	
K2 Transfer (t-2)	0.177 (0.509)		-0.144 (0.097)	
K2 Transfer (t-1)	0.375 (0.515)		0.029 (0.079)	
K2 Transfer (t)	-0.389 (0.698)		-0.031 (0.116)	
K2 Transfer (t+1)	1.073* (0.651)		-0.036 (0.098)	
K2 Transfer (t+2)	0.093 (0.494)		-0.319** (0.151)	
Elec. Mayor re-runs (t-3)		0.011 (0.018)		-0.002 (0.004)
Elec. Mayor re-runs (t-2)		-0.026 (0.027)		0.004 (0.005)
Elec. Mayor re-runs (t-1)		0.038 (0.028)		-0.003 (0.006)
Elec. Mayor re-runs (t)		0.01 (0.020)		-0.001 (0.004)
Elec. Mayor re-runs (t+1)		-0.073 (0.048)		0.006 (0.007)
Elec. Mayor re-runs (t+2)		0.058 (0.047)		-0.130 (0.007)
Elec. Mayor quits (t-3)		0.025 (0.021)		0.010* (0.006)
Elec. Mayor quits (t-2)		-0.009 (0.041)		-0.000 (0.004)
Elec. Mayor quits (t-1)		-0.011 (0.043)		-0.002 (0.004)
Elec. Mayor quits (t)		0.007 (0.027)		0.008 (0.008)
Elec. Mayor quits (t+1)		-0.002 (0.054)		0.002 (0.006)
Elec. Mayor quits (t+2)		-0.008 (0.052)		0.003 (0.008)
Controls	✓	✓	✓	✓
Time Fixed Effects	✓	✓	✓	✓
Dynamic Model	✓	✓	✓	✓
R2	0.421	0.421	0.216	0.216
Observations	9,782	9,782	9,782	9,782

All variables in 1000 Euro per capita and in prices of 2005. Standard errors clustered on the municipal level and shown in parentheses. ***, **, * indicate statistical significance on the 1%, 5% and 10% level. We use the Stata routine xtreg and control for each municipality's deficit, unemployment, resident density, share of population below the age of 25, share of population above the age of 65, share of left-wing votes in council elections, tax strength, debt stock, earmarked grants for investment and current expenditures and municipal equalization grants.

Table A4: First Stage of IV Regressions

	Mayor quits in 2010/2011 = 1	Mayor re-runs in 2010/2011 = 1	Interaction
Mayor Pensionable in 2010/2011 = 1	0.223*** (0.061)	0.611*** (0.062)	-0.001 (0.000)
Mayor over 60 in 2010/2011 = 1	0.584*** (0.083)	-0.587*** (0.083)	0.001** (0.000)
Pensionable*K2 Transfers			0.624*** (0.074)
Over 60*K2 Transfers			-0.698*** (0.078)
K2 Transfers (t=0)	0.566 (0.398)	0.369 (0.643)	0.165* (0.069)
K2 Transfers (t+1)	0.577 (0.398)	0.400 (0.641)	
K2 Transfers (t+2)	0.553 (0.392)	0.446 (0.646)	
Deficit	0.000 (0.003)	0.000 (0.003)	0.000 (0.000)
Deficit (t-1)	-0.001 (0.002)	0.002 (0.003)	0.000 (0.000)
Unemployment	0.001 (0.003)	0.008 (0.005)	0.000 (0.000)
Resident Density	-0.020 (0.022)	0.026 (0.029)	-0.001 (0.000)
Population below 25	-0.002 (0.001)	-0.001 (0.002)	0.000 (0.000)
Population above 65	0.001 (0.001)	0.000 (0.002)	0.000 (0.000)
Tax Strength	-0.001 (0.001)	-0.001 (0.001)	0.000 (0.000)
Debt Stock	0.010 (0.007)	-0.010 (0.009)	0.000 (0.000)
Earmarked grants for investment	-0.002 (0.010)	-0.006 (0.004)	0.000 (0.000)
Earmarked grants for current expenditures	0.027 (0.029)	0.100 (0.067)	0.002 (0.002)
Municipal equalization grants	-0.002 (0.010)	-0.010 (0.020)	0.000 (0.001)
F-Test of excluded instruments	108.01***	49.13***	11.22***
Observations	11,964	11,964	11,964

All variables in 1000 Euro per capita and in prices of 2005. Standard errors clustered on the municipal level and shown in parentheses. ***, **, * indicate statistical significance on the 1%, 5% and 10% level. We use the Stata routine ivreg2.

