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Co-Partisan Buddies or Partisan Bullies? Why State Supervision of Local Government Borrowing Fails

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Abstract

In many federal countries, local governments run large deficits, even when supervision by state authorities is tight. I investigate whether party alignment of mayors and supervisors influences local government borrowing. The dataset includes 427 local German governments over the period 1999–2012. I exploit variation of a far-reaching institutional reform that entirely re-distributed political powers on both debt issuance and supervision. The results show that short-term deficits of local governments are not enabled by a vertical "buddy" relationship between a mayor and a supervisor affiliated with the same party (co-partisanship) but rather by an ideological "bully behavior" of partisan supervisors and supervisees: left-wing local governments issue more debt, while left-wing supervisory authorities tolerate more debt. These findings imply that political independence for state supervisory authorities is highly recommended.

JEL Code: H62, H74, H77.

Keywords: Local government, public deficits, supervision, partisan cycle.

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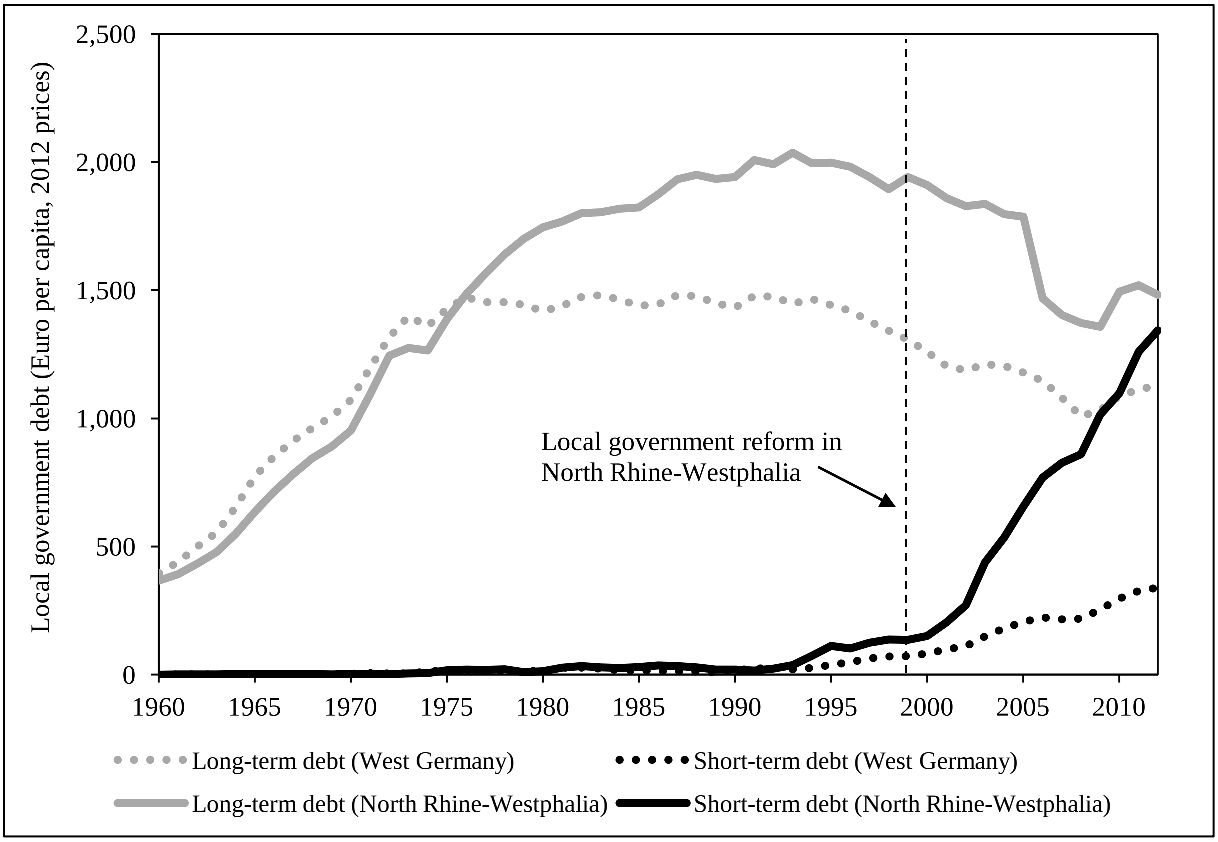
"One of the lessons being drawn from the present economic depression, and especially from the financial straits of municipalities, is the very real need of more adequate restriction upon the power of cities, towns, villages, counties, school districts and other local governments to burden themselves and their taxpayers with excessive public debt." [STASON (1932), p. 833]

1. Introduction

The bankruptcies of the U.S. cities of Stockton, San Bernardino and Detroit put the issue of excessive local government debt into the spotlight. Although studies to date have investigated different sources of local indebtedness, such as political business cycles [ASHWORTH et al. (2005), VEIGA and VEIGA (2007), CIOFFI et al. (2012)], missing direct democratic institutions [FELD and KIRCHGÄSSNER (2001), FELD et al. (2011)] or spatial dependency [FOSSEN et al. (2014)], they do not reflect one of the main features of local finance: state supervision. In most federal countries such as Austria, Australia, Canada and Germany, as well as some Swiss cantons and a growing number of U.S. states, the state level regulates local governments' finances by drawing on a large set of reporting, borrowing permission and intervention rules [RATTSØ (2002)]. Because of their coverage by state supervision, local governments should be protected against excessive debt burdens. In practice, if supervisors and supervisees are affiliated with political parties, the interactions between both levels establish new sources of distortions and misdirecting incentives.

I exploit variation of a far-reaching institutional reform that was implemented in the largest German state, North Rhine-Westphalia, in 1999. The reform removed former accountabilities and established the direct election of both mayors and their supervisors. At the same time, short-term debt, which is solely at the discretion of the mayor and the supervisory authority, began to rise sharply as shown in Figure 1. The black bold line shows the evolution of the average short-term debt per capita in local governments in North Rhine-Westphalia since 1960. Short-term debt did not play a role in local finance until the 1990s, it increased moderately beginning in 1994, and it has risen dramatically since the 1999 reform. This contrasts with the evolution of short-term debt in local governments in the rest of Western Germany (black dotted line) as well as with the parallel trends in the capital spending-related long-term debt between 1999 and 2012 (gray lines).

Figure 1: Evolution of local government debt in North Rhine-Westphalia and West Germany (without North Rhine-Westphalia), 1960–2012



Notes: Extra budgets included. Eastern German states and city-states are left out for reasons of comparability.
Source: Own figure and calculations. Data: FEDERAL STATISTICAL OFFICE (2013a, 2014).

Due to the overall high level of fiscal distress of German municipalities, THE ECONOMIST (2011) labels these municipalities “Hundreds of mini-Greeces” and mentions the failure of “state watchdogs” as one of the main causes, especially in North Rhine-Westphalia. In fact, the political economy of state supervision on local finance in Germany is delicate. First, both supervised politicians and state overseers are part of local party politics. Second, supervisory authorities have a great deal of discretion in regulating local governments’ finance. Two political economy sources of supervisory failure on local borrowing may arise from this setting: party relations and party values. On the one hand, vertical party relations matter if a partisan overseer supervises a co-partisan “buddy” in a laxer fashion than a non-affiliated government. On the other hand, stubborn partisan supervisory authorities (“bullies”) may enforce their party values, leading to an ideological bias in debt supervision. I test the “buddy” and the "bully" hypotheses empirically and find evidence of the latter: Short-term deficits of local governments are not enabled by a vertical "buddy" relationship between a mayor and a supervisor affiliated with the same party (co-partisanship) but rather by an ideological "bully behavior" of partisan supervisors and supervisees. In particular, left-wing mayors run higher short-term deficits than their right-wing colleagues, while local governments controlled by a left-wing supervisor issue more debt than those under a right-wing supervisor.. These findings imply that political independence for state supervisory authorities is highly recommended.

