English Bacon: Copartisan Bias in Intergovernmental Grant Allocation in England

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The literature on distributive politics suggests that politicians have incentives to engage in targeted spending especially in decentralized political systems with weak parties and candidate-centered elections. We argue that in centralized political systems with party-centered elections parties use intergovernmental transfers to advance their electoral fortune via performance spillovers across different levels of government. On the basis of a new data set on partisan composition of local councils in England and grants allocated by the central government during 1992–2012, and using a difference-in-difference approach, we provide evidence that governments allocate up to 17% more money to local councils controlled by their "own" party. Furthermore, we show that the effect is strongest closer to local election years, in local councils where institutions facilitate credit claiming, and in swing councils.

The distribution of particularistic benefits in return of votes has been extensively studied in political science, especially in the context of the United States, providing vast evidence for strategic spending (Berry, Burden, and Howell 2010; Cox and McCubbins 1986; Ferejohn 1974; Levitt and Snyder 1995; Shepsle and Weingast 1981; Weingast, Shepsle, and Johnsen 1981). Pork barrel politics in the United States is typically explained by a common-pool resource logic: individual legislators who care about their (re)election chances have incentives to demand more money for local projects than is socially optimal because the benefits from those projects accrue to the district whereas the costs are shared among all districts (Ferejohn 1974; Shepsle and Weingast 1981; Weingast et al. 1981). The argument hinges on the assumption of weak parties and candidate-centered elections: under these conditions legislators first and foremost represent their individual districts, they are held accountable independent of the general performance of their party, and bargaining over distribution is not coordinated by centralized institutions such as parties or leaders who internalize the full costs of the projects.

Strong parties and party-dominated elections, however, mitigate this common-pool resource problem as the party in government fully internalizes the costs of local projects and individual legislators do not have a personal vote independent of their party. However, we argue that in these settings a different form of pork barrel politics emerges; that is, government parties strategically allocate resources to copartisans at lower levels of government in order to advance their electoral fortune.

The previous work on distributive politics outside the United States is limited and mostly confined to countries with federal systems of government (e.g., Brollo and Nannicini 2011; Denemark 2000; Solé-Ollé and Sorribas-Navarro 2008). However, geographical redistribution via local governments might be equally or even more important in unitary systems of government, where local governments are constitutionally and financially dependent on the central

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government.[1] This is especially the case in Westminster democracies that are characterized by centralized governments, executive power that is often concentrated in one-party governments, and highly disciplined parties (Kam 2009; Lijphart 2009).

Knowledge of how partisan considerations affect distribution via local governments in these political systems is important for at least two reasons. First, understanding why some geographical areas are politically important may help explain why similar geographical areas develop along very different paths. Second, understanding whether and how parties distribute resources to their own advantage is crucial for designing better policies that are not distorted by partisan goals.

In this article, we focus on the allocation of central government grants in England because it highlights the key features of a unitary system of government with centralized party organizations, strong party leaders and whips, and disciplined members of Parliament (MPs) with limited individual bargaining power.[2] Further, in the media and among scholars of British politics, it is well known that "each administration since the late 1970s has been accused of political manipulation of the grant system" (Gibson 1998, 646). However, apart from anecdotal evidence, our current knowledge is restricted to two studies that are based on cross-sectional evidence from a selected set of local councils (John and Ward 2001; Ward and John 1999).

We argue that an important distributive strategy for government parties in unitary, strong-party systems is to allocate more resources to copartisans at the local level. This behavior is explained by the positive externalities created by a party that performs well at the local level. In particular, we argue that voters' assessment of the party's performance at one level spills over and affects the assessment of the party's performance at other levels of government.

To test whether central governments in England allocate more money to copartisans at lower levels of government, we collected a new data set with yearly information on (1) partisan control of all 466 local councils in England during 1980–2013 and (2) various central government grants allocated to local councils during 1992–2012.[3] On the basis of the new data, and using a difference-in-difference approach, we show that parties in power favor local councils controlled by their own party. The results, robust across a number of different econometric specifications, indicate that, on average, parties in government allocate up to 17% more money to their "own" local councils. Furthermore, we analyze the heterogeneity in the estimated effect and show that the effect is largest immediately before local elections, in local councils where institutions facilitate political credit claiming, and in swing councils.

The article proceeds as follows. First, we discuss why the party in government would have incentives to allocate more money to copartisans at lower levels of government, drawing on the major debates in the literature on this subject. Then, we briefly describe the local government system in England. Next, we describe how we collected the new data and outline our identification strategy. After that, we present our main results and a number of additional results to support our hypothesis. Finally, we conclude with a short discussion.

WHY ALLOCATE MONEY TO COPARTISAN LOCAL COUNCILS?

Unlike weak party systems where individual legislators cultivate a personal vote by allocating more resources to their districts, in strong party systems the electoral strategies are determined by parties that have an incentive to win as many national votes as possible to increase their parliamentary representation (Denemark 2000). But how do the government parties achieve this goal?

We argue that in a system like England where local governments are mainly funded by the central government, strong parties have an incentive to allocate extra resources to their "own" local councils. The reason for this strategic behavior is that voters' assessment of the party's performance at one level spills over and affects the assessment of the party's performance at other levels of government (Bloch and John 1990; John and Ward 2001; Rodden 2006). For example, in England, it has been documented that voters living in Tory-controlled flagship local authorities that were favored in the provision of public services in 1992 have electorally rewarded the government party (Curtice and Steed 1992). The positive externalities associated with a party's performance at the local level reinforce the view of parties as "brands," which suggests that even if voters are not aware of the central government grants, it would still be in the interest of the party in government that lower-level copartisans perform well because voters would in general have a positive evaluation of the party.

It is noteworthy that increased allocations to aligned councils before local elections might also result in electoral

1. For a comparison of the intergovernmental grants as a share of local government revenue across countries, see, e.g., OECD (2009).

2. We leave out Scotland, Wales, and Northern Ireland from the analysis, as in these areas the financing of local authorities is the responsibility of the devolved administrations. Furthermore, in determining the total amount of funds to be allocated to the devolved administrations, the UK central government uses the Barnett Formula, which is based on increases in public spending in England. This in turn complicates the modeling of strategic grant allocation in these areas (Adam, Emmerson, and Kenley 2007).

3. The data will be made publicly available upon publication.

spillovers in addition to performance spillovers. Accordingly, one would expect that good electoral outcomes at one level might foster good electoral outcomes at other levels of government. This may be explained by the benefits associated with being in office: elected officials give the party a platform that they can exploit in other elections. For example, a mayor can help a copartisan parliamentary candidate attract media attention. Furthermore, an electoral momentum could mean that good performance in recent elections spills over to current elections (e.g., Ansolabehere and Iyengar 1994).