Table A5a: Second Stage Estimations Including Elections in 2009

Dependent Variable:	Investment in Construction (long-run investment)			Investment in Equipment (short-run investment)		
Estimator:	FE OLS (1)	2SLS (2)	GMM (3)	FE OLS (4)	2SLS (5)	GMM (6)
2009						
K2 Transfer	-0.788 (0.737)	-0.653 (0.571)	-0.622 (1.561)	-0.138 (0.115)	-0.075 (0.112)	-0.040 (0.106)
K2*Election	0.243 (0.617)			0.129 (0.133)		
K2*Election Mayor quits		-0.304 (1.187)	-0.185 (1.274)			-0.354 (0.342)
K2*Election Mayor re-runs		0.582 (1.478)	0.600 (1.561)		0.781* (0.404)	0.653* (0.396)
2010						
K2 Transfer	1.238** (0.631)	1.016** (0.470)	0.783* (0.444)	-0.063 (0.121)	-0.012 (0.110)	-0.068 (0.077)
K2*Election	-0.493 (0.601)			0.142 (0.128)		
K2*Election Mayor quits		-0.158 (1.012)	-0.248 (1.102)			-0.327 (0.314)
K2*Election Mayor re-runs		-0.211 (1.259)	0.089 (1.346)		0.757* (0.389)	0.681* (0.354)
2011						
K2 Transfer	-0.221 (0.575)	-0.059 (0.496)	-0.043 (0.504)	-0.349** (0.134)	-0.278** (0.118)	-0.269** (0.126)
K2*Election	-0.283 (0.611)			0.033 (0.116)		
K2*Election Mayor quits		0.795 (1.062)	0.791 (1.038)			-0.066 (0.279)
K2*Election Mayor re-runs		-0.782 (1.305)	-0.842 (1.263)		0.223 (0.356)	0.149 (0.315)
Investment Construction (t-1)			-0.150*** (0.031)			
Investment Equipment (t-1)						-0.445*** (0.015)
Controls	✓	✓	✓	✓	✓	✓
Time Fixed Effects	✓	✓	✓	✓	✓	✓
Underidentification Test (Kleibergen-Paap rk LM)		55.472	55.203		55.472	55.430
Weak Identification Test (Kleibergen-Paap rk Wald F)		13.299	13.238		13.299	13.294
Overidentification Test (Hansen J p value)		0.415	0.472		0.646	0.699
R2	0.346	0.452	0.471	0.017	0.022	0.217
Observations	11,934	11,934	11,934	11,934	11,934	11,934

All variables in 1000 Euro per capita and in prices of 2005. Standard errors clustered on the municipal level and shown in parentheses. ***, **, * indicate statistical significance on the 1%, 5% and 10% level. We use the Stata routine ivreg2 and control for each municipality's deficit, unemployment, resident density, share of population below the age of 25, share of population above the age of 65, share of left-wing votes in council elections, tax strength, debt stock, earmarked grants for investment and current expenditures and municipal equalization grants.

Table A5b: Marginal Effects of Interaction Terms Including Elections in 2009

Dependent Variable:	Investment in Construction (long-run investment)		Investment in Equipment (short-run investment)	
	2SLS	GMM	2SLS	GMM
Estimator:	(1)	(2)	(3)	(4)
2009 ($t=0$)				
A: No Election	-0.653 (0.571)	-0.622 (0.562)	-0.075 (0.112)	-0.040 (0.106)
B: Elec. Mayor quits	-0.958 (1.308)	-0.808 (0.137)	-0.557 (0.348)	-0.394 (0.345)
C: Elec. Mayor re-runs	-0.376 (0.604)	-0.207 (0.558)	0.224 (0.138)	0.259* (0.139)
2010 ($t+1$)				
D: No Election	1.016** (0.470)	0.783* (0.444)	-0.012 (0.110)	-0.068 (0.077)
E: Elec. Mayor quits	0.858 (1.071)	0.536 (1.138)	-0.454 (0.331)	-0.396 (0.298)
F: Elec. Mayor re-runs	0.647 (0.593)	0.625 (0.571)	0.303** (0.127)	0.286*** (0.103)
2011 ($t+2$)				
G: No Election	-0.059 (0.496)	-0.043 (0.504)	-0.278** (0.118)	-0.268** (0.126)
H: Elec. Mayor quits	0.736 (1.164)	0.748 (1.116)	-0.457 (0.339)	-0.335 (0.310)
I: Elec. Mayor re-runs	-0.047 (0.583)	-0.094 (0.542)	-0.234* (0.123)	-0.186 (0.116)