2. The political economy of local borrowing and supervision

The institutional setting of local governments differs between the national or sub-national level. First, local governments face a very homogenous legal framework given by national or state law, e.g., common borrowing, transparency and electoral rules [ESLAVA (2011)]. At the same time, one observes very heterogeneous local debt levels. Given institutional conditions to be almost equal, different explanations have to come into consideration, especially political leadership. Therefore, the first subsection focuses on the impact of partisan differences on public deficits.[1] The second and most important feature of local finance is related to fiscal autonomy. Central and state sub-national governments run fiscal policy on their own behalf, whereas local governments' finance in most federal countries is controlled and regulated by state authorities. Overseers have to approve or veto decisions on the local budget. Hence, the decision on local borrowing is divided, and both local politics *and* supervisory behavior may explain differences in deficits.

2.1 Partisanship

Beginning with the seminal work of HIBBS (1977), a long tradition of empirical studies of partisan impacts on policy outcomes has been established [for an overview, see SCHMIDT (1996)]. A core result of this research is that left-wing parties favor a larger public sector and therefore higher governmental expenditures than their right-wing counterparts [e.g., PETTERSSON-LIDBOM (2003), BJØRNSKOV and POTRAFKE (2013)]. However, the implications of this finding for fiscal deficits must

[1] ESLAVA (2011) also describes other political economy theories: e.g., strategic reasons (political business cycles [PERSSON und TABELLINI (2003)]) or weak governments [ROUBINI and SACHS (1989)].

be derived very carefully. By treating the budget balance as the residual difference of government's expenditures and revenues, higher spending levels do not necessarily lead to higher deficits when taxes are increased simultaneously. Conversely, tax cuts do not cause an increase in debt if they are combined with reductions in spending. Deficits arise if either revenues or expenditures are fixed for certain reasons. Party attitudes towards the extent of the public sector constitute such reasons: Higher deficits under right-wing governments occur if right-wing governments enforce tax cuts and if the expenditure level is fixed by law or political opportunity. For example, one may think of the Proposition 13 Tax Reform in California that was implemented in 1978, which limits the property tax rate by constitutional amendment [see COUPAL (2004)]. Conversely, if revenues are given, left-wing parties can only finance additional expenditures by issuing debt.[2]

Hypothesis 1: Partisanship matters in local government: Left-wing governments run higher deficits than right-wing governments when they face fixed revenues.

Evidence from the sub-national level can give confidence to the theory outlined above. German state governments face a strong asymmetry in fiscal autonomy, as they can spend and borrow on their own behalf but do not have significant authority to levy or raise taxes. As mentioned by theory, WAGSCHAL (1996), RODDEN (2006) and POTRAFKE et al. (2014) reveal higher deficits for left-wing state governments in Germany. For the local level, evidence is more mixed. GARCÍA-SÁNCHEZ et al. (2011) show that Spanish towns under left-wing governments suffer from higher debt levels than those under right-wing governments. Conversely, PETTERSSON-LIDBOM (2001) presents evidence of higher deficits of right-wing governments in Swedish municipalities. Further micro-econometric literature does not find partisan sources of local deficits. Neither ASHWORTH et al. (2005), VEIGA and VEIGA

[2] In this view, the strategically multi-period distribution of deficits under an intertemporal budget constraint is a sub-case of the theory I outlined. PERSSON and SVENSSON (1989) predict higher deficits of ("stubborn") right-wing governments that face a replacement by the political opponent. If these right-wing governments want to enforce a smaller public sector through lower public expenditures, they may cut taxes and issue debt strategically to restrict future governments. Implicitly, this assumes fixed revenues. Conversely, CARLSEN (1997) assumes higher deficits of left-wing governments because of an asymmetrical reaction under left-wing leadership to the business cycle. While right-wing governments set a pro-cyclical fiscal policy and therefore avoid deficits in all circumstances, left-wing governments run counter-cyclical deficits in times of recession but do not employ surpluses in good times. Interestingly, this theory of intertemporal budget constraints also assumes a fixed level of revenues and/or spending.

(2007) nor LETELIER (2011) reveal significant influences of partisanship on Belgian, Portuguese and Chilean municipal deficits. An explanation for these results might be that studies on local governments do not address the issue of revenue or expenditure constraints. This paper tries to address this problem and presents evidence on German municipalities that face a *de facto* given level of revenues [see Section 3 for more detail].

2.2 State supervision and partisanship

Most federal states have to resolve the trade-off between local autonomy on the one hand and implicit or explicit bailout guarantees of higher levels of government on the other hand [RODDEN (2006)]. State governments have installed mechanisms of local budget control to prevent lower levels from adverse actions and to avoid bailout payments.[3] In Austria, Australia, Canada and Germany, state or upper-local authorities regulate local governments' finances by drawing on a large set of intervention rights [see Section 3]. In the highly decentralized federal order of Switzerland that virtually abandons bailouts, cantons also supervise the fiscal policy of their municipalities. Even a growing number of U.S. states experiment with more active and hands-on municipal oversight in reaction to an increasing level of municipal fiscal distress [SPIOTTO (2013)].

One aspect that is frequently overlooked is that supervision may induce new sources of misdirecting incentives if supervisors are part of local politics, e.g., in Germany or Austria. First, *co-partisanship* between a supervisor and a supervisee that belongs to the same party may have an influence on fiscal policy [LETELIER (2011)]. Partisans in lower levels of government can use extortion opportunities to enjoy the laxer debt supervision of affiliated state overseers, e.g., by threatening to not re-nominate a co-partisan supervisor for office [KHEMANI (2007a)].[4] Bailout expectations may also lead to a deficit-increasing effect of co-partisan relationships [RODDEN (2006)]. As a state bailout seems to be more likely if a co-partisan "buddy" runs the government, this expectation may also result in less fiscal discipline. Hypothesis 2 captures these considerations of co-partisanship in supervision.

[3] For country studies, see RATTSØ (2002), RODDEN et al. (2003), STEYTLER (2005).

[4] JONES et al. (2000) and CIOFFI et al. (2012) disagree. Under a strong "top-down" party discipline, national party leaders might be able to put pressure on affiliated sub-national governments to stop unsustainable fiscal policy. Co-partisanship would then lead to sounder fiscal outcomes. However, as the "bottom-up" setting of internal party powers as proposed by KHEMANI (2007a) appears more plausible for western democracies, I follow the deficit-enforcing theory of co-partisanship.

Hypothesis 2: Co-partisanship matters to state supervision ("buddy behavior"): Governments under co-partisan supervision run higher deficits than governments under adversary supervision.

Second, a stubborn ("bully") partisan overseer may reinforce her ideological values towards borrowing independently of whether the supervisee belongs to the same party. This idea of partisanship in supervision is closely connected to Hypothesis 1 (partisanship in government) and drops the assumption of a homogenous behavior of left- and right-wing overseers. KHEMANI (2007a), p. 56 illustrates this idea for Indian states: "If there is any impact of political partisanship, then co-partisan states should have lower deficits if the party's political incentives are aligned with greater fiscal discipline. However, if the party's own interests are served through greater deficits, then co-partisan states should have higher deficits." The incentives to run such a partisan supervisory policy are even larger as electoral externalities link different levels of governments [RODDEN (2006)]. These externalities arise if the re-election probability of an executive is driven not only by her own reputation but also by the reputation of her co-partisan counterpart at another level of government. In this case, overseers are confronted with even stronger incentives to take *coherent* supervisory actions related to their partisan values. Hypothesis 3 assumes the same partisan bias in supervision as stated in Hypothesis 1.

Hypothesis 3: Partisanship matters to state supervision ("bully behavior"): Governments under left-wing supervision run higher deficits than under right-wing supervision when local governments face fixed revenues.