When the same party holds the majority both at the central and the local level, it is also easier for the government parties to claim credit for the services provided at the local level and voters who are aware of the government grants to reward good performance by the incumbent party in the next election (or to punish bad performance). If, however, different parties control the local and central government, it is less clear whom the voters should reward (or punish) due to shared responsibilities across different levels of government. Therefore, we hypothesize that partisan alignment between the local and central government leads to an increase in the grants allocated at the local level.

There are several implications of this hypothesis that we explore in the empirical section: first, if government parties want to benefit from positive externalities and also claim credit, they need to keep the control of the local councils of their own party. Assuming that voters are to some extent myopic and discount previous performance more heavily compared to the local council's current performance, one would expect government parties to deliberately allocate more goods and services to copartisan councils immediately before local election years to help them win and keep their majority status.[4] It has been argued that giving more money to local authorities before local elections creates a "mini political business cycle" (John and Ward 2001, 318). We expect this effect to decrease as we are further away from the next elections.

Second, in order to benefit from positive performance spillovers and claim credit for the services provided at the local level, the government parties would want to allocate more money to councils where it is easier to benefit from performance spillovers and claim credit. In England some councils elect all of the councillors every four years, whereas some others elect half of the councillors every two years or a third of the councillors every year. In councils that hold elections every four years, there is certainty about the majority party at least for the next four years. But, in councils that use staggered elections there is the possibility that the majority will switch from one party to the other over the next four years. Therefore, we expect government parties to strategically allocate more resources to aligned councils that hold elections every four years than those that hold elections more frequently.

Third, performance spillovers and credit claiming by the government party for the services provided will also be higher if the services provided by the local councils are easily discerned by the voters. Therefore, we expect government parties to engage in strategic allocation of grants in areas that provide more citizen-focused services such as education, transportation, social services, and police. Indeed, in England, the county councils cover large areas and provide most of the citizen-focused services, whereas the district councils cover smaller areas and provide more administrative services such as tax collection or provide services that affect smaller number of citizens such as council housing and cemeteries. Thus, we expect more grants to be allocated to aligned county councils as opposed to aligned district councils.

Finally, since government parties are mainly motivated by increasing their vote share, we expect that they will strategically allocate more money to areas that have a higher impact on their overall electoral performance. This suggests that councils that are both aligned with the government party and electorally vulnerable—which we call swing councils—will be prioritized in the allocation of grants when these are compared to the aligned but electorally safe councils.

LOCAL COUNCILS AND GOVERNMENT GRANTS IN ENGLAND

Local government in England is characterized by a multitiered structure.[5] In some areas, local government has a two-tier system in which responsibility for providing pub-

4. We would also expect that the government would allocate more resources to a local council closer to the general election. This would allow us to directly test the "party brands" theory. Accordingly, if voters' assessment of the party's performance at the lower level affects the assessment of the party's performance at the national level, one would expect the central government to allocate more resources to aligned local councils closer to the general election. However, in the United Kingdom, unlike the local elections, the general elections are not held at fixed points and the prime minister can strategically call an early election. This raises the possibility of reverse causality. Put differently, it might be the case that rather than increasing grants to local councils before an election, the prime minister can choose to hold elections when he can increase funding.

5. We focus on England and exclude the other countries in the United Kingdom because the grant allocation system is fundamentally different in Scotland, Wales, and Northern Ireland. In particular, many central government grants are channeled through the regional parliaments in Scotland, Wales, and Northern Ireland. In England, however, grants flow directly from the central government to the individual local governments. This makes England particularly suitable for testing our hypotheses.

lic service is shared between county councils and district councils. In others, there is a one-tier system that is responsible for all public services.[6]

Local councils are managed by councillors who are elected by the people living in their local councils.[7] All political decisions regarding taxes, spending, and management are taken by the local council, and council decisions must be supported by a majority of the councillors. Although the political agenda at the local level differs from the national agenda and leaves room for single-issue parties and local party lists, more than 90% of councillors are affiliated with one of the three major national parties: the Labour Party, the Conservative Party, and the Liberal Democrats. In general, local council politics in England is characterized by fairly strong party discipline, and "political decision-making at the local level is party-based political decision-making" (Copus 2004, 178; 2008).

Councillors are elected in periodic elections every four years using plurality rule in single- and multimember districts. As we discussed earlier, in some local councils all of the councillors are elected every four years, in others only half of the councillors are elected every two years, and in the remaining councils a third of the councillors are elected every year for three years with no elections in the fourth year.[8]

Party affiliation is probably the most important cue available to voters when they cast their vote (Bartels 2000; Kam 2005; Miller and Shanks 1996). We would expect the effect of party affiliation on voting behavior to be felt stronger in Westminster democracies, where local elections act as opinion polls on the central government party (Miller 1988; Rallings, Thrasher, and Denver 2005).

The central government plays a key role in the funding system of local councils and is responsible for the statutory framework for the services they deliver (see, e.g., National Audit Office 2013). Local councils account for a quarter of all public spending (Department for Communities and Local Government 2013a) and are funded by a combination of grants from the central government, council tax, and other locally generated income, which includes fees and charges for services and rents on council housing.[9]

Central government grants can be divided into two broad categories: Formula Grants and Specific Grants.[10] Formula Grants are calculated on the basis of a formula that takes into account the local councils' socioeconomic and demographic characteristics as well as their ability to raise income through council tax.[11] Councils can spend Formula Grants as they see fit.

Specific Grants, also known as targeted grants, comprise grants associated with particular projects and are allocated to local councils by individual government departments according to specific policy criteria rather than a general formula (Department for Communities and Local Government 2013a). They consist of both ring-fenced grants (i.e., grants with certain conditions attached, which local governments can only use for purposes specified by the government) and non-ring-fenced grants (i.e., grants with no conditions attached).[12]

During the period under study, more than 60% of local government's total gross income (£162 billion in 2011–12) was in the form of government grants, and Specific Grants account for approximately 45% of the total grants, as of

6. Councils in this latter category include unitary authorities, metropolitan district councils, and London borough councils as well as the Greater London Authority. Before the restructuring of local government in 2009, there were a total of 34 county councils split into 238 district councils, as well as 47 unitary authorities, 36 metropolitan district councils, 32 London borough councils, and the Greater London Authority. In 2009, a number of counties turned into unitary authorities, hence decreasing the number of county councils and district councils to 27 and 201, respectively, and increasing the number of unitary authorities to 56 (Office for National Statistics 2015). Changing the local government structures and boundaries could potentially make it easier for the government to funnel money toward copartisans. In the online appendix, we show how the estimated effect varies across councils that underwent structural or boundary changes relative to unaffected councils. The evidence is suggestive that changes in the system do not disadvantage the party in power.

7. Note that local councils are also referred to as local authorities.

8. For a more detailed discussion of the multimember plurality system used to elect local councillors in Britain, see, e.g., Eggers and Fouirnaies (2014).

9. Council tax, which is set and raised by the local councils on the basis of their overall budget for the year, and other locally generated income are outside the scope of this article.