Marginal effects of estimations shown in Table A5a. Standard errors clustered at the municipal level and shown in parentheses. All variables in 1000 Euro per capita and in prices of 2005, ***, **, * indicate statistical significance on the 1%, 5% and 10% level. We use the Stata routine margins.

Table A6a: Second Stage Estimations Including Number of Students in Public Schools

Dependent Variable:	Investment in Construction (long-run investment)		Investment in Equipment (short-run investment)	
Estimator:	2SLS	GMM	2SLS	GMM
	(1)	(2)	(3)	(4)
2009				
K2 Transfer	-0.607 (0.552)	-0.669 (0.552)	-0.080 (0.107)	-0.027 (0.105)
K2*Election Mayor quits	-2,743 (1.955)	-2.808 (2.111)	-0.189 (0.313)	-0.051 (0.341)
K2*Election Mayor re-runs	3.727 (2.603)	4.179 (2.714)	0.459 (0.423)	0.290 (0.436)
2010				
K2 Transfer	0.939** (0.458)	0.806* (0.433)	-0.001 (0.106)	-0.070 (0.071)
K2*Election Mayor quits	-2.403 (1.531)	-2.807* (1.684)	-0.334 (0.291)	-0.231 (0.303)
K2*Election Mayor re-runs	2.977 (2.032)	3.849* (2.119)	0.647* (0.396)	0.637* (0.395)
2011				
K2 Transfer	-0.117 (0.504)	-0.150 (0.507)	-0.277** (0.114)	-0.262** (0.124)
K2*Election Mayor quits	-0.657 (1.804)	-0.737 (1.648)	-0.072 (0.248)	-0.033 (0.274)
K2*Election Mayor re-runs	0.536 (2.401)	0.707 (2.162)	-0.011 (0.342)	0.073 (0.373)
Investment Construction (t-1)		-0.149*** (0.031)		
Investment Equipment (t-1)				-0.452*** (0.016)
Number of Students	3.251** (1.510)	3.671** (1.644)	0.243 (0.387)	0.005 (0.395)
Controls	✓	✓	✓	✓
Time Fixed Effects	✓	✓	✓	✓
Underidentification Test (Kleibergen-Paap rk LM)	18.555***	18.488***	18.555***	18.294***
Weak Identification Test (Kleibergen-Paap rk Wald F)	3.456	3.454	3.456	3.452
Overidentification Test (Hansen J p value)	0.862	0.869	0.314	0.536
R2	0.451	0.472	0.022	0.218
Observations	11,934	11,934	11,934	11,934

All variables in 1000 Euro per capita and in prices of 2005. Standard errors clustered on the municipal level and shown in parentheses. ***, **, * indicate statistical significance on the 1%, 5% and 10% level. We use the Stata routine ivreg2 and control for each municipality's deficit, unemployment, resident density, share of population below the age of 25, share of population above the age of 65, share of left-wing votes in council elections, tax strength, debt stock, earmarked grants for investment and current expenditures, municipal equalization grants and the number of students in public schools.

Table A6b: Marginal Effects of Interaction Terms Including Number of Students

Dependent Variable:	Investment in Construction (long-run investment)		Investment in Equipment (short-run investment)	
	2SLS	GMM	2SLS	GMM
Estimator:	(1)	(2)	(3)	(4)
2009 ($t=0$)				
A: No Election	-0.607 (0.552)	-0.635 (0.552)	-0.078 (0.108)	-0.027 (0.105)
B: Elec. Mayor quits	-3.350 (2.060)	-3.393 (2.220)	-0.267 (0.328)	-0.078 (0.355)
C: Elec. Mayor re-runs	0.377 (0.918)	0.689 (0.802)	0.192 (0.184)	0.213 (1.645)
2010 ($t+1$)				
D: No Election	0.939** (0.458)	0.826* (0.433)	0.001 (0.106)	-0.071 (0.071)
E: Elec. Mayor quits	-1.463 (1.578)	-1.948 (1.727)	-0.334 (0.300)	-0.302 (0.305)
F: Elec. Mayor re-runs	1.514* (0.865)	1.831** (0.752)	0.315* (0.171)	0.335** (0.139)
2011 ($t+2$)				
G: No Election	-0.117 (0.504)	0.078 (0.487)	-0.262** (0.111)	-0.262** (0.120)
H: Elec. Mayor quits	-0.774 (1.911)	-0.645 (1.752)	-0.335 (0.263)	-0.295 (0.287)
I: Elec. Mayor re-runs	-0.238 (0.839)	0.042 (0.737)	-0.344* (0.189)	-0.222 (0.181)