To date, empirical research on the effects of state supervision is entirely missing.[5] Few studies focus on the relationship between the national and the first sub-national government level. RODDEN (2006) and KHEMANI (2007a, 2007b) show a deficit-raising effect of co-partisanship between the federal and state governments in Germany and India, respectively. For the case of Brazilian states, RODDEN (2006) does not find a significant influence of co-partisanship; HALLERBERG and STOLFI (2008) reject co-partisan effects on Italian regions' deficits. Hence, evidence of an impact of co-partisanship on

[5] In contrast, the case of higher transfers to local governments led by a majority of the state government's party is well-documented [LARCINESE et al. (2006), KHEMANI (2007c), SOLÉ-OLLÉ and SORRIBAS-NAVARRO (2008)].

fiscal policy (Hypothesis 2) at the state level is at least mixed. Surprisingly, extant studies have not investigated the local level, albeit the political, institutional and especially supervisory links between local and state governments are much tighter than between regional and national governments, and oversight has been recognized as one of the key determinants of local finance [DOLLERY et al. (2009), HOLLER (2012)]. This paper aims to close these research gaps by drawing on data of German local governments and their supervisory authorities. As shown below, the chosen framework allows the testing of Hypothesis 1 as well as the competing "buddy" and "bully" theories (Hypotheses 2 and 3).

3. Institutional background

The institutional setting of local governments in Germany is comparable to that of most other federal countries. German local governments are formally part of the federal states but can rely on a constitutional guarantee of self-governance that also includes financial autonomy [KRAMER (2005)]. Due to this setting, local governments in Germany can borrow on their own behalf, but state governments have the obligation to intervene in cases of fiscal distress. To address the misdirecting incentives that arise from this bailout guarantee, all federal states have implemented a broad set of budget oversight instruments to monitor their local governments (*Kommunalaufsicht*). The organization, the instruments and the intervention powers of the supervisory authorities differ substantially. In some states, the local budget has to be approved by the supervisory authority; other states only receive the local budget for information [for overviews, see BRÜNING and VOGELGESANG (2009), GLÖCKNER and MÜHLENKAMP (2009), HOLLER (2012)]. The supervisory authority is headed either by upper-local or regional politicians.

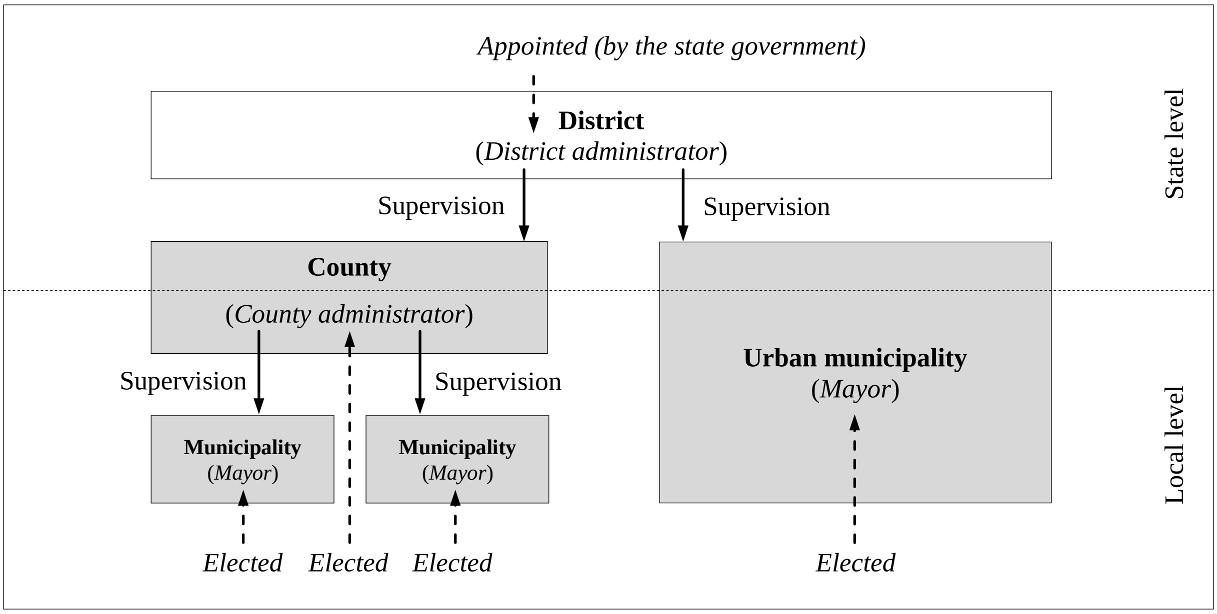
In the following, I focus on the largest German state in terms of population, North Rhine-Westphalia, for several reasons. First, a far-reaching institutional and electoral reform implemented in this state in 1999 provides a quasi-experimental setting that allows the identification of the causality of electoral outcomes and deficits [Section 4 provides more detail]. Second, one can assume that local governments in North Rhine-Westphalia face a *de facto* constraint on revenues that may allow partisan differences to come into action. Local governments in North Rhine-Westphalia run the highest property and business tax rates on average in Germany, while state-funded grants have been declining for years

[FEDERAL STATISTICAL OFFICE (2013b), AGENCY OF INFORMATION AND TECHNOLOGY OF NORTH RHINE-WESTPHALIA (2014)]. Given a vital business tax competition between German municipalities [BUETTNER (2001)], local governments in North Rhine-Westphalia can no longer raise taxes on a large scale. Industrial representatives expressed their deep worries that North Rhine-Westphalia is falling behind in attracting businesses because of high business tax rates and call for tax cuts [IHK COLOGNE (2009)]. Third, local governments in North Rhine-Westphalia are highly fiscally distressed. North Rhine-Westphalia covers approximately 22 % of the German population (2012), 37 % of local governments' total debt (50 billion Euro) and 50 % of local governments' short-term debt (24 billion Euro) [FEDERAL STATISTICAL OFFICE (2013a)]. Lastly, limiting the investigation to one state only is advisable to rule out noise from differences in supervision regulation, even within Germany.

3.1 Local governments in North Rhine-Westphalia

In North Rhine-Westphalia, three different types of local governments exist. 373 municipalities (*Städte* and *Gemeinden*) constitute the lowest level of government. As a second layer, 31 counties (*Landkreise*) group 7 to 24 municipalities. In addition, 23 large urban municipalities (*Kreisfreie Städte*) execute both municipality's and county's powers as one. Municipalities hold responsibility for local public services such as public order, waste disposal or cultural institutions and can set their own tax rates on property and local business. Counties are mainly responsible for social care and public transport and are financed by contributions from their municipalities because they do not hold own tax competences. All types of local governments can issue debt on their own behalf but are regulated by supervisory authorities [Figure 2].

Figure 2: Arrangement of local governments in North Rhine-Westphalia since 1999



Note: Head of the local or district administration in parentheses.
Source: Own figure.

Political powers within local governments are divided between a directly elected mayor (municipalities and urban municipalities) or county administrator (counties) on the one hand and a local council on the other hand. Mayors and county administrators are usually members of political parties and hold powerful rights, especially assuming the day-to-day management of their local administrations. The local council decides on more general issues, e.g., local statutes. Mayors, county administrators and local councils are elected for five years in elections held on the same day statewide.

3.2 Supervision of local government borrowing

All policy actions of local governments in North Rhine-Westphalia are subject to state supervision. The supervisory authority has the right to request information on local affairs, approve decisions on specific topics and suspend illegal decisions made by the local council or the mayor. In more extreme cases, the supervisory authority can substitute local governments' decisions, dissolve the local council or appoint a regulator to take over local decisions. Notably, all of these regulation steps are entirely at the discretion of the supervisory authority. As shown in Figure 2, state supervision is divided between different actors. Municipalities are controlled by the county administrator, who acts *on behalf* of the state in exercising municipal oversight. Counties in turn are supervised by the district administrator, who is part of the state administration and is also a partisan. Hence, the county administrator has an exceptional dual capacity as chief of her own local administration *and* – while executing supervision on municipalities – as part of the state government.

