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In the grip of Whitehall? The effects of party control on local fiscal policy in England

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In the Grip of Whitehall? The Effects of Party Control on Local Fiscal Policy in England *

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Abstract

This paper uses an instrumental variable approach based on close elections to evaluate the effects of political parties on local fiscal policy in England from 1998 to 2015. Our main finding is that when we condition on the central government grant, political control of the council by Labour or Conservative parties has no effect on total service expenditure, the composition of that expenditure, and the property tax rate (council tax per band D property). We find the same null results for capital expenditure, debt, and authorized debt limits. Using data on the distribution of income within local authorities, we find no evidence that this null result is being driven by homogeneous electorates rather than fiscal constraints. Thus, our results confirm the widely expressed belief that centrally imposed constraints on local government fiscal policy (rate-capping, and more recently, compulsory referenda, and the Prudential Code for borrowing) hold local government fiscal policy in a tight grip.

Keywords: Party Control, Grants, Government Spending, Taxation

JEL Codes: H70, H71, D72

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1 Introduction

The UK, and particularly England, is widely recognized as having one of the most centralized systems of sub-national government among developed democracies, both in expenditure and taxation. For example, the influential Lyons report on UK local government, published in 2007, concludes: “Over the 1980s and 1990, there has been increasing centralization across a range of local public services, driven by concerns to control public sector expenditure and to improve public services. This has helped to improve performance, but it has also inhibited the ability of local government to respond to local needs and preferences, and to manage financial pressures” (Lyons, 2007). Although there have been some minor improvements since then—such as the business rate retention scheme—the picture described by Lyons remains largely unchanged.

On the tax side, local authorities (LAs) have only one major revenue-raising tax: the domestic property tax (council tax), where the rate can be set locally.¹ However, since 1984, when so-called “rate-capping” was introduced, LAs have been constrained in how much they can increase council tax rates. The current regime, in place since 2012, and described in more detail in section 3.3 below, effectively constrained increases in the rate of council tax to 2% until 2016. This percentage cap was then increased to deal with the funding crisis in social care. However, the cap binds most LAs; for example, a recent survey by the Local Government Chronicle found that most LAs plan to set the maximum increase in 2022.²

There is no sub-national income tax in the UK. While the non-domestic property tax (business rate) is a major source of revenue for LAs, the rates for this tax are set centrally, with a uniform rate for the whole country.³ Moreover, the council tax only comprises about 20% of revenue for LAs on average, meaning they rely heavily on central funding.⁴

On the expenditure side, LAs face several constraints. First, a number of services are funded via specific grants. A notable example is spending on primary and secondary education, which comprises about 22% of total service expenditure in our dataset. Since 2006, this has been funded by a ring-fenced specific grant. Even where funding is not via specific grants, the statutory responsibilities of LAs are often very detailed. A case in point is spending on social care, where the demographic characteristics of the local

¹“Local authority” is the official term used by the UK government to describe all forms of local government i.e., London boroughs, metropolitan boroughs, unitary authorities, counties, and non-metropolitan districts, and we use it throughout the paper.

²See <https://www.lgcplus.com/finance/exclusive-over-two-thirds-of-councils-to-raise-council-tax-by>

³Scotland sets its own rate, but again that rate is uniform for all Scottish councils.

⁴For the US, comparable figures are much lower see e.g., Gerber and Hopkins (2011).

population largely determine spending.

The regime for capital expenditure is rather different. The majority of capital expenditure by LAs is on infrastructure that fulfills statutory service requirements, such as housing, highways, street lighting, and waste facilities, and most of this expenditure is financed by borrowing. As explained in more detail in Section 3.3 below, since 2003, each authority must set a total borrowing limit for itself in accordance with the principles of the Prudential Code. In turn, most borrowing is from the central government at preferential interest rates; only a very small number of authorities issue bonds (Sandford, 2020).⁵ This is in stark contrast to the US, where municipal bonds are widely used.⁶

In this paper, using a new dataset that combines fiscal and electoral data for England, we investigate whether local government is constrained from responding to local needs and preferences, as the Lyons report claims.⁷ To do this, one must first recognize that the formula and specific grants for LAs in England take into account many indicators of need, such as demographics and levels of deprivation. So, there will be a mechanical correlation between these indicators and spending outcomes, *even if* LAs do not have any discretion at all.