Marginal effects of estimations shown in Table A6a. Standard errors clustered at the municipal level and shown in parentheses. All variables in 1000 Euro per capita and in prices of 2005, ***, **, * indicate statistical significance on the 1%, 5% and 10% level. We use the Stata routine margins.

Table A7a: Baseline Estimates (OLS FE) (Excl. Outliers)

	Investment in Construction (long-run investment)					Investment in Equipment (short-run investment)				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2009										
K2 Transfer	-0.359 (0.510)	-0.353 (0.537)	-0.352 (0.537)	-0.294 (0.539)	-0.483 (0.573)	-0.085 (0.113)	-0.117 (0.109)	-0.117 (0.109)	-0.131 (0.114)	-0.058 (0.106)
K2*Election		0.001 (0.762)					0.117 (0.179)			
K2*Election Mayor quits in 2010/2011			-1.477 (1.414)	-1.522 (1.508)	-1.187 (1.615)			-0.384 (0.487)	-0.358 (0.487)	-0.373 (0.499)
K2*Election Mayor re-runs in 2010/2011			0.592 (0.919)	0.524 (0.984)	0.749 (0.907)			0.312** (0.124)	0.321** (0.141)	0.381** (0.149)
2010										
K2 Transfer	1.047** (0.460)	1.060** (0.421)	1.060** (0.421)	1.120*** (0.430)	0.734* (0.450)	-0.007 (0.109)	-0.032 (0.118)	-0.033 (0.118)	-0.050 (0.124)	-0.078 (0.088)
K2*Election		-0.020 (0.699)					0.094 (0.170)			
K2* Election Mayor quits in 2010/2011			-1.625 (1.289)	-1.647 (1.384)	-1.509 (1.495)			-0.431 (0.482)	-0.411 (0.480)	-0.409 (0.491)
K2*Election Mayor re-runs in 2010/2011			0.641 (0.874)	0.580 (0.942)	0.771 (0.901)			0.300** (0.124)	0.311** (0.128)	0.447*** (0.140)
2011										
K2 Transfer	0.280 (0.454)	0.268 (0.467)	0.267 (0.468)	0.348 (0.513)	0.354 (0.445)	-0.333** (0.132)	-0.313** (0.130)	-0.312** (0.129)	-0.336** (0.142)	-0.302** (0.141)
K2*Election		0.065 (0.734)								
K2* Election Mayor quits in 2010/2011			-1.265 (1.211)	-1.267 (1.313)	-1.065 (1.306)			-0.377 (0.455)	-0.362 (0.454)	-0.373 (0.464)
K2*Election Mayor re-runs in 2010/2011			0.577 (0.918)	0.512 (0.966)	0.653 (0.904)			0.016 (0.117)	0.029 (0.124)	0.155 (0.147)
Controls	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Time Fixed Effects	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Municipality Specific Time Trends				✓					✓	
Dynamic Model					✓					✓
R2	0.388	0.397	0.388	0.412	0.430	0.024	0.024	0.024	0.054	0.231
Observations	11,934	11,934	11,934	11,934	11,934	11,934	11,934	11,934	11,934	11,934

All variables in 1000 Euro per capita and in prices of 2005. Standard errors clustered on the municipal level and shown in parentheses. ***, **, * indicate statistical significance on the 1%, 5% and 10% level. We use the Stata routine xtreg and control for each municipality's deficit, unemployment, resident density, share of population below the age of 25, share of population above the age of 65, share of left-wing votes in council elections, tax strength, debt stock, earmarked grants for investment and current expenditures and municipal equalization grants.