State supervision comprises the regulation of local governments' finances, particularly in controlling borrowing. Two different types of local government debt exist, differing vastly in terms of regulation and legal purpose. Long-term debt is solely allowed to finance capital spending given a sound fiscal perspective [see Column 2 of Table 1]. The decision on this type of borrowing is part of the local budget that has to be passed by the local council and forwarded to the supervisory authority. The supervisor can veto the budget within one month.[6] Short-term debt [Column 1, Table 1] is treated quite differently. The obligation of the mayor to handle day-to-day tasks also comprises ensuring the liquidity of the local authority, e.g., by issuing short-term debt (*Kassenkredite*) if other fiscal sources are exhausted. The local council cannot intervene in the mayor's specific short-term debt decisions.[7]

Table 1: Types of local government debt in North Rhine-Westphalia

	Short-term debt	*Long-term debt*
Legal purpose	Securing liquidity as part of day-to-day management	Financing capital spending as part of the budget
Additional legal conditions	Other fiscal sources exhausted	Sound long-term fiscal perspective
Competence to decide on borrowing	Mayor (municipalities), county administrator (counties)	Local government council
Notification by the supervisory authority	Not required	Required (budget)
Intervention rights of the supervisory authority	Request to reduce debt (not formalized)	Veto (budget)
Margin of discretion for supervisory interventions	Large	Small

Source: Own table.

Figure 1 has already shown that short-term debt has increased rapidly in North Rhine-Westphalia since 1999. The debt level is even higher than in (West) Germany and cannot be explained by liquidity purposes. The legal literature deems the evolution of short-term debt to be obviously illegal [HEINEMANN et al. (2009)]. Hence, supervisory authorities would have the right to intervene and restrict local governments' short-term borrowing, but the exercise of this right is at their discretion. This provides a

[6] In other German states, the budget not only has to be notified but also has to be approved by the supervisory authority within one month.
[7] The council can only set out a general short-term debt ceiling. Usually, this ceiling is generously sized and will be raised in times of fiscal distress.

fatal opportunity for both strategic "buddy" deals between the supervised and the supervisory level and for an ideological "bully" supervision behavior.

On the one hand, party members elect candidates for higher government levels. For instance, local party sections – in many cases, led by the mayor as the head of the local party section – decide whether to re-nominate the county administrator running for office again. To ensure her re-nomination, a partisan county administrator might be vulnerable to pressure and slacken the mayor's supervision. Second, mayors are often members of the county council that controls the actions of the county administrator and enacts the county's budget. This provides further opportunities to put pressure on the county administrator. Anecdotally, HEINEMANN et al. (2009), p. 185 report on the "specific risk of politically motivated collusion or coercion situations, e.g., between the county administrator and the mayor of the supervised municipality" [own translation by the author]. In particular, left-wing mayors are said to use party "buddy" connections to exert pressure on the supervisory authorities [HOLTKAMP (2000)].

On the other hand, there is also evidence that supports the "bully" hypothesis of the supervisory authority. GLÖCKNER and MÜHLENKAMP (2009), p. 415 suspect a "partisan-driven political logic of action by the supervisory authority" [own translation by the author] in German states. In North Rhine-Westphalia, electoral externalities are quite important, as one observes a sharp polarization and tight races between right-wing and left-wing parties. In particular, partisan supervisors should take coherent policy actions according to their parties' values. An ideological "bully" behavior of supervisory authorities is therefore as likely as a co-partisan "buddy" behavior. Ultimately, this is an empirical matter.

4. Empirical strategy

4.1 Identification

Endogeneity concerns are some of the most common issues of empirical political economy models. While the setup of these models proposes an influence of electoral results on fiscal outcomes, the reverse causality must also be true if voters react to political outcomes [ESLAVA (2011)]. The problem of feedback loops between deficits and electoral outcomes becomes even more complicated when one investigates vertical co-partisanship relations. If one assumes electoral externalities between different layers of government, fiscal outcomes and the electoral results of mayors and of their supervisors are no longer independent.

The exceptional evolution of local government institutions in North Rhine-Westphalia gives a simple but efficacious opportunity to address these endogeneity concerns. A far-reaching institutional reform entirely re-distributed the political powers within local governments. Until 1999, municipal leadership was divided: mayors worked in an honorary capacity and carried out mainly representative tasks, while a city manager as the chief of the local administration executed the operative management of the municipality. Both leading officials were elected by the local council. In 1999, this parliamentary system was replaced by a presidential system: the functions of the city manager and mayor were conjoined, and direct elections of mayors were introduced.

The county level was treated analogously: the former functions of an honorary county administrator and an operating county manager were merged into one (directly elected county administrator). Hence, former accountabilities in *both* government and supervision have vanished. This is especially true for the case of short-term debt because the function held responsible for short-term borrowing (city managers) and its supervision (county managers) no longer exist. Hence, the electoral chances of the candidates running for the newly created mayors' offices in 1999 cannot be driven by their own previous local budget performance.[8]

4.2 Data

The dataset includes all 427 local governments (373 municipalities, 31 counties and 23 urban municipalities) of North Rhine-Westphalia for the main period of interest from 1999 to 2004 (2,562 observations). Later on, I extend the dataset to 2012 to control for the long-term robustness of the findings

[8] Some of the mayoral candidates in 1999 had previously been a part of local politics as members of the local council or had served as honorary mayors. However, they could not influence short-term borrowing in these positions. Only 27.3 % of all elected mayors in 1999 previously served as city managers and may have issued short-term debt. However, one out of four of these mayors has not been affiliated with a political party [GEHNE (2000)]. In addition, the reform of the electoral system and of the competences of the local politicians in 1999 has been that massive, that former short-term debt performance should not have an impact on the first election outcomes.

(5,978 observations). Financial and socio-demographic data are provided by the AGENCY OF INFORMATION AND TECHNOLOGY OF NORTH RHINE-WESTPHALIA (2013, 2014) and the FEDERAL EMPLOYMENT AGENCY (2013); data on local election outcomes and officeholders are taken from the MINISTRY OF THE INTERIOR OF NORTH RHINE-WESTPHALIA (2014), and some are hand-collected. Financial data were deflated by a uniform GDP deflator for North Rhine-Westphalia to generate real-term data in 2012 prices [REGIONAL ACCOUNTS VGRDL (2014)].

Public deficits are measured as the absolute annual change of the level of debt (net borrowing) per capita. Financial data comprise only deficits of the core budget of local governments; deficits of extra budgets are not covered.[9] For robustness exercises, I also use the short-term and long-term loan finance quotient (ratio of short-term or long-term net borrowing and total spending) as an alternative measure of annual public deficits. The five main variables of interest, the measures of being a left-wing, right-wing or non-partisan local government and being subject to a left-wing or right-wing supervisory authority,[10] are coded binary because of a clear left-right classification of the parties in office.[11] Hence, I can compute a co-partisanship dummy equal to 1 if the local government and its supervisor belong to the same ideology (either right-wing or left-wing) and do not face problems related to measuring the degree of alignment between different government layers [SOLÉ-OLLÉ and SORRIBAS-NAVARRO (2008), LETELIER (2011)].

4.3 Descriptives

Table 2 presents some summary statistics up to 2004 [for the period up to 2012 see the Appendix]. On average, short-term debt rises by 21 Euro in real terms per capita per year, while long-term debt increases by less than 4 Euro per capita on average. In most cases, local governments in North Rhine-Westphalia have been led by mayors of right-wing parties (68 %). Left-wing mayors account for 20 %,

[9] This data restriction should not change the results for short-term debt substantially because core budget short-term debt accounts for 99.5% of total local government short-term debt in North Rhine-Westphalia in 2012 [FEDERAL STATISTICAL OFFICE (2013a)].
[10] There has been no non-partisan supervisors between 1999 and 2012.
[11] The conservative CDU and the liberal FDP are treated as “right-wing”, the social democratic SPD and the Green Party (Bündnis 90/Die Grünen) are treated as “left-wing” parties. In addition, there are also non-partisan mayors. The partisan variable of the mayor or county administrator is coded by her party if she was in office for the whole year. In cases of leadership changes during the year, borrowing is treated as still determined by her predecessor to ensure a correct accountability for the annual deficit.

non-partisan mayors for 12 % of all cases. In 64 % of all observations, the head of the local government and her supervisor (county or district administrator) belong to the same party (co-partisanship).