10. From 2008 to 2011 a new grant called the Area Based Grant was distributed to local councils as an additional revenue. It was allocated according to specific policy criteria rather than a general formula. Also, from 2011 to 2012 a new non-ring-fenced general grant called the Local Services Support Grant was set up (Department for Communities and Local Government 2013b).

11. Formula Grants have three components: (1) Redistributed Non-Domestic Rates, also known as Business Rates, which are property taxes on businesses and other nondomestic properties. The national rates are set by the central government, and the revenue is collected by local councils, pooled by central government, and then redistributed again to local councils; (2) Revenue Support Grants; and (3) Police Grants, which are allocated by the Home Office to fund police authorities (Department for Communities and Local Government 2013a).

12. One example of Specific Grant is the Dedicated Schools Grant, which is a ring-fenced grant introduced in 2006. It provides the majority of funding for education. Other examples include Urban Bus Challenge and Kickstart Grant, Homelessness Grant, and Neighborhood Renewal Fund (see Finance and General Statistics, 2007–8, available at http://www.cipfastats.net/general/financegeneral/).

2012 (Department for Communities and Local Government 2013a). These figures indicate that grants to local councils are an important source of revenue, and small changes in their allocation across constituencies can create big differences in the services delivered to citizens or to the level of taxation (Ward and John 1999).

The finance of local councils is controlled by the government party, and the opposition party has no control over the national budget. The Department for Communities and Local Government is the lead department for local government funding. An announcement about government funding to local councils is usually made in December each year and finalized early in the new year after consultation with representatives of local governments (Local Government Association 2015). While Specific Grants are not part of the settlement process, their announcement is also made alongside the local government finance settlement. The composition of Specific Grants changes over time on the basis of the shifts in the governments' priorities. The government can manipulate the allocation of resources to local councils by either fine-tuning the grant allocation formula or using discretion in grants that are allocated according to policy criteria.

NEW DATA ON LOCAL GOVERNMENTS

To examine whether government parties allocate more or fewer resources to local councils that are controlled by their own party, we collected a new data set on central government grants allocated to local councils as well as the partisan control of local councils in England. The data on grants used in this study are collected from the Chartered Institute of Public Finance and Accounting (CIPFA).[13] In our analyses, we are mainly interested in the allocation of Specific Grants, since these are allocated on the basis of policy criteria rather than a formula, allowing the government party to use more discretion in their allocation.[14] The data on grants cover the years between 1992 and 2012.

The data on partisan control of local councils are collected from news sources and local governments' websites.[15] Our primary sources are BBC's various local election websites and old copies of the newspaper *The Guardian*. In addition to the majority party status, the final data set includes data on the characteristics of the local councils and electoral institutions (staggered or nonstaggered elections) for each local council in England as coded in the aftermath of a local election during 1980–2012.

Each observation in our data set is uniquely identified by a council year. The final data set consists of 466 local councils that we observe from 1992 to 2012; in total, this gives us an unbalanced panel with approximately 7,500 local council-year observations.[16] We report descriptive statistics for the key variables in the online appendix.

DIFFERENCE-IN-DIFFERENCE DESIGN

The first question that we ask is, Do government parties, on average, allocate more money to local councils in which copartisans control a majority of the seats? In equation (1), we define the alignment variable that indicates whether local council i in year t received the "partisan alignment treatment."

$$\text{Copartisan}_{it} = \begin{cases} 1 & \text{if majority}_{it} \in \mathcal{G}_t \\ 0 & \text{otherwise} \end{cases}, \qquad (1)$$

where majority_{it} is the party that holds a majority of the seats in council i at time t, and $\mathcal{G}_t$ is the set of parties that are in government at time t. As an illustration, consider Amber Valley district council: in the local election in 1999, the Labour Party maintained the majority of the seats, and we classify the council as "aligned" because the Labour Party was in government in 1999. After the local election in 2000, where the Conservative Party won the majority of the seats in Amber Valley, the council switches status to "nonaligned."

Figure 1 shows the variation in alignment status from 1992 to 2012. The dark (light) columns represent the number of nonaligned (aligned) councils within a given year, and the line indicates the number of council elections. The variation in the alignment status comes from two sources: changes in the party in government and changes in the partisan control of local councils after local elections.[17] In

13. Finance and General Statistics books published every year by CIPFA (available at http://www.cipfastats.net/general/financegeneral/) provide data on Specific Grants and Formula Grants in each local council.

14. We particularly focus on Specific Grants within Aggregate External Finance, which designate the main nonhousing revenue stream. Specific Grants outside Aggregate External Finance, a separate category of grants, are usually allocated through third party agencies and are not used to pay for the councils' core services (Devon County Council 2007).

15. In order to minimize errors stemming from incorrect information reported in the news, we confirmed the coding of our variable using information from multiple sources whenever possible. In the few cases in which there is inconsistency between our sources, the party majority variable is coded as missing. This only occurs in six council elections.

16. Whenever there is a local government reorganization (e.g., some councils changed from a two-tier structure to unitary authorities in 2009), we treat observations before and after the reorganization as separate units.

17. In the online appendix, we show that the estimated effects are not sensitive to the source of variation. Estimates based only on local and national variation are all in the same direction and similar in magnitude. See the online appendix for further details.

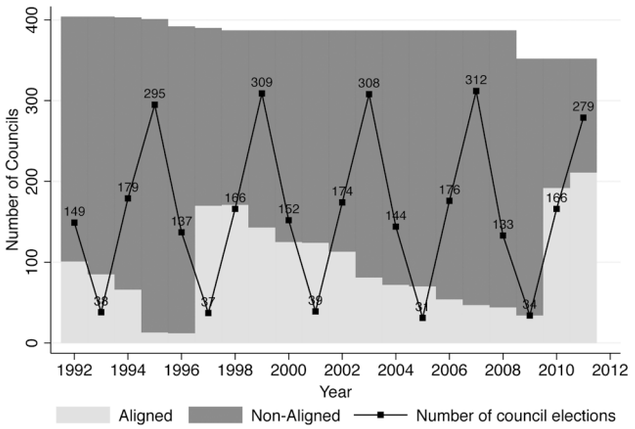

Figure 1. Aligned and nonaligned local councils

our sample, the party in government changes in 1997, when Tony Blair formed a Labour government, and in 2010 when David Cameron formed a coalition government between the Conservatives and the Liberal Democrats. Changes in the majority party status at the local level occur frequently over the studied period. Figure 1 also shows that the number of council elections varies substantially from one year to the next, and the cyclical pattern is induced by the staggered timing of the elections.