Rather, we interpret Lyons' concern as being about local democracy and, in particular, party politics. Specifically, conditional on a given level of grant from the central government, do expenditure and tax outcomes of LAs depend on which party controls the local council? There is now a large literature, reviewed in Section 2 below, on the effects of party control on fiscal outcomes using a variety of methods. In our study, we use an instrumental variables approach, utilizing seat shares won in close elections as instruments for either actual party seat shares or party control dummies. We chose this design rather than a regression discontinuity design (RDD) because local government in England is a multi-party system, with the Liberal Democrats being an important third party, rather than a two-party system as in the US.

Because LAs in England are heavily dependent on central government grants, a key first step is to determine whether this grant is endogenous to party control, a possible confounding factor. In section 4, we show that this is not the case. Our regression specification is then designed to capture the decision-making of a LA facing an exogenous grant; we, therefore, condition on the grant, as well as year and LA fixed effects. Because

⁵Until recently, borrowing from central government was via the Public Works Loan Board.

⁶At the end of 2019, state and local governments had \$3.85 trillion in debt outstanding, of which 60 percent was in the form of local government bonds (<https://www.taxpolicycenter.org/briefing-book/what-are-municipal-bonds-and-how-are-they-used>, accessed 24/5/22).

⁷Our data include Wales, but in our analysis, we focus on LAs in England as the party-political structure in Wales is rather different, with a number of councils being controlled by Plaid Cymru, the Welsh nationalist party.

of fixed effects, we are essentially asking: does an increase in the seat share of, say, the Conservative Party, or a gain in control by the Conservatives at an election in that LA, affect fiscal outcomes?

We consider a variety of outcomes. On the tax side, we consider the only tax rate that is under the control of the local government, the domestic property tax rate (council tax payable on a band D property). On the expenditure side, we consider measures of expenditure that are directly under the control of the local government, namely total service expenditure and shares of that expenditure on schools, social care, transport, planning, culture, environment, housing, and corporate spending. Finally, we also consider capital expenditure, debt, and authorized debt limits. We find *no effect of party control or party seat shares on any of these outcomes*. We continued to find null effects when we disaggregated by type of LAs and when we split the sample at the beginning of the period of austerity in LA funding in 2010.

Our leading explanation for the irrelevance of party control for LA fiscal outcomes is that the LA is fiscally constrained. As noted by [Ferreira and Gyourko \(2009\)](#) in the US context, an alternative explanation could be that LAs are rather homogeneous in voter characteristics. In that case, the standard Downsian model with probabilistic voting predicts that party platforms are close together as parties are relatively certain about the location of the median voter ([Lindbeck and Weibull \(1993\)](#)). We consider this alternative hypothesis by using data on income inequality *within* LAs, interpreting high inequality as measuring heterogeneity in voter preferences for public goods and taxes. We find no evidence of significant effects of changes in party control, even in high-heterogeneity LAs.

Overall, our findings provide evidence that confirms the concerns of Michael Lyons and others that because of the grip of Whitehall, the local democratic process does not allow local governments to respond to local preferences.

The rest of the paper is arranged as follows. Section II surveys related literature. Section III gives a brief overview of the structure of English LAs both in terms of functions and governance. Section IV develops our empirical strategy. Section V describes the data. Finally, Section VI gives the baseline results, and Section VII concludes.