Table 2: Descriptives (1999–2004)

	Mean	*Min.*	*Max.*	*Std. Der.*
Short-term deficit (Euro per capita[a])	21.01	-1,133.50	1,564.90	100.34
Long-term deficit (Euro per capita[a])	3.52	-2,214.60	943.23	135.09
Short-term loan finance quotient (%)	0.93	-34.31	47.28	4.40
Long-term loan finance quotient (%)	0.16	-78.77	45.64	6.71
Right-wing government	0.68	0.00	1.00	0.46
Left-wing government	0.20	0.00	1.00	0.40
Non-partisan government	0.12	0.00	1.00	0.32
Co-partisanship	0.64	0.00	1.00	0.48
Right-wing government $\times$ *Co-partisanship*	0.59	0.00	1.00	0.49
Left-wing government $\times$ *Co-partisanship*	0.05	0.00	1.00	0.22
Population (in 1,000 inhabitants)	67.14	4.26	969.71	117.95
Unemployment (per 1,000 capita)	35.91	16.45	81.06	9.72
State grants (Euro per capita[a])	223.30	-79.62	695.00	136.56
Share of industrial employees	0.28	0.00	0.72	0.16
Share of in-commuters	0.54	0.15	0.83	0.13
Fragmented council	0.23	0.00	1.00	0.42
Mayor-affiliated council (absolute majority of mayor's party[b])	0.61	0.00	1.00	0.49
Swing local government	0.38	0.00	1.00	0.48
Short-term deficit of the supervisory authority (Euro per capita[a, c])	1.05	-112.14	51.43	11.04

Notes: a) Financial data in 2012 prices. b) Partisan majorities only. c) Municipalities only (without counties and urban municipalities).

Source: Own calculations. Data: AGENCY OF INFORMATION AND TECHNOLOGY OF NORTH RHINE-WESTPHALIA (2013, 2014), FEDERAL EMPLOYMENT AGENCY (2013), MINISTRY OF THE INTERIOR OF NORTH RHINE-WESTPHALIA (2014).

Beside partisan issues, socio-demographic effects may also drive local deficits. First, in cases of high unemployment rates, local governments have to bear additional social expenditures while receiving fewer tax revenues. I include a pseudo-unemployment rate (unemployed per 1,000 capita) as a proxy for the extent of local labor market problems.[12] Second, local governments' finance may differ in size. Larger municipalities are said to run higher expenditures per capita than smaller municipalities, e.g., because of rising crowding costs [WILDASIN (1986)]. To control for this additional source of deficits, I include the population size. Third, declining intergovernmental grants from higher levels of government may force local governments to issue debt if other sources of revenues are depleted. Therefore, the estimations contain the received intergovernmental grants from the state government (*Schlüsselzu-*

[12] At the municipal level, the usual unemployment rate is not available.

weisungen). Fourth, the far-reaching structural change in the densely populated Ruhr district has not yet been completed. Supporting the shift of the local economy from coal and other heavy industries to services may cause additional local government spending and deficits. I add the share of industrial employees as a proxy for this specific economic condition. Lastly, spillover effects may force local governments to run deficits. For instance, in-commuters cause additional public expenditures but only partially contribute to local governments' revenues because the wage tax has to be paid at the place of residence. The share of in-commuters of all employees that have their workplace in the local government covers this potential deficit-forcing channel.

Further variables account for further political economy theories. Following the weak government hypothesis, one may expect a deficit-increasing effect of a fragmented council [ROUBINI and SACHS (1989)]. Therefore, I add a dummy that equals 1 if neither right-wing nor left-wing parties hold an absolute majority in the local council (fragmented council) and 0 otherwise. I also set out a dummy variable that measures whether a mayor's party holds an absolute majority in the local council. This was true for 61 % of all cases between 1999 and 2004 [Table 2]. The impact of this variable is not obvious: if the mayor can rely on a majority in the council, it might be easier for her to establish fiscal consolidation and deficit reductions. At the same time, the system of checks and balances among the executive and legislative branch of local government is weak, and a higher level of borrowing may arise. Tight political races in swing municipalities can also drive deficits. Debt may provide extra resources for the mayor to "buy" the decisive swing votes. To control for this hypothesis, I add an ex-post variable that equals 1 if the party holding the mayor's office changed between 1999 and 2012 as a proxy for "long-term" swing municipalities [similarly LARCINESE et al. (2006)]. Lastly, one may suspect a "debt shift" from higher to lower local government levels [KIEWIET and SZAKALY (1996)]. A county administrator can lower her own deficit by raising municipal contributions for the county's budget while giving them the allowance to issue debt. Thus, I control for this possibility by integrating the deficit of the supervisory authority.

4.4 Regression design

The estimation of a Random effects (RE) model is most appropriate because the political economy variables remain constant between 1999 and 2004 in almost all local governments. LETELIER (2011) also estimates a RE model, as he faces the same data restrictions. The p-value of the Hausman test of the baseline specification of 0.27 gives further confidence for the choice of RE. Estimates are computed as proposed by SWAMY and ARORA (1972). To separate the partisan and co-partisan effects, I choose an interaction term setting that will be discussed in more detail below. The baseline model is specified in (1):

$$D_{it} = \alpha + \beta_1 L_{it} + \beta_2 C_{it} + \beta_3 L_{it} C_{it} + \sum \theta_k X_{kit} + \tau T_t + \gamma G_i + \mu_i + \varepsilon_{it} \tag{1}$$

D_{it} measures the short-term deficit of local government i in year t. The regression comprises a set of k control variables (X),[13] year dummies (T) and dummies for the different types of local governments (G). Due to stationary concerns, socio-demographic and fiscal controls are employed in first differences, although the results do not change substantially in comparison to estimations in levels. L_{it} equals 1 if the mayor is affiliated with a left-wing party and 0 otherwise.[14] C_{it} is equal to 1 in cases of co-partisanship. The interaction term $L_{it} C_{it}$ captures the case of left-wing co-partisanship. This set of dummies covers all possible cases of relationships between supervised and supervisor and allows to test of the three guiding hypothesis introduces above [Table 3].

Table 3: Calculating the effects of partisanship in government and supervision

1999–2004		Supervisory authority	
		Left-wing	*Right-wing*
Local government	*Left-wing*	$\beta_1 + \beta_2 + \beta_3$	β_1
	Right-wing	0	β_2

Source: Own figure.

Right-wing governments under left-wing supervision represent the base category, while β_1 measures the converse constellation. β_2 gives the marginal effect for a right-wing co-partisan relationship; the

[13] This also comprises a dummy for non-partisan governments.

[14] In 1999, about 97 % of all partisan mayors have been a member of their nominating party [data based on GEHNE (2000)]. However, also the small amount of mayors who are not party members may show loyalty to their nominating party given the vital party competition in North Rhine-Westphalia.

sum of the coefficients β_1, β_2 and β_3 captures left-wing co-partisanship. For formalization purposes, one should recall the hypotheses introduced above. Hypothesis 1 states that left-wing governments run higher deficits than right-wing governments. If this case, each term of the first row in Table 3 ($\beta_1 + \beta_2 + \beta_3$ respectively β_1) should be larger than its counterpart in the second row (zero and β_2):

$$\beta_1 + \beta_2 + \beta_3 > 0 \text{ and } \beta_1 > \beta_2 \tag{2}$$

Subtracting β_2 from both sides of the second condition yields:

$$\beta_1 + \beta_2 + \beta_3 > 0 \text{ and } \beta_1 - \beta_2 > 0 \tag{3}$$

If co-partisanship matters (Hypothesis 2), local governments' deficits under "buddy supervision" should be higher than those under adversary supervision, independent of a left-right affiliation. Hence, coefficient β_2 should be greater than zero (right-wing co-partisanship), and the term $\beta_1 + \beta_2 + \beta_3$ should be significantly greater than β_1 (left-wing co-partisanship). Because one can subtract β_1 on both sides of the first condition, (4) shows the formalization of Hypothesis 2:

$$\beta_2 + \beta_3 > 0 \text{ and } \beta_2 > 0 \tag{4}$$

Conversely, if political values dominate co-partisanship in supervision, a "bully" ideological supervisor force her political attitude on the issue of debt independently of the party of the supervisee (Hypothesis 3). Formally, this leads to (5) that competes with (4):

$$\beta_2 + \beta_3 > 0 \text{ and } \beta_2 < 0 \tag{5}$$

The results for the question of partisan or co-partisan oversight policy are mainly driven by the sign of β_2 and $\beta_2 + \beta_3$. If the signs of these terms point in the same direction, the hypothesis of a co-partisan "buddy" behavior can be confirmed. If there is a significant but different sign, evidence of a partisan "bully" behavior is found.