Majorities in local councils are, of course, not assigned randomly: in some areas voters have more conservative preferences, and the Conservative Party is more likely to win a majority of the votes in those areas, whereas the opposite is the case in areas where voters have preferences in favor of the Labour Party. A simple comparison of grants allocated to councils that are aligned and nonaligned could be biased due to omitted variables and reversed causation. For example, economic growth in an area is a negative determinant of grants and might be positively correlated with the voters' propensity to vote for the prime minister's party in local elections. If this is the case, the error term and alignment status of the council will be correlated, and ordinary least squares (OLS) results will be biased. To correct for this bias, we employ a difference-in-difference estimation strategy.[18]

We are interested in comparing the grants allocated at time $t + k$ to local council i controlled by the government party at time t and the counterfactual grants allocated at time $t + k$ to the same council had the council not been controlled by the government party. We exploit the changes in the partisan alignment between the majority party at the local and national level that occur at different points in time across local councils and assess the causal effect by contrasting grants allocated to councils in which the alignment status switches and councils where it remains unchanged. The difference-in-difference estimation helps us eliminate observed and unobserved differences between these two categories of councils that are constant over time and allows us to identify the average partisan alignment effect under weaker assumptions than a simple pooled OLS regression.

To illustrate the basic idea in our empirical strategy, consider figure 2, which shows the geographical variation in the alignment status over time. Looking at the four maps, we see that the alignment status switches on and off in some areas, whereas it remains constant in others. In our identification strategy, we compare changes in grants allocated to councils that switch into being aligned and changes in grants allocated to councils where the alignment status remains unchanged.

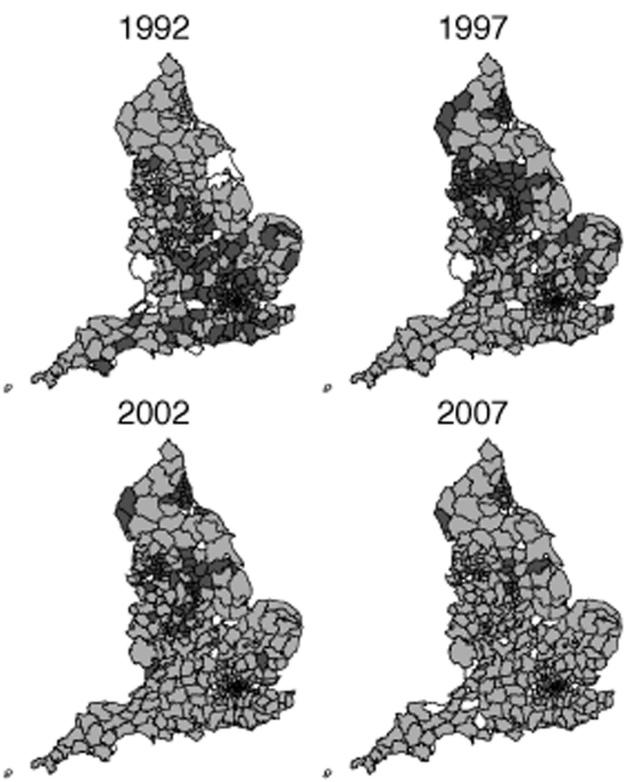

Figure 2. Geographical and temporal distribution of aligned councils. Black and gray shaded areas represent aligned and nonaligned district councils, respectively. White areas represent local councils that changed from a two-tier to a one-tier system during the period.

18. We also estimated the effects using a regression-discontinuity design in which the running variable is the government party's seat share in a local council (such that partisan alignment is "assigned" if the seat share is larger than 50%; this is a modification of the approach developed in Feigenbaum, Fouirnaies, and Hall [2014]). Both approaches produce similar results in terms of the direction of the effect and the statistical significance. The regression-discontinuity design estimates are somewhat larger in magnitude. See the online appendix for further details.

More specifically, on the basis of the panel data described above, we estimate equations of the following form using a difference-in-difference estimation strategy with OLS:

$$y_{i,t+k}^{\text{specific}} = \beta_1 \text{Copartisan}_{it} + \alpha_i + \delta_t + \alpha_i t + X_{it}\lambda + \varepsilon_{i,t+k}, \quad (2)$$

where $y_{i,t+k}^{\text{specific}}$ is the (log of) Specific Grants per capita allocated to local council i at time $t + k$ by the government;[19] Copartisan_{it} is the treatment variable as defined in equation (1), indicating the alignment between the majority party at the local level and the central government; α_i are local council fixed effects that control for mean differences in grants across local councils; δ_t are time fixed effects that control for common changes in grants over time; $\alpha_i t$ are local council–specific linear time trends;[20] X_{it} is a vector of control variables that in some specifications includes log(population) and dummies for years in the electoral cycle; and, finally, $\varepsilon_{i,t+k}$ is a disturbance term and β_1 is the coefficient of interest.[21] To estimate effects pre- and postpartisan alignment, we run separate regressions in which we vary k from -3 to 6 and record β_1 for each regression. In the online appendix we show that the results are very similar if we estimate the effects using a single regression with lags and leads instead.

The difference-in-difference estimator yields a consistent estimate under the assumption that in the absence of partisan alignment all councils would have followed the same trends. One might be concerned that the aligned and nonaligned councils were following different trends. For example, a local council might experience a positive change in its economic conditions that leads to fewer resources being allocated to the council, and this in turn might be either positively or negatively correlated with voting for the party in government. Including council-specific trends and other control variables might mitigate the problem, but one might still be concerned that the common-trends assumption is violated because of unobservable, nonlinear trends in local councils.

To relax the common-trends assumption, we exploit the fact that while the central government can fairly easily manipulate some grants, other grants are allocated according to predetermined formulas and cannot easily be manipulated from one year to the next. We use Formula Grants that are allocated according to mathematically well-defined criteria as an additional control group and implement a "triple-difference" estimator. We use the difference between the (log of) the Specific Grants and the (log of) Formula Grants as the outcome variable and estimate equations of the form

$$y_{i,t+k}^{\text{specific}} - y_{i,t+k}^{\text{formula}} = \beta_1 \text{Copartisan}_{it} + \alpha_i + \delta_t + \alpha_i t + X_{it}\lambda + \varepsilon_{i,t+k}, \quad (3)$$

where $y_{i,t+k}^{\text{formula}}$ is (log of) Formula Grants per capita allocated to council i at time $t + k$, and all other variables are the same as in equation (2).

This estimator yields a consistent estimate under the assumption that in the absence of partisan alignment treatment the difference between the Specific Grants and Formula Grants would have followed a common trend. In other words, we allow for nonparallel trends between the aligned and nonaligned councils as long as the difference between the Specific Grants and Formula Grants would have followed the same trend.[22] In the next section we present the results from the analysis.

MORE MONEY TO COPARTISANS

Figure 3 illustrates the estimated effect of partisan alignment on (log) Specific Grants in the pre- and postalignment period.[23] According to the figure, councils that are con-

19. None of the results are sensitive to whether we use log(Special Grants) or log(Special Grants + 100). Since the results are not sensitive to the approach, we use log(Special Grants) as the outcome because this makes the substantial interpretation of the results more straightforward (in terms of percentages). We code this variable as missing in a few cases in which the Special Grants are zero. Overall there are 22 council years (out of more than 7,500 observations) when a local council is allocated £0 in Special Grants per capita, and 15 of these cases are "aligned" and 7 of them are "nonaligned."