Table A7b: Static and Dynamic IV Estimates (Second Stage, Excl. Outliers)

Dependent Variable:	Investment in Construction (long-run investment)		Investment in Equipment (short-run investment)	
Estimator:	2SLS	GMM	2SLS	GMM
	(1)	(2)	(3)	(4)
2009				
K2 Transfer	-0.272 (0.490)	-0.242 (0.489)	-0.085 (0.019)	-0.031 (0.106)
K2*Election Mayor quits	-2.854 (1.850)	-2.743 (2.048)	-0.180 (0.312)	-0.040 (0.341)
K2*Election Mayor re-runs	4.081 (2.563)	3.783 (2.617)	0.453 (0.421)	0.285 (0.436)
2010				
K2 Transfer	1.138*** (0.387)	0.917*** (0.346)	-0.002 (0.107)	-0.075 (0.072)
K2*Election Mayor quits	-2.493* (1.457)	-2.859* (1.634)	-0.328 (0.290)	-0.223 (0.303)
K2*Election Mayor re-runs	3.473* (2.019)	3.887* (2.049)	0.644* (0.396)	0.646* (0.395)
2011				
K2 Transfer	0.271 (0.451)	0.401 (0.418)	-0.277** (0.112)	-0.275** (0.122)
K2*Election Mayor quits	-1.011 (1.793)	-1.143 (1.602)	-0.069 (0.248)	-0.030 (0.274)
K2*Election Mayor re-runs	1.316 (2.465)	1.177 (2.108)	-0.010 (0.343)	0.077 (0.374)
Investment Construction (t-1)		-0.181*** (0.022)		
Investment Equipment (t-1)				-0.458*** (0.017)
Controls	✓	✓	✓	✓
Time Fixed Effects	✓	✓	✓	✓
Underidentification Test (Kleibergen-Paap rk LM)	18.744***	18.680***	18.744***	18.840***
Weak Identification Test (Kleibergen-Paap rk Wald F)	3.662	3.652	3.662	3.671
Overidentification Test (Hansen J p value)	0.829	0.846	0.303	0.533
R2	0.396	0.430	0.022	0.220
Observations	11,934	11,934	11,934	11,934

All variables in 1000 Euro per capita and in prices of 2005. Standard errors clustered on the municipal level and shown in parentheses. ***, **, * indicate statistical significance on the 1%, 5% and 10% level. We use the Stata routine ivreg2 and control for each municipality's deficit, unemployment, resident density, share of population below the age of 25, share of population above the age of 65, share of left-wing votes in council elections, tax strength, debt stock, earmarked grants for investment and current expenditures and municipal equalization grants.

Table A7c: Marginal Effects of Interaction Terms Excluding Outliers

Dependent Variable:	Investment in Construction (long-run investment)		Investment in Equipment (short-run investment)	
	2SLS	GMM	2SLS	GMM
Estimator:	(1)	(2)	(3)	(4)
2009 ($t=0$)				
A: No Election	-0.272 (0.489)	-0.242 (0.489)	-0.085 (0.109)	-0.031 (0.106)
B: Elec. Mayor quits	-3.126 (1.934)	-2.985 (2.121)	-0.265 (0.328)	-0.071 (0.356)
C: Elec. Mayor re-runs	0.954 (1.066)	0.798 (0.755)	0.188 (0.186)	0.214 (0.167)
2010 ($t+1$)				
D: No Election	1.138*** (0.384)	0.917*** (0.346)	-0.002 (0.107)	-0.075 (0.072)
E: Elec. Mayor quits	-1.354 (1.480)	-1.942 (1.658)	-0.329 (0.299)	-0.298 (0.304)
F: Elec. Mayor re-runs	2.118* (1.109)	1.946*** (0.738)	0.315* (0.172)	0.339** (0.140)
2011 ($t+2$)				
G: No Election	0.271 (0.451)	0.401 (0.418)	-0.277** (0.112)	-0.275** (0.122)
H: Elec. Mayor quits	-0.739 (1.900)	-0.742 (1.697)	-0.347 (0.263)	-0.305 (0.288)
I: Elec. Mayor re-runs	0.577 (0.972)	0.435 (0.731)	-0.356* (0.190)	-0.228 (0.182)

Marginal effects of estimations shown in Table A7b. Standard errors clustered at the municipal level and shown in parentheses. All variables in 1000 Euro per capita and in prices of 2005, ***, **, * indicate statistical significance on the 1%, 5% and 10% level. We use the Stata routine margins.