5. Results

5.1 Baseline results

The results of the basic model specification without control variables are shown in Column 1 of Table 4. Models 2 and 3 comprise additional variables. Because I employ the deficit as the annual change of the debt stock, a positive sign indicates higher deficits and lower surpluses; a negative sign shows greater fiscal discipline. The coefficient for the interaction term $(L \times C)$, β_3, is statistically significant and greater than zero at the 1 % level in all settings. Conversely, β_2 is smaller than zero and significant at the 5 % level. The coefficient for left-wing governments (β_1) also differs significantly from zero and is always greater than β_2. The inclusion of additional controls does not change the signs or magnitudes of any coefficient of interest. Non-partisan governments for which ideological or party channels are missing do not significantly differ in issuing debt in all settings.

Table 4: RE regression results (baseline)

Dependent variable: Short-term deficit	(1)	(2)	(3)
Left-wing government (L)	-24.02**	-25.63**	-24.87**
	(11.89)	(12.16)	(12.17)
Co-partisanship (C)	-28.12***	-27.29**	-26.48**
	(10.88)	(10.73)	(10.74)
Left-wing government × Co-partisanship $(L \times C)$	61.08***	61.85***	60.66***
	(17.55)	(17.42)	(17.45)
Non-partisan government	-16.28	-17.63	-16.53
	(12.22)	(12.95)	(12.96)
Δ*Population*		-2.05	-2.76
		(3.07)	(3.08)
Δ*Unemployment*		0.95	1.00
		(0.77)	(0.77)
Δ*State grants*		-0.08**	-0.08**
		(0.03)	(0.03)
Δ*Share of industrial employees*		34.51	34.92
		(53.94)	(53.78)
Δ*Share of in-commuters*		-68.11	-63.57
		(181.90)	(181.30)
Fragmented council		10.54	10.64
		(6.65)	(6.64)
Mayor-affiliated council		3.30	4.19
		(7.21)	(7.21)
Swing		8.63**	8.56**
		(4.27)	(4.27)
Long-term deficit			-0.05***
			(0.01)
Period	1999-2004	1999-2004	1999-2004
Time dummies	YES	YES	YES
Non-partisan mayors (or county administrators) included	YES	YES	YES
Counties and urban municipalities included[a]	YES	YES	YES
Obs.	2,562	2,562	2,562

Notes: Standard errors in parentheses. Significance levels: *: p<0.1; **: p<0.05; ***: p<0.01. a) Group dummies included.

Source: Own calculations.

However, as one cannot interpret the regression results of the interacted variables themselves, I also calculated the effects, as proposed in Table 3. The first matrix in Table 5 shows the results for the period from 1999 to 2004. Partisanship matters to government as well as to supervision: While left-wing governments run higher short-term deficits than right-wing governments, governments under left-wing supervision run even higher deficits than under right-wing supervision. The marginal effect for left-wing co-partisanship remains insignificant for the first election term due to a small number of observations. For a larger sample up to 2012, one does observe a highly significant result.[15]

[15] However, the long-run results have to be interpreted in a prudent way due to the reverse causality concerns discussed above.

Table 5: Effects of partisanship in government and supervision on short-term deficits (Euro per capita)

1999–2004		Supervisory authority	
		Left-wing	*Right-wing*
Local government	*Left-wing*	9.31 (12.03)	-24.87** (12.17)
	Right-wing	*0.00* *Base category*	-26.48** (10.74)
1999–2012		**Supervisory authority**	
		Left-wing	Right-wing
Local government	*Left-wing*	27.95*** (9.97)	-16.90* (8.89)
	Right-wing	*0.00* *Base category*	-23.51*** (7.72)

Notes: Standard errors in parentheses. Significance levels: *: p<0.1; **: p<0.05; ***: p<0.01. The calculated effects are based on Models (3) in Table 4 and Table 8.

Source: Own calculations.

All results are in line with theory on partisan behavior. As described above, local governments' revenues in North Rhine-Westphalia are constrained by both an increasingly exhausted tax base and declining transfers. Given that left-wing governments prefer higher expenditure levels, the only way to finance these additional expenditures is to issue (government) or to tolerate (supervisory authority) higher deficits. Altogether, Hypothesis 1 and 3 can be confirmed: Ideology matters and dominates the incentives to protect one's buddy. Conversely, Hypothesis 2, which proposes a deficit-raising effect of right-wing co-partisanship, can be rejected.

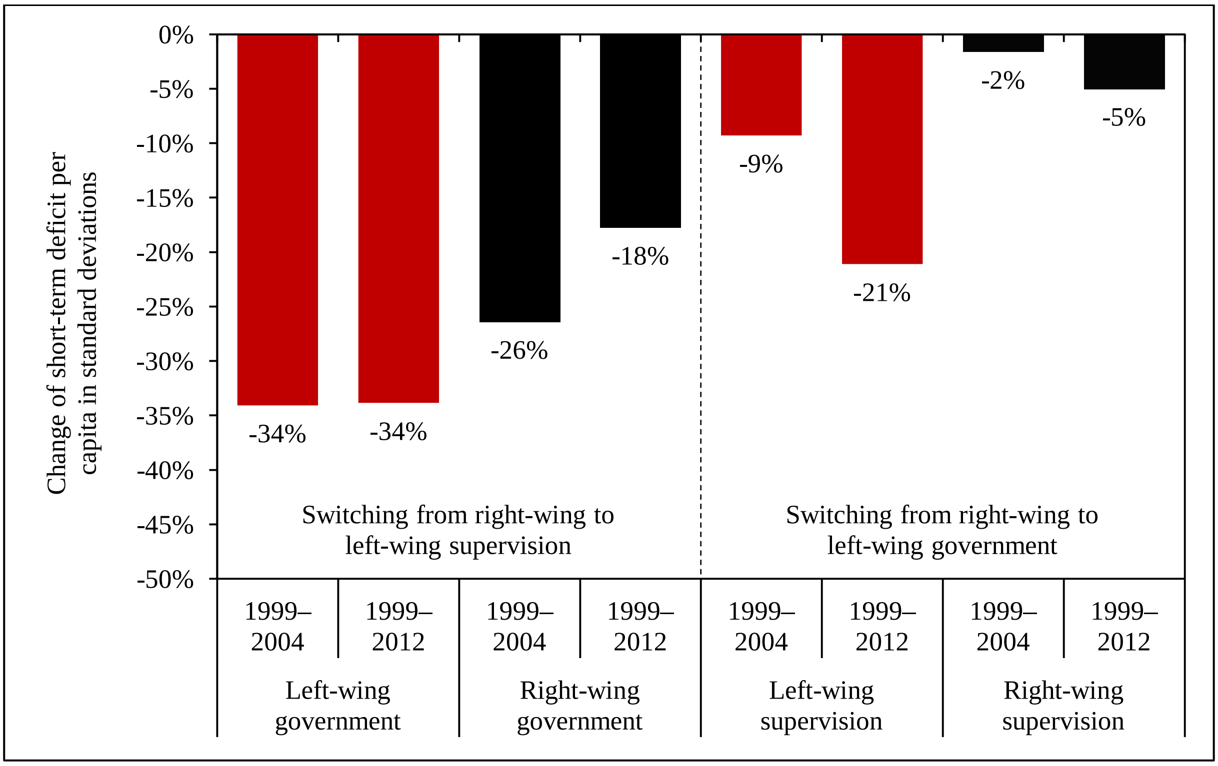
All partisan effects are substantial. Hypothetically, a left-wing government switching from a right-wing to a left-wing overseer would run a higher deficit by about one third (34 %) of a standard deviation of short-term deficits in the period from 1999 to 2004 [Figure 3, left-hand side].[16] This effect remains constant for the period from 1999 to 2012.[17] Also a right-wing government facing a left-wing instead of a right-wing overseer would run higher short-term deficits (18 % to 26 % of a standard deviation). Negative bars at the right-hand side in Figure 3 show that changing from a left- to a right-wing government would lead to higher deficits, too. Interestingly, the effects of changes in supervision