20. We also estimate all models presented in the article using council-specific quadratic trends. The results are not sensitive to the specific choice of linear or quadratic trends. See the appendix for further details.

21. Since "alignment" occurs in election years, but the outcome is measured for all years, errors correlated within the electoral cycle in a council could potentially be problematic for statistical inference. To deal with this issue, we calculate both clustered standard errors (clustering on council elections) and robust standard errors and always report the largest of the two. In practice, the standard errors turn out to be very similar.

22. If the central government were able to manipulate the Formula Grants by modifying the underlying allocation rules, this would lead to a downward bias in the triple-difference estimator, and the estimated effects would represent lower bounds.

23. The results presented in fig. 3 are based on 10 separate OLS estimations of eq. (2). Note that although the pattern is the same, the precise magnitude of the estimates is slightly different from the results presented in table 1 because the samples are not exactly the same. In particular, the estimates presented in fig. 3 are based on council years for which we observe the partisan alignment status three years before and six years after, whereas the estimates presented in table 1 are based on council years for which we observe the partisan alignment five years after. Estimating effects pre- and postalignment will obviously lead to changes in the sample if one uses the full sample, but this does not appear to drive the results. The issue is that for alignments occurring in 2011, e.g., we cannot observe the allocated grants five years later, and this means that the estimated effect of alignment on grants at $t + 1$ and $t + 5$ will be based on different samples. However, the results are almost exactly the same if we restrict the sample to council years where we have observations for all years.

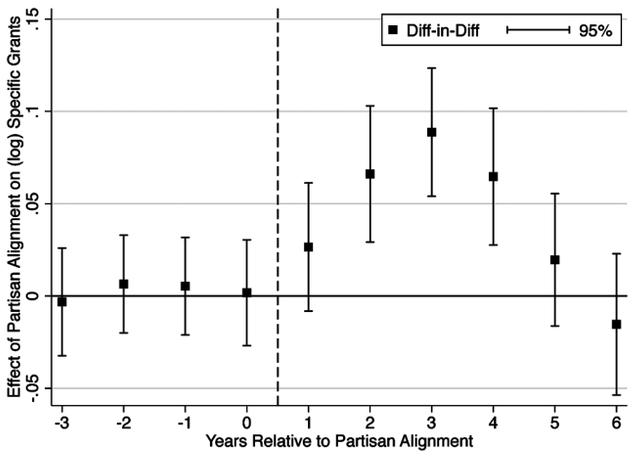

Figure 3. Effect of alignment on pre- and postalignment (log of) Specific Grants per capita. Squares represent the estimated average effect of alignment on (log) Specific Grants per capita obtained from separate ordinary least squares regressions using a difference-in-difference approach with council-linear trends. Bars represent 95% confidence intervals. Results are not sensitive to the choice of council-specific linear trends: in the online appendix, we show that the results are very similar if we allow for convex and concave trends.

trolled by the government party are on average allocated more central government grants in the years after the partisan alignment kicks in. Partisan-aligned councils appear to get somewhere between 0.02 and 0.1 log points, or approximately 2%–10%, more money compared to councils controlled by other parties. The effect seems to increase over the first couple of years, and it peaks in year three, after which it slowly fades away. The fact that the full effect is not realized until three years after the alignment probably reflects an implementation delay and—as we explore in the next section—potentially also an attempt to schedule the boost in grants so it fits the electoral cycle.[24]

As we discussed above, the alignment status is not randomly assigned, and reversed causality might be a potential concern with the estimated effects. For example, one could imagine that the government strategically allocates grants in order to win certain councils and that voters reward the government party for this behavior in the local election. In other words, perhaps the additional grants are causing the partisan alignment—not the other way around.

Although we cannot completely rule out reversed causation without a proper experiment, we can use prealignment outcomes to test whether causes happen before consequences. If reversed causation is driving the results such that grant allocation is causing the partisan alignment, we would expect to see more money allocated to councils before the partisan alignment. According to figure 3, this does not appear to be the case. In the prealignment period, the point estimates are very close to zero, and none of the estimates are statistically significantly different from zero. This supports the claim that the increase in the allocated grants is caused by partisan alignment and not the other way around. One could still argue that perhaps it is not the actual allocation of grants in the preelectoral period but the promise of grants that is driving the partisan alignment.[25] In that case, reverse causality might still be a problem. To substantiate that this is not driving the results, we looked through news stories published on local BBC websites one month before local elections during 1999–2012. Although local government finances and taxation is a common theme, we did not find any stories in which the party in government explicitly makes promises about grants to specific local councils.

Table 1 gives a more detailed account of the estimates illustrated in figure 3. The table reports the estimated effect for years 1–5 after partisan alignment kicks in across four different econometric specifications: the difference-in-difference estimator and triple-difference estimator—both with and without council-linear trends.

The estimated effects are positive across all specifications, and the results are statistically significantly different from zero for years 2–4 across all specifications (most effects are at the 0.001 significance level). In some—but not all—specifications, the estimated effects are also significant for years 1 and 5.

The estimates all reveal the same pattern: the estimated effect increases in the years after the occurrence of partisan alignment and peaks three years after the alignment and thereafter slowly fades away. While the direction of the effects and the overall pattern 5 years downstream are fairly stable, the magnitude of estimated effects does vary across specifications. This could suggest that the parallel-trends assumption is not perfectly met and that we must be cautious when interpreting the exact magnitude of the effect—in particular four and five years downstream from the partisan alignment. As a consequence, all the results presented in the remainder of the article include council-specific trends. In the appendix, we show that the estimates are fairly robust across estimations using linear council-specific trends and quadratic trends and including additional covariates.

In sum, our results suggest that government parties allocate up to 17% more resources to local councils controlled

24. Local elections are typically held in early May after the government has presented the budget (typically in March/April, with 1993–98 as exceptions). In other words, it would be difficult for substantial changes in the grant system to take effect one year after the alignment. Further, there might be a delay on the local government side as well.