Table A8a: Varying Pre- and Post-Treatment Period (Dynamic Model, Second Stage)

Dependent Variable:	Investment in Construction (long-run investment)		Investment in Equipment (short-run investment)	
	2006-2015 (1)	2004-2011 (2)	2006-2015 (3)	2004-2011 (4)
2009				
K2 Transfer	-0.617 (0.546)	-0.508 (0.553)	-0.024 (0.105)	-0.034 (0.105)
K2*Election Mayor quits	-2.603 (2.070)	-3.130 (2.230)	-0.061 (0.341)	
K2*Election Mayor re-runs	3.899 (2.671)	4.511 (2.862)	0.303 (0.436)	0.296 (0.434)
2010				
K2 Transfer	0.804* (0.432)	0.872** (0.424)	-0.071 (0.071)	-0.068 (0.074)
K2*Election Mayor quits	-2.703 (1.672)	-3.077* (1.714)	-0.247 (0.303)	
K2*Election Mayor re-runs	3.708* (2.119)	4.092* (2.129)	0.659* (0.394)	0.652* (0.392)
2011				
K2 Transfer	0.055 (0.496)	0.292 (0.452)	-0.028** (0.120)	-0.265** (0.117)
K2*Election Mayor quits	-0.632 (1.698)	-0.856 (1.642)	-0.044 (0.275)	
K2*Election Mayor re-runs	0.611 (2.226)	0.725 (2.155)	0.087 (0.375)	0.069 (0.366)
Investment Construction (t-1)	-0.144*** (0.038)	-0.166*** (0.021)		
Investment Equipment (t-1)			-0.463*** (0.017)	-0.413*** (0.016)
Controls	✓	✓	✓	✓
Time Fixed Effects	✓	✓	✓	✓
Underidentification Test (Kleibergen-Paap rk LM)	18.301***	18.369***	18.119***	18.115***
Weak Identification Test (Kleibergen-Paap rk Wald F)	3.463	3.471	3.470	3.475
Overidentification Test (Hansen J p value)	0.884	0.889	0.534	0.536
R2	0.46	0.52	0.22	0.19
Observations	9,791	8,691	9,791	8,691

All variables in 1000 Euro per capita and in prices of 2005. Standard errors clustered on the municipal level and shown in parentheses. ***, **, * indicate statistical significance on the 1%, 5% and 10% level. We use the Stata routine ivreg2 and control for each municipality's deficit, unemployment, resident density, share of population below the age of 25, share of population above the age of 65, share of left-wing votes in council elections, tax strength, debt stock, earmarked grants for investment and current expenditures, municipal equalization grants and the number of students in public schools.

Table A8b: Marginal Effects of Interaction Terms at Varying Pre- and Post-Treatment Periods

Dependent Variable:	Investment in Construction (long-run investment)		Investment in Equipment (short-run investment)	
	2006-2015 (1)	2004-2011 (2)	2006-2015 (3)	2004-2011 (4)
2009 ($t=0$)				
A: No Election	-0.617 (0.547)	-0.508 (0.553)	-0.024 (0.105)	-0.033 (0.105)
B: Elec. Mayor quits	-3.220 (2.162)	-3.638 (2.348)	-0.084 (0.356)	-0.089 (0.355)
C: Elec. Mayor re-runs	0.678 (0.802)	0.872 (0.806)	0.219 (0.164)	0.207 (0.164)
2010 ($t+1$)				
D: No Election	0.804* (0.432)	0.872** (0.424)	-0.071 (0.071)	-0.068 (0.074)
E: Elec. Mayor quits	-1.898 (1.718)	-2.205 (1.745)	-0.319 (0.305)	-0.315 (0.303)
F: Elec. Mayor re-runs	1.809** (0.765)	1.887** (0.742)	0.340** (0.139)	0.337** (0.139)
2011 ($t+2$)				
G: No Election	0.055 (0.496)	0.292 (0.451)	-0.258** (0.120)	-0.265** (0.118)
H: Elec. Mayor quits	-0.577 (1.792)	-0.564 (1.743)	-0.301 (0.289)	-0.300 (0.281)
I: Elec. Mayor re-runs	0.035 (0.754)	0.161 (0.729)	-0.214 (0.182)	-0.231 (0.180)

Marginal effects of estimations shown in Table A8a. Standard errors clustered at the municipal level and shown in parentheses. All variables in 1000 Euro per capita and in prices of 2005, ***, **, * indicate statistical significance on the 1%, 5% and 10% level. We use the Stata routine margins.