[16] Note that negative signs indicate a larger deficit. The standard deviation for the period from 1999 to 2004 is 100.34 [Table 2]. The switch of a left-wing government from a left-wing to a right-wing overseer would lower the short term deficit by 9.31 – (–24.87) = 34.18; this gives an effect of 34.18 ÷ 100.34 = 34.1 %.

[17] The calculation for the 1999 to 2012 period yields: (27.95 – (–16.90)) ÷ 132.49 = 33.9 % [figures taken from Table 5 and 7].

are quite larger and more stable over time than changes in government [left-hand side vs. right-hand side in Figure 3]. This finding points to the crucial importance to account for supervision in empirical frameworks concerning local finance in federal systems.

Figure 3: Effect of a hypothetical switch from left-wing to right-wing supervision or government (standard deviations of short-term deficit per capita)



Note: Negative signs indicate a larger deficit per capita.
Source: Own calculations.

5.2 Control variables

Almost all control variables in Models 2 and 3 in Table 4 remain insignificant. Only the coefficient that measures state grant changes is significant: A reduction of transfers reinforces deficits. The composition of the local economy, centrality issues and unemployment seem not to determine local deficits. I also do not find striking evidence of an influence of the local council.[18] Only the swing voter hypothesis can be verified.

Local governments may replace long-term debt by the more easily accessible short-term debt. Model 3 in Table 4 controls for this option. Long-term and short-term deficits seem to be weak substitutes. A drop in the long-term deficit of a single Euro leads to a modest increase in the short-term deficit of

[18] The inclusion of the shares of parties' seats in the local council does also not deliver significant results.

0.05 Euro on average. More importantly, all results for the political economy variables hold even under this specification.

5.3 Robustness checks

In addition to the integration of control variables, Table 6 comprises further robustness checks. Model 4 rules out noise from non-partisan governments, as only left- and right-wing mayors are included. All partisan results hold under this specification. The same is true for the idea of debt downshifting from the county level to the municipal level. To control for this option, I restrict the dataset to municipalities only and include the short-term deficit of the county to which a municipality belongs [Model 5]. The results do not give any significant evidence of a debt shift from the county level to the municipal level. Again, the political economy effects do not change substantially; only the co-partisan coefficient runs out of significance. Substituting the dependent variable (annual net short-term borrowing per capita) by the loan finance quotient [Model 6] leads to the same signs of all coefficients. Hence, the findings are robust to a different way of measuring deficits.

Beside the robustness checks discussed above, two additional settings give support to the findings so far. First, I extend the dataset to 2012. Some results of this extension have already been shown above [Table 5]. The appendix gives a complete overview for all RE baseline and robustness regressions discussed so far, repeated for the period up to 2012 [Table 8]. Interestingly, even in this longer period, all results for the influence of partisan variables hold.[19] Second, I use the asymmetric supervisory rules for long-term and short-term debt. As shown earlier in Section 3, long-term debt is subject to strict rules, while the regulation of short-term debt is at the discretion of the supervisory authority. Table 9 in the appendix gives the results for all regressions after substituting short-term borrowing with long-term borrowing. As expected, neither partisanship nor co-partisanship matter to long-term deficits or show any significant results.

[19] In 2011, an extensive bail-out package for municipalities in fiscal distress has been implemented by the state government (*Stärkungspakt Stadtfinanzen*). The supervision on these municipalities has switched over from the county administrator to the district administrator. However, the results hold even if one controls for supervisor's change in 2012.

Table 6: RE regression results (robustness checks)

Dependent variable: Short-term deficit[b]	(4) RE	(5) RE	(6) RE[b]
Left-wing government (L)	-26.64**	-28.01*	-0.88*
	(12.01)	(16.13)	(0.52)
Co-partisanship (C)	-27.00**	-24.93	-1.01**
	(10.57)	(15.46)	(0.46)
Left-wing government × Co-partisanship (L × C)	62.23***	39.42**	2.23***
	(17.19)	(19.07)	(0.75)
Non-partisan government		-20.52	-0.64
		(16.50)	(0.56)
Δ*Population*	-4.10	-28.85***	-0.10
	(3.11)	(8.39)	(0.13)
Δ*Unemployment*	1.19	0.72	0.05
	(0.85)	(0.66)	(0.03)
Δ*State grants*	-0.08**	-0.06**	-0.00***
	(0.03)	(0.03)	(0.00)
Δ*Share of industrial employees*	54.97	38.70	1.16
	(59.24)	(44.86)	(2.40)
Δ*Share of in-commuters*	-65.19	-109.90	-7.21
	(210.00)	(153.90)	(8.09)
Fragmented council	-0.63	14.72**	0.54*
	(8.18)	(5.89)	(0.29)
Mayor-affiliated council	-4.05	-0.89	0.04
	(8.04)	(6.61)	(0.32)
Swing	7.05	4.83	0.33*
	(4.53)	(3.76)	(0.18)
Long-term deficit	-0.07***	-0.06***	
	(0.02)	(0.01)	
Short-term deficit of the supervisory authority		0.10	
		(0.16)	
Period	1999-2004	1999-2004	1999-2004
Time dummies	YES	YES	YES
Non-partisan mayors/county administrators included	NO	YES	YES
Counties and urban municipalities included[a]	YES	NO	YES
Obs.	2,256	2,238	2,562

Notes: Standard errors in parentheses. Significance levels: *: p<0.1; **: p<0.05; ***: p<0.01. a) Group dummies included. b) Dependent variable in Model 6: Short-term loan finance quotient.

Source: Own calculations.

6. Conclusion

I investigated whether partisanship in local government politics and in state supervision has an impact on public deficits. The findings suggest that the opportunity for discretionary decisions in supervision allows partisan attitudes towards public finance coming into action. As the case of the largest German state, North Rhine-Westphalia, shows, these values of local politicians are even stronger than "buddy" relations between affiliated levels of government.

These findings draw important lessons for the ongoing debate on the optimal design and extent of state supervision. Similar to KHEMANI (2007a), GLÖCKNER and MÜHLENKAMP (2009) and SPIOTTO (2013), one may call for an independent agency or board that controls sub-national governments' deficits to avoid partisan distortions. Two other German federal states, which also suffer from local fiscal distress, adopted reforms along this consideration. In 2008, Saarland shifted all supervisory powers from the county administrator to a state agency. For municipalities in the state of Hesse, the receipt of bailout payments from the state government is linked to a supervisory change from the county to the district administrator. However, these reforms remain incomplete because the new overseers are appointed by the state government and are not immune to partisan influences, either.

Admittedly, an independent local government debt agency may suffer from a lack of democratic legitimation. Strengthening the accountability for local decisions might be a more democratic way to limit local government debt. One step could be the implementation of quasi-automatic direct democratic decisions on local budgets [FELD and KIRCHGÄSSNER (2001)]. Further research should address the question of how to construct an efficacious supervision regime that solves the trade-off between independency and democratic legitimation given the heterogeneous federal orders and traditions of different countries. A systematic cross-national study on these important issues as recommended by RATTSØ (2002) is still missing.