25. We thank an anonymous reviewer for this point.

Table 1. Impact of Partisan Alignment on (log) Specific Grants per Capita Allocated to Local Councils in England

	Years after Partisan Alignment				
	1	2	3	4	5
Difference in difference:					
Copartisan	.053	.120	.167	.163	.149
	(.016)	(.015)	(.016)	(.017)	(.016)
Observations	7,645	7,549	7,472	7,394	7,327
Difference in difference (with linear trends):					
Copartisan	.069	.090	.098	.077	.037
	(.011)	(.012)	(.014)	(.014)	(.016)
Observations	7,645	7,549	7,472	7,394	7,327
Triple difference:					
Copartisan	.020	.067	.107	.099	.096
	(.021)	(.020)	(.022)	(.023)	(.021)
Observations	7,645	7,549	7,472	7,394	7,327
Triple difference (with linear trends):					
Copartisan	.048	.063	.080	.051	.030
	(.017)	(.018)	(.020)	(.021)	(.023)
Observations	7,645	7,549	7,472	7,394	7,327

Note. Outcome variable is log(Specific Grants per capita). Estimates are obtained from separate ordinary least squares regressions using a difference-in-difference approach. Standard errors in parentheses. For each regression, the maximum of clustered standard errors and robust standard errors is reported.

by their own party. While the results are intriguing, their interpretation is ambiguous. On the one hand, the results can be interpreted as evidence of a copartisan bias in the grant system—the central government deliberately targets resources toward its own local councils to improve the party's performance in the upcoming elections. On the other hand, a less cynical interpretation is that local governments are more likely to apply for Specific Grants when their party is in government. Accordingly, more grants to aligned local councils may not indicate that there is a bias in the allocation but simply that the opposition has different preferences: opposition-controlled local councils are less interested in applying for the type of grants offered by the central government.

In the next sections, we provide additional evidence in support of our hypothesis. We examine the heterogeneity in the estimated effect and show that the size of the effect varies across the electoral cycle and electoral institutions.

LARGE EFFECT BEFORE ELECTIONS

As we argued above, if the government party allocates more money to copartisan councils in order to benefit from performance spillovers and claim credit for the services provided, it will help them win the next local election. If voters are to some extent myopic and discount previous performance more heavily compared to the local council's current performance, one would expect that the government would allocate more resources to a local council just before an upcoming council election. To examine whether this is the case, we estimate the following equation:

$$y_{i,t+k} = \alpha_i + \delta_t + \alpha_i t + \beta_1 \text{Copartisan}_{it} + \beta_2 \text{ElectYear}_{i,t+k} + \beta_3 (\text{Copartisan}_{it} \times \text{ElectYear}_{i,t+k}) + \varepsilon_{i,t+k}, \quad (4)$$

where $\text{ElectYear}_{i,t+k}$ is a dummy indicating whether there is a local election in council i at time $t + k$. We limit the sample to all the local councils that elect the whole council every four years, so that the results do not conflate the effect of electoral timing and the effect of the electoral system (e.g., councils that elect councillors using staggered election by definition have fewer years to the next election).[26]

Table 2 reports the effects for one to five years after the partisan alignment kicks in. The coefficient on the interaction term for local election year for all five years after alignment is positive, and it is statistically significant for years 1–3. Consistent with our expectations, these results

26. We explore the other aspect below.

Table 2. Electoral Cycle

	Years after Partisan Alignment				
	1	2	3	4	5
Local election year:					
Copartisan × election year	.029	.053	.075	.099	.015
	(.029)	(.027)	(.026)	(.034)	(.029)
Copartisan	.087	.112	.136	.087	.034
	(.025)	(.022)	(.021)	(.025)	(.025)
Election year	.016	.015	.015	.016	.027
	(.017)	(.017)	(.017)	(.017)	(.017)
Observations	4,836	4,801	4,768	4,733	4,703
Years to next local election:					
Copartisan × years to election	−.052	−.028	−.031	−.011	.011
	(.011)	(.011)	(.011)	(.012)	(.011)
Copartisan	.146	.161	.193	.110	.021
	(.026)	(.026)	(.024)	(.029)	(.026)
Years to election	.030	.023	.021	.018	.013
	(.006)	(.007)	(.007)	(.007)	(.007)
Observations	4,521	4,487	4,453	4,420	4,398

Note. Outcome variable is log(Specific Grants per capita). Estimates are obtained from separate ordinary least squares regressions using a difference-in-difference approach with council-linear trends. Standard errors in parentheses.

indicate that councils controlled by copartisans are allocated about 3–10 percentage points extra money in election years.

To shed light on how governments strategically manipulate the timing of grant allocation, we next explore how the effect varies across the complete electoral cycle at the local level. We estimate the following equation:

$$y_{i,t+k} = \alpha_i + \delta_t + \alpha_i t + \beta_1 \text{Copartisan}_{it} + \beta_2 \text{YearToElect}_{i,t+k} + \beta_3(\text{Copartisan}_{it} \times \text{YearToElect}_{i,t+k}) + \varepsilon_{i,t+k}, \quad (5)$$

where $\text{YearToElect}_{i,t+k}$ is a variable counting the number of years to the next local election in council i at time $t + k$.

The results reported for years to the next local election in table 2 are consistent with the findings presented there for the local election year. The coefficients on the interaction terms are negative for years 1–4, and the estimates are statistically significantly different from zero in years 1–3. The estimated coefficients on the interaction terms are negative for years 1–4, implying that the effect of copartisanship decreases as the time to the next election increases. Substantively, one year after the occurrence of partisan alignment, the estimated effect of copartisanship on the grants allocated in election years is 0.15, whereas this effect decreases to 0.09 if there is one year to the next election.

STRONG EFFECT WHERE CREDIT CLAIMING IS EASY

Voters are probably better at discerning good and bad government performance when it directly affects their everyday life. Hence, it should be easier for parties to claim credit for policies that have an immediate, tangible impact on voters. As a result, one would expect a particularly strong effect for grants allocated within policy areas that affect a broad range of citizens on a daily basis.

While we cannot disaggregate our data by individual grants, we can exploit the two-tier structure of local governments: the upper-tier councils (county and unitary councils) cover large areas and provide most of the citizen-focused services (e.g., education, highways, libraries, social services, pubic transportation, police, fire fighting), whereas the lower-tier councils (district councils) cover smaller areas and are responsible for many administrative tasks (e.g., tax collection, local planning, licensing) and policy areas that mostly affect relatively narrow groups of citizens (e.g., council housing, cemeteries, and crematoria).

Further, one would expect risk-averse governments to allocate more money to local councils in institutional settings where the chance that the government party will remain in power is high. Put differently, if risk-averse government parties aim to benefit from the improved local government performance induced by the grants and claim credit for the services provided, they would be more in-

clined to allocate money to councils where they are certain that they will be in power for long enough. To explore this idea, we exploit the fact that some councils hold elections more often than others. In councils that hold only one election every four years, there is no uncertainty about the majority party from one year to the next, whereas in councils with staggered elections it is uncertain whether the majority will switch from one party to the other over the subsequent four years.

Below we test whether the effect is strongest in councils that provide citizen-focused services and hold relatively infrequent elections. We estimate the following equation:

$$\begin{aligned} y_{i,t+k} = {} & \alpha_i + \delta_t + \alpha_i t + \beta_1 \text{Copartisan}_{it} \\ & + \beta_2(\text{Copartisan}_{it} \times \text{InfrequentElections}_i) \\ & + \beta_3(\text{Copartisan}_{it} \times \text{UpperTier}_i) \\ & + \beta_4(\text{Copartisan}_{it} \times \text{UpperTier}_i \\ & \times \text{InfrequentElections}_i) + \varepsilon_{i,t+k}, \end{aligned} \quad (6)$$

where $\text{InfrequentElections}_i$ is a dummy variable indicating whether council i holds elections only once every four years or more often; UpperTier_i is a dummy variable indicating whether the observation refers to a top-tier council;[27] all other variables are the same as in the previous estimations.