Table A9: Alternative Specifications of the FE-Model

	Investment in Construction (long-run investment)					Investment in Equipment (short-run investment)				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2009										
K2 Transfer	-0.548 (0.561)	-0.447 (0.587)	-0.447 (0.587)	-0.424 (0.606)	-0.609 (0.603)	-0.084 (0.111)	-0.115 (0.109)	-0.115 (0.108)	-0.128 (0.113)	-0.062 (0.106)
K2*Election		-0.409 (0.635)					0.111 (0.178)			
K2*Election Mayor quits in 2010/2011			-1.545 (1.458)	-1.575 (1.561)	-1.370 (1.617)			-0.397 (0.485)	-0.377 (0.485)	-0.376 (0.498)
K2*Election Mayor re-runs in 2010/2011			0.070 (0.640)	0.001 (0.692)	0.216 (0.640)			0.306** (0.124)	0.311** (0.142)	0.376** (0.149)
2010										
K2 Transfer	0.958** (0.472)	1.097** (0.484)	1.097** (0.485)	1.126** (0.515)	0.780* (0.485)	-0.010 (0.109)	-0.034 (0.117)	-0.035 (0.117)	-0.050 (0.123)	-0.082 (0.088)
K2*Election		-0.546 (0.584)					0.088 (0.169)			
K2* Election Mayor quits in 2010/2011			-1.748 (1.307)	-1.766 (1.409)	-1.732 (1.470)			-0.444 (0.480)	-0.430 (0.478)	-0.412 (0.489)
K2*Election Mayor re-runs in 2010/2011			-0.031 (0.636)	-0.092 (0.704)	0.074 (0.644)			0.295** (0.114)	0.303** (0.126)	0.441*** (0.138)
2011										
K2 Transfer	0.101 (0.491)	0.193 (0.503)	0.193 (0.504)	0.258 (0.562)	-0.078 (0.542)	-0.338** (0.138)	-0.316** (0.136)	-0.316** (0.135)	-0.340** (0.149)	-0.299** (0.150)
K2*Election							-0.074 (0.153)			
K2* Election Mayor quits in 2010/2011			-1.268 (1.178)	-1.264 (1.278)	-1.196 (1.234)			-0.388 (0.453)	-0.378 (0.451)	-0.372 (0.462)
K2*Election Mayor re-runs in 2010/2011			-0.028 (0.624)	-0.079 (0.658)	0.046 (0.615)			0.013 (0.115)	0.024 (0.121)	0.151 (0.144)
Controls	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Municipality Fixed Effects	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Time Fixed Effects	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Municipality Specific Time Trends				✓					✓	
Dynamic Model					✓					✓
R2	0.397	0.452	0.452	0.471	0.473	0.023	0.023	0.024	0.052	0.220
Observations	11,964	11,964	11,964	11,964	11,964	11,964	11,964	11,964	11,964	11,964

All variables in 1000 Euro per capita and in prices of 2005. Standard errors clustered on the municipal level and shown in parentheses. ***, **, * indicate statistical significance on the 1%, 5% and 10% level. We use the Stata routine xtreg and control for each municipality's deficit, unemployment, resident density, share of population below the age of 25, share of population above the age of 65, share of left-wing votes in council elections, tax strength, debt stock, earmarked grants for investment and current expenditures and municipal equalization grants.

Table A10: IV Estimates (Second Stage) with Mayor's Age as Control instead Instrument