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Appendix

Table 7: Descriptives (1999–2012)

	Mean	Min.	Max.	Std. Der.
Short-term deficit (Euro per capita[a])	38.51	-1,133.50	1,564.90	132.49
Long-term deficit (Euro per capita[a])	-6.30	-2,214.60	2,194.30	148.93
Short-term loan finance quote (%)	1.74	-36.18	51.21	5.92
Long-term loan finance quote (%)	-0.39	-82.87	102.59	7.22
Right-wing government	0.63	0.00	1.00	0.48
Left-wing government	0.23	0.00	1.00	0.42
Non-partisan government	0.14	0.00	1.00	0.35
Co-partisanship	0.60	0.00	1.00	0.49
Right-wing government × Co-partisanship	0.54	0.00	1.00	0.50
Left-wing government × Co-partisanship	0.07	0.00	1.00	0.25
Population (in 1,000 inhabitants)	66.87	4.09	1,027.10	117.81
Unemployment (per 1,000 capita)	35.31	5.77	112.24	11.99
State grants (Euro per capita[a])	209.24	-79.62	908.54	146.09
Share of industrial employees	0.27	0.00	0.77	0.16
Share of in-commuters	0.56	0.15	0.88	0.13
Fragmented council	0.31	0.00	1.00	0.46
Mayor-affiliated council (absolute majority of mayor's party[b])	0.56	0.00	1.00	0.50
Swing local government	0.38	0.00	1.00	0.48
Short-term deficit of the supervisory authority (Euro per capita[a, c])	1.66	-112.14	163.85	21.38

Notes: a) Financial data in 2012 prices. b) Partisan majorities only. c) Municipalities only (without counties and urban municipalities).

Source: Own calculations. Data: AGENCY OF INFORMATION AND TECHNOLOGY OF NORTH RHINE-WESTPHALIA (2013, 2014), FEDERAL EMPLOYMENT AGENCY (2013), MINISTRY OF THE INTERIOR OF NORTH RHINE-WESTPHALIA (2014).

Table 8: RE regression results (long period, 1999–2012)

Dependent variable: Short-term deficit[b]	(1)	(2)	(3)	(4)	(5)	(6)[b]
Left-wing government (L)	-12.98	-16.76*	-16.90*	-16.90*	-29.72***	-0.72*
	(8.82)	(8.92)	(8.89)	(8.95)	(11.15)	(0.40)
Co-partisanship (C)	-20.28***	-23.68***	-23.51***	-22.34***	-28.84***	-0.97***
	(7.86)	(7.74)	(7.72)	(7.74)	(10.46)	(0.35)
Left-wing government × Co-partisanship $(L \times C)$	62.75***	67.97***	68.36***	67.67***	69.06***	2.56***
	(12.88)	(12.50)	(12.45)	(12.57)	(14.58)	(0.56)
Non-partisan government	-15.89*	-17.57*	-17.36*		-26.84**	-0.81*
	(9.38)	(9.99)	(9.95)		(11.71)	(0.45)
Δ*Population*		-9.35***	-9.81***	-8.97***	-47.08***	-0.35***
		(2.70)	(2.69)	(2.70)	(10.06)	(0.12)
Δ*Unemployment*		1.30***	1.31***	1.19**	1.21***	0.05**
		(0.45)	(0.45)	(0.48)	(0.46)	(0.02)
Δ*State grants*		-0.12***	-0.12***	-0.11***	-0.11***	-0.01***
		(0.02)	(0.02)	(0.02)	(0.02)	(0.00)
Δ*Share of industrial employees*		-8.38	-7.59	-5.54	-5.25	-0.39
		(36.42)	(36.43)	(38.99)	(34.87)	(1.66)
Δ*Share of in-commuters*		92.06	88.20	57.38	-57.17	-0.90
		(163.70)	(163.70)	(183.20)	(161.80)	(7.46)
Fragmented council		7.65	7.77	6.95	8.64	0.38
		(6.27)	(6.25)	(8.12)	(6.14)	(0.28)
Mayor-affiliated council		6.97	7.04	5.92	3.24	0.19
		(7.07)	(7.06)	(8.33)	(7.12)	(0.32)
Swing		6.51	6.36	7.27	2.26	0.26
		(4.90)	(4.86)	(5.32)	(4.58)	(0.22)
Long-term deficit			-0.03**	-0.04***	-0.03**	
			(0.01)	(0.01)	(0.01)	
Short-term deficit of the supervisory authority					-0.13	
					(0.08)	
Period	1999-2004	1999-2004	1999-2004	1999-2004	1999-2004	1999-2004
Time dummies	YES	YES	YES	YES	YES	YES
Non-partisan mayors (or county administrators) included	YES	YES	YES	NO	YES	YES
Counties and urban municipalities included[a]	YES	YES	YES	YES	NO	YES
Obs.	5,978	5,978	5,978	5,142	5,222	5,978

Notes: Standard errors in parentheses. Significance levels: *: p<0.1; **: p<0.05; ***: p<0.01. a) Group dummies included. b) Dependent variable in Model 6: Short-term loan finance quotient.

Source: Own calculations.

Table 9: RE regression results (long-term deficit)

Dependent variable: Long-term deficit[b]	(1)	(2)	(3)	(4)	(5)	(6)[b]
Left-wing government (L)	4.91	11.92	9.02	6.73	-13.08	0.26
	(17.54)	(18.14)	(18.17)	(18.54)	(26.70)	(0.89)
Co-partisanship (C)	15.53	13.71	10.69	9.92	-6.32	0.45
	(16.05)	(16.04)	(16.08)	(16.41)	(25.59)	(0.79)
Left-wing government × Co-partisanship $(L \times C)$	-13.72	-21.44	-14.49	-13.46	24.98	-0.51
	(25.89)	(26.05)	(26.13)	(26.73)	(31.42)	(1.28)
Non-partisan government	8.47	18.09	16.06		-8.34	0.21
	(18.02)	(19.27)	(19.29)		(27.30)	(0.95)
Δ*Population*		-14.90***	-15.04***	-15.93***	-25.01*	-0.57**
		(4.46)	(4.45)	(4.49)	(13.50)	(0.22)
Δ*Unemployment*		0.89	1.00	1.11	1.47	0.06
		(1.08)	(1.07)	(1.15)	(1.02)	(0.05)
Δ*State grants*		0.01	0.00	-0.03	-0.01	0.00
		(0.04)	(0.04)	(0.05)	(0.04)	(0.00)
Δ*Share of industrial employees*		12.32	16.03	28.35	40.07	0.22
		(75.70)	(75.47)	(79.83)	(69.88)	(3.78)
Δ*Share of in-commuters*		74.56	68.15	282.00	32.22	0.40
		(255.20)	(254.40)	(282.80)	(239.80)	(12.73)
Fragmented council		0.93	2.07	-4.85	-3.00	-0.24
		(9.67)	(9.67)	(11.82)	(9.53)	(0.48)
Mayor-affiliated council		14.86	15.10	8.30	4.95	0.38
		(10.43)	(10.41)	(11.48)	(10.60)	(0.52)
Swing		-1.67	-0.71	-4.05	3.96	-0.02
		(6.38)	(6.39)	(7.02)	(6.23)	(0.31)
Short-term deficit			-0.11***	-0.13***	-0.15***	
			(0.03)	(0.03)	(0.03)	
Long-term deficit of the supervisory authority					-0.03	
					(0.09)	
Period	1999-2004	1999-2004	1999-2004	1999-2004	1999-2004	1999-2004
Time dummies	YES	YES	YES	YES	YES	YES
Non-partisan mayors (or county administrators) included	YES	YES	YES	NO	YES	YES
Counties and urban municipalities included[a]	YES	YES	YES	YES	NO	YES
Obs.	2,562	2,562	2,562	2,256	2,238	2,562

Notes: Standard errors in parentheses. Significance levels: *: p<0.1; **: p<0.05; ***: p<0.01. a) Group dummies included. b) Dependent variable in Model 6: Long-term loan finance quotient.

Source: Own calculations.

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