2 Related Literature

This paper is related to the recent literature on the effects of political control on government behavior at the local level. Important papers here include [Ferreira and Gyourko \(2009\)](#) for US cities, [Pettersson-Lidbom \(2008\)](#), and [Folke \(2014\)](#) for Sweden, and [Freier and Odendahl \(2015\)](#) for Germany. [Ferreira and Gyourko \(2009\)](#) find, using a regression discontinuity design, that whether the mayor is a Democrat or a Republican does not

affect the size of city government, the allocation of local public spending, or crime rates. However, they ascribe this lack of partisan control to Tiebout competition between cities; cities where this competition is less intense display partisan differences. More recently, using a similar dataset, while [Gerber and Hopkins \(2011\)](#) find that partisan control matters for public safety—a spending area where US cities have considerable discretion—they replicate [Ferreira and Gyourko \(2009\)](#)’s results for areas where cities are subject to federal and state mandates and constraints, such as tax policy. So, these results are broadly consistent with our results; where local governments are highly constrained by higher-level governments, there tend not to be partisan differences.⁸

Studies for other countries do, however, find partisan differences. [Pettersson-Lidbom \(2008\)](#), [Folke \(2014\)](#), and [Högström and Lidén \(2023\)](#) for Sweden; [Solé-Ollé and Viladecans-Marsal \(2013\)](#) for Spain; [Freier and Odendahl \(2015\)](#) for Bavaria; and [Fiva, Folke and Sørensen \(2018\)](#) for Norway all find partisan effects in some dimensions of local government policy. However, these tend to be in the area of regulatory policy rather than fiscal policy. For example, [Folke \(2014\)](#), in a careful study that uses a methodology suited to proportional representation systems, finds that, while there are partisan differences in environmental and immigration policies, there are no differences in tax policy. Similarly, [Fiva, Folke and Sørensen \(2018\)](#) found that, for Norway, there are no differences in spending on local public goods. In a more recent study, [Högström and Lidén \(2023\)](#) for Sweden found that tax levels are higher under left-wing rule. However, in Sweden, unlike the UK, local governments have a local income tax, which can be set in an unconstrained way. [Gamalerio \(2020\)](#) shows that for Italian municipalities we observe partisan differences between national party-affiliated and independent mayors (“Civic Lists” in Italy) in general party-affiliated are more fiscally responsible suggesting that national parties act as a substitute for fiscal rules in constraining politicians.

On the question of methodology, while we face a similar identification problem to these papers, our approach to it is necessarily slightly different due to the specific electoral rules and party structure in the UK. First, council seats i.e., seats on the governing council of a LA, are typically contested in the UK by the three main parties (Conservatives, Labour, and Liberal Democrats). Thus, we cannot use methods developed for estimating the causal effect of party control in two-party systems, such as [Ferreira and Gyourko \(2009\)](#). Moreover, English and Welsh local government elections use a plurality voting system with a varying number of seats per district (ward). This means we cannot adopt the approach of [Folke \(2014\)](#). Similarly, we cannot adopt the approach of [Freier and Odendahl \(2015\)](#)

⁸[Caughey, Xu and Warshaw \(2017\)](#) do find partisan policy differences at the US state level, but US states are, in terms of autonomy, size, and constitutional protection, very different to UK local governments. Moreover, their dependent variable is state policy liberalism score based on over 150 separate policies, most of which are not fiscal.

as their Banzhaf index-based approach requires locating each party in the policy space, for which there are no suitable data for local governments in the UK.⁹ Instead, we use a closely related approach employed by [Clots-Figueras \(2011, 2012\)](#) in which the number of women winning close elections is used to instrument the share of women in a legislature. Specifically, we build on the approach of [Hyytinen et al. \(2018\)](#), who extend this strategy to study the effects of municipal employees on party lists in Finland. This is described in more detail below in section 4.