Dependent Variable:	Investment in Construction (long-run investment)	Investment in Equipment (short-run investment)
Estimator:	GMM (1)	GMM (2)
2009		
K2 Transfer	-0.670 (0.587)	-0.057 (0.112)
K2*Election Mayor quits	-2.568 (2.218)	-0.006 (0.362)
K2*Election Mayor re-runs	1.306 (1.453)	0.401* (0.212)
2010		
K2 Transfer	0.909* (0.494)	-0.099 (0.090)
K2*Election Mayor quits	-2.879 (1.770)	-0.181 (0.329)
K2*Election Mayor re-runs	0.087* (1.388)	0.674** (0.335)
2011		
K2 Transfer	-0.090 (0.530)	-0.381** (0.158)
K2*Election Mayor quits	-0.410 (1.702)	0.085 (0.309)
K2*Election Mayor re-runs	1.127 (1.546)	0.629* (0.315)
Investment Construction (t-1)	-0.149*** (0.031)	
Investment Equipment (t-1)		-0.450*** (0.016)
Age Mayor	0.001 (0.001)	0.000 (0.000)
Controls	✓	✓
Time Fixed Effects	✓	✓
Underidentification Test (Kleibergen-Paap rk LM)	26.83***	18.840***
Weak Identification Test (Kleibergen-Paap rk Wald F)	4.89	4.863
Overidentification Test (Hansen J p value)	0.000	0.000
R2	0.470	0.218
Observations	11,934	11,934

All variables in 1000 Euro per capita and in prices of 2005. Standard errors clustered on the municipal level and shown in parentheses. ***, **, * indicate statistical significance on the 1%, 5% and 10% level. We use the Stata routine ivreg2 and control for each municipality's deficit, unemployment, resident density, share of population below the age of 25, share of population above the age of 65, share of left-wing votes in council elections, tax strength, debt stock, earmarked grants for investment and current expenditures and municipal equalization grants.

Table A11: IV Estimates (Second Stage) with Dynamic Incentive Effects

Dependent Variable:	Investment in Construction (long-run investment)	Investment in Equipment (short-run investment)
Estimator:	GMM (1)	GMM (2)
2009		
K2 Transfer	-0.627 (0.592)	-0.046 (0.112)
K2*Election Mayor quits	-2.771 (2.203)	-0.038 (0.364)
K2*Election Mayor re-runs	1.140 (1.524)	0.363* (0.214)
2010		
K2 Transfer	0.821* (0.486)	-0.112 (0.085)
K2*Election Mayor quits	-2.600 (1.764)	-0.138 (0.327)
K2*Election Mayor re-runs	0.379 (1.200)	0.721** (0.313)
2011		
K2 Transfer	-0.083 (0.529)	-0.381** (0.154)
K2*Election Mayor quits	-0.511 (1.697)	0.079 (0.298)
K2*Election Mayor re-runs	1.095 (1.482)	0.633** (0.319)
Investment Construction (t-1)	-0.149*** (0.031)	
Investment Equipment (t-1)		-0.451*** (0.016)
Years to Next Election	-0.002 (0.001)	-0.001** (0.000)
Years in Office	0.001* (0.000)	0.001* (0.000)
Controls	✓	✓
Time Fixed Effects	✓	✓
Underidentification Test (Kleibergen-Paap rk LM)	21.849***	21.875***
Weak Identification Test (Kleibergen-Paap rk Wald F)	3,564	3.569
Overidentification Test (Hansen J p value)	0.000	0.000
R2	0.472	0.218
Observations	11,934	11,934

All variables in 1000 Euro per capita and in prices of 2005. Standard errors clustered on the municipal level and shown in parentheses. ***, **, * indicate statistical significance on the 1%, 5% and 10% level. We use the Stata routine ivreg2 and control for each municipality's deficit, unemployment, resident density, share of population below the age of 25, share of population above the age of 65, share of left-wing votes in council elections, tax strength, debt stock, earmarked grants for investment and current expenditures and municipal equalization grants.

Table A12: Potential Correlates of K2-Grants

	K2 Transfers
Resident Density	0.001** (0.000)
Share Leftwing	0.016*** (0.005)
Share Young	0.000 (0.000)
Share Old	-0.001** 0.000
Tax Strength	-0.001 (0.001)
Debt (t-1)	0.001 (0.001)
No. of Students	0.101*** (0.006)
Non-earmarked grants	-0.001 (0.002)
Investment Grants	-0.003** (0.002)
Current Exp. Grants	0.179*** (0.011)
Years Mayor in Office	0.000 (0.000)
Years until next Mayor Election	-0.000 (0.000)
Age Mayor	0.000 (0.000)
R2	0.61
Municipality FE	Yes
Observations	1091

All variables in 1000 Euro per capita and in prices of 2005. Standard errors clustered on the municipal level and shown in parentheses. ***, **, * indicate statistical significance on the 1%, 5% and 10% level. We use the Stata routine reg.

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