The results are presented in figure 4. In councils with frequent elections and more administrative responsibilities, the effect is very low and indistinguishable from zero. Whereas the effect of winning the majority in a council with infrequent elections and citizen-focused services is statistically and economically significant.

LARGER EFFECT IN SWING COUNCILS

The heterogeneity in the effect over the electoral cycle and across institutional settings suggests that government parties allocate money to improve the performance of copartisan-controlled councils. What motivates the government parties? In this section, we test whether governments particularly target copartisans in electorally safe or vulnerable areas.

According to the swing-voter hypothesis, central governments should allocate more resources to swing or marginal localities where voters do not have a strong attachment to either of the parties in order to maximize their chance of winning more seats in the next election (Cadot, Roller, and Stephan 2006; Dahlberg and Johansson 2002; Dixit and Londregan 1998; Lindbeck and Weibull 1987). This results from the fact that the electoral prospect and access to resources of a candidate depend on the overall success of his or her party in the general elections and not on his or her success at the constituency level. The core-supporters hypothesis, however, posits that risk-averse politicians should allocate more funds to localities where they have a larger voter support (Cox and McCubbins 1986; Larcinese, Rizzo, and Testa 2006; Levitt and Snyder 1995).

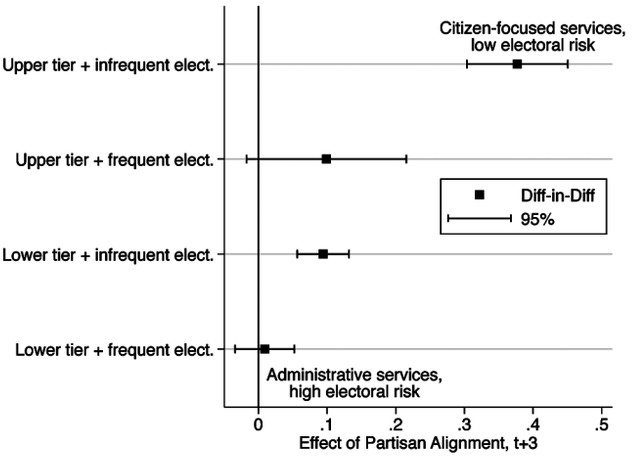

Figure 4. Heterogeneity in the estimated effect across institutions that facilitate credit claiming. Outcome variable is log(Specific Grants per capita). *X*-axis shows the estimated effect at time $t + 3$ (the other years are reported in the online appendix) obtained from an ordinary least squares regression using a difference-in-difference approach with council-linear trends. *Y*-axis shows the different institutional combinations. Effect for "lower tier + frequent elections" is captured by β_1 in equation (6), "lower tier + infrequent elections" is captured by $\beta_1 + \beta_2$, "upper tier + frequent elections" is captured by $\beta_1 + \beta_3$, and "upper tier + infrequent elections" is captured by $\beta_1 + \beta_2 + \beta_3 + \beta_4$.

As we argued above, if the government parties are narrowly motivated by their reelection probability, we would expect a stronger effect in "swing" councils, that is, councils where both parties have a realistic chance of winning the majority of the seats. By winning the swing councils, the party in government can expect to reap the spillover effects also in these areas in addition to the councils where it commands a majority of votes.

We define the variable Swing_{it} as a dummy that takes the value 1 if neither the government nor the opposition held an absolute majority of the seats in council i before election t, and we estimate the following equation:[28]

27. We do not include $\text{InfrequentElections}_i$ and TopTier_i as separate variables in eq. (6), as the council fixed effects already control for all time-invariant characteristics.

28. The results are not sensitive to the specific operationalizations of swing councils. For instance, when we define "swing councils" as councils in which the largest party controls between 49% and 51% of the seats, we find similar results as the ones we report here. See the appendix for further details.

Table 3. Swing Councils

	Years after Partisan Alignment				
	1	2	3	4	5
Copartisan × swing council	.012	.019	.263	.233	.074
	(.052)	(.063)	(.068)	(.058)	(.062)
Copartisan	.066	.081	.080	.063	.037
	(.012)	(.013)	(.016)	(.015)	(.017)
Swing council	.010	.025	.023	.013	.005
	(.012)	(.013)	(.015)	(.013)	(.014)
Observations	7,645	7,549	7,472	7,394	7,327

Note. Outcome variable is log(Specific Grants per capita). Estimates are obtained from separate ordinary least squares regressions using a difference-in-difference approach with council-linear trends. Standard errors in parentheses.

$$y_{i,t+k} = \alpha_i + \delta_t + \alpha_i t + \beta_1 \text{Copartisan}_{it} + \beta_2 \text{Swing}_{it} + \beta_3 (\text{Copartisan}_{it} \times \text{Swing}_{it}) + \varepsilon_{i,t+k}. \quad (7)$$

The results are presented in table 3. On average, the estimated effect appears to be larger in swing councils, lending support to the swing-voter hypothesis. In the first years, the coefficient on the interaction term is small and insignificant, then it increases substantially in year 3 after which is slowly fades away.

CONCLUSION

The allocation of resources is motivated by both political institutions and political considerations. In the separation-of-powers systems with weak parties and candidate-centered elections where voters can cast multiple votes as in the United States, legislators can be held accountable for their actions independent of the general performance of the party in government. This system strongly incentivizes individual legislators to bargain for spending on local projects—even though the spending is socially suboptimal. But, in parliamentary systems, where the powers of the executive and legislative branches are fused, the electoral performance of an individual MP strongly depends on the overall performance of the party in government, and while this in turn mitigates the common-pool resource problem by internalizing the social costs of spending on local projects, it creates incentives for the party in power to allocate resources in ways that benefit the overall party.

We show in this article that the government parties in England strategically allocate up to 17% more money to local councils controlled by copartisans. Furthermore, we find that copartisan councils receive more resources, especially closer to and in local election years, in institutional settings that facilitate political credit claiming, and in swing councils. We argue that government parties allocate resources strategically to the councils from their own party in expectation that performance evaluation of the party at the local level will spill over to the national level and, hence, increase the electoral performance of the party at the general election.

There may be additional ways for the government party to increase its vote share such as through centralized allocation of pork or strategic firm positioning. In future work, we would like to analyze different strategies available to government parties.

Finally, while we present empirical evidence using data on England, our results advance our understanding of distributive politics in systems with strong parties. Our theory extends especially to other Westminster democracies. We also leave for future work the analysis of strategic allocation of government grants in other similar settings.

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REFERENCES

Adam, Stuart, Carl Emmerson, and Anoushka Kenley. 2007. "A Survey of UK Local Government Finance." IFS Briefing Note 74, Institute for Fiscal Studies.