3 Local government in England: An Overview

3.1 Structure and Functions

England has a relatively complex local government structure with several types of councils. There are currently 32 London boroughs, 36 metropolitan boroughs, 56 unitary authorities, 33 counties, and 201 non-metropolitan districts. However, all councils except for the county councils and non-metropolitan districts (just districts in what follows) are, broadly speaking, unitary in that they are responsible for most or all functions not controlled by the central government, such as primary and secondary education, social care, housing and housing benefit payments, waste disposal, transport, and environment, planning, and culture. In what follows, we refer to these generically as unitary LAs. In the remainder of England, a two-tier system is in place: an upper level, the county, and a lower level, the district. In this case, responsibilities are divided between the two levels, with the county responsible for the more major parts of service delivery, such as education, transport, and social care.¹⁰

In London, LA functions are currently split between the Greater London Authority, responsible for transport, policing, economic development, and fire and emergency planning, and London Boroughs, which are unitary in the sense that there are no lower subdivisions of local government below them (except for parish councils) and are responsible for all other functions. However, over the first three years of our sample period, the GLA did not exist, and its functions were shared among London Boroughs.¹¹ We do not include

⁹We note that the positions of local governments cannot be inferred from national parties, and moreover, there will be substantial variation across LAs that makes an approach based on ideological distance infeasible.

¹⁰A more complete list is that counties are responsible for education, transport, planning, fire and public safety, social care, libraries, waste management, and trading standards. While districts are responsible for rubbish collection, recycling, Council Tax collections, housing, and planning applications (www.gov.uk/understand-how-your-council-works/types-of-council).

¹¹In other large urban areas, the metropolitan county councils, in place between 1974 and 1986, played a similar role to the GLA.

either the GLA in our analysis, or indeed, the City of London, which has a rather different and limited function to an ordinary council. So, we include London Boroughs among the unitary authorities.

3.2 Elections and Governance

The governing body of a LA is known as the council. The area covered by a LA is divided into one or more electoral divisions known as wards. Each ward can return one or more members to serve on the council; multi-member wards are quite common. There is no requirement for the size of wards to be the same within a district.¹² Elections use the plurality rule: the candidate(s) with the most votes fill the available seats. Minor and local single-issue parties tend to do much better at local elections than they do in general elections.

Since 2000, LAs have had to choose between an executive-based system, with the council leader and a cabinet acting as an executive authority, or a directly elected mayor. Nearly all LAs use the council leader and cabinet option; very few mayors are directly elected.¹³ The executive councilors, i.e. members of the cabinet, are appointed either by the full council (i.e. all the authority's councilors) or by the leader. Each possesses a portfolio of responsibility for a particular part of the local authority's services — such as education, social services, or the environment. Decision-making on each policy area may lie either solely with the executive councilor or with the cabinet as a whole, depending on the constitution. So, overall, if party control has any effect on tax or spending decisions, we expect this effect to be roughly proportional to the seat share of the dominant party, especially if the party has a majority of seats on the council.

3.3 Central Government Constraints

The Government first introduced powers under which it could limit the amount of tax raised by LAs in 1984; the Rates Act 1984 gave the Government power selectively to 'cap' council rate levels. In 1991 a universal capping power was introduced which placed a cap on any LA whose planned budget exceeded a given level of expenditure increase. This system applied to the community charge (or "poll tax") and then to its replacement, council tax, which was introduced from April 1993. The Labour Government elected in 1997 replaced what it called the "crude and universal" capping system with reserve

¹²Metropolitan borough wards must return a multiple of three councillors, while, until the Local Government Act 2003, multiple-member county electoral divisions were forbidden.

¹³As of 2015, there were 17 directly elected mayors in England (excluding the Mayor of London).

powers to cap selectively.¹⁴ These capping powers were not used until 2004-05 but after that, according to the Department for Communities and Local Government (DCLG), 36 authorities were capped, 43 times overall. Of these, 16 were subject to in-year designation which meant that they were required to re-bill taxpayers immediately.

In 2009, the Conservative government initiated a reform to the capping system which replaced the centrally imposed cap