Ansolabehere, Stephen, and Shanto Iyengar. 1994. "Of Horseshoes and Horse Races: Experimental Studies of the Impact of Poll Results on Electoral Behavior." *Political Communication* 11 (4): 413–30.

Bartels, Larry. 2000. "Partisanship and Voting Behavior, 1952–1996." *American Journal of Political Science* 44 (1): 35–50.

Berry, Christopher R., Barry C. Burden, and William G. Howell. 2010. "The President and the Distribution of Federal Spending." *American Political Science Review* 104 (11): 783–99.

Bloch, Alice, and Peter John. 1990. *Attitudes to Local Government*. New York: Joseph Rowntree Foundation.

Brollo, Fernanda, and Tommaso Nannicini. 2011. "Tying Your Enemy's Hands in Close Races: The Politics of Federal Transfers in Brazil." IZA Research Paper no. 5698, Institute for the Study of Labor, Bonn.

Cadot, Olivier, Lars-Hendrik Roller, and Andreas Stephan. 2006. "Contribution to Productivity or Pork Barrel? The Two Faces of Infrastructure Investment." *Journal of Public Economics* 90 (6): 1133–53.

Copus, Colin. 2004. *Party Politics and Local Government*. Manchester: Manchester University Press.

Copus, Colin. 2008. "English Councillors and Mayoral Governance: Developing a New Dynamic for Political Accountability." *Political Quarterly* 79 (4): 590–604.

Cox, Gary W., and Mathew D. McCubbins. 1986. "Electoral Politics as a Redistributive Game." *Journal of Politics* 48 (2): 370–89.

Curtice, John, and Michael Steed. 1992. "Appendix 2: The Results Analysed." In David Butler and Dennis Kavanagh, eds., *The British General Election of 1992*. Basingstoke: Macmillan.

Dahlberg, Matz, and Eva Johansson. 2002. "On the Vote-Purchasing Behavior of Incumbent Governments." *American Political Science Review* 96 (1): 27–40.

Denemark, David. 2000. "Partisan Pork Barrel in Parliamentary Systems: Australian Constituency-Level Grants." *Journal of Politics* 62 (3): 896–915.

Department for Communities and Local Government. 2013a. "A Guide to the Local Government Finance Settlement in England." https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/266886/LGFS_Guide.pdf.

Department for Communities and Local Government. 2013b. "Local Government Financial Statistics England." No. 23. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/203942/29699_DCLG_WEB_version.pdf.

Devon County Council. 2007. "Additional Government Grants Allocated to Devon County Council." http://www.devon.gov.uk/additional_grants_200607.pdf.

Dixit, Avinash, and John Londregan. 1998. "Fiscal Federalism and Redistributive Politics." *Journal of Public Economics* 68 (2): 153–80.

Eggers, Andrew C., and Alexander B. Fouirnaies. 2014. "Representation and District Magnitude in Plurality Systems." *Electoral Studies* 33:267–77.

Feigenbaum, James J., Alexander Fouirnaies, and Andrew B. Hall. 2014. "The Majority-Party Disadvantage: Evidence from a Multidimensional Regression Discontinuity Design in US State Legislatures." Working paper, Harvard University.

Ferejohn, John A. 1974. *Pork Barrel Politics: Rivers and Harbors Legislation, 1947–1968*. Palo Alto, CA: Stanford University Press.

Gibson, John. 1998. "Political Manipulation or Feedback in English Local Authorities' Standard Spending Assessments? The Case of the Abolition of the Inner London Education Authority." *Public Administration* 76 (4): 629–47.

John, Peter, and Hugh Ward. 2001. "Political Manipulation in a Majoritarian Democracy: Central Government Targeting of Public Funds to English Subnational Government, in Space and across Time." *British Journal of Politics and International Relations* 3 (3): 308–39.

Kam, Christopher J. 2009. *Party Discipline and Parliamentary Politics*. Cambridge: Cambridge University Press.

Kam, Cindy. 2005. "Who Toes the Party Line? Cues, Values, and Individual Differences." *Political Behavior* 27 (2): 163–82.

Larcinese, Valentino, Leonzio Rizzo, and Cecilia Testa. 2006. "Allocating the U.S. Federal Budget to the States: The Impact of the President." *Journal of Politics* 68:447–56.

Levitt, Steven D., and James M. Snyder. 1995. "Political Parties and the Distribution of Federal Outlays." *American Journal of Political Science* 39 (4): 958–80.

Lijphart, Arend. 2009. *Patterns of Democracy: Government Forms and Performance in Thirty-Six Countries*. New Haven, CT: Yale University Press.

Lindbeck, Assar S. N., and Jörgen W. Weibull. 1987. "Balanced-Budget Redistribution as the Outcome of Political Competition." *Public Choice* 52:273–97.

Local Government Association. 2015. "Annual Local Government Finance Settlements." http://www.local.gov.uk/finance/-/journal_content/56/10180/3494959/ARTICLE.

Miller, Warren, and Merrill J. Shanks. 1996. *The New American Voter*. Cambridge, MA: Harvard University Press.

Miller, William L. 1988. *Irrelevant Elections? The Quality of Local Democracy in Britain*. Oxford: Clarendon.

National Audit Office. 2013. "Financial Sustainability of Local Authorities." http://www.nao.org.uk/wp-content/uploads/2013/03/Local-Authority-Full-Report.pdf.

OECD (Organization for Economic Cooperation and Development). 2009. *Government at a Glance, 2009*. Paris: OECD.

Office for National Statistics. 2015. "Local Government Restructuring." http://www.ons.gov.uk/ons/guide-method/geography/beginner-s-guide/administrative/our-changing-geography/local-government-restructuring/index.html.

Rallings, Colin, Michael Thrasher, and David Denver. 2005. "Trends in Local Elections in Britain, 1975–2003." *Local Government Studies* 31 (4): 393–413.

Rodden, J. 2006. *Hamilton's Paradox: The Promise and Peril of Fiscal Federalism*. Cambridge Studies in Comparative Politics. Cambridge: Cambridge University Press.

Shepsle, Kenneth A., and Barry R. Weingast. 1981. "Political Preferences for the Pork Barrel: A Generalization." *American Journal of Political Science* 25:96–111.

Solé-Ollé, Albert, and Pilar Sorribas-Navarro. 2008. "The Effects of Partisan Alignment on the Allocation of Intergovernmental Transfers: Differences-in-Differences Estimates for Spain." *Journal of Public Economics* 92 (12): 2302–19.

Ward, Hugh, and Peter John. 1999. "Targeting Benefits for Electoral Gain: Constituency Marginality and the Distribution of Grants to English Local Authorities." *Political Studies* 47:32–52.

Weingast, Barry R., Kenneth A. Shepsle, and Christopher Johnsen. 1981. "The Political Economy of Benefits and Costs: A Neoclassical Approach to Distributive Politics." *Journal of Political Economy* 89 (4): 642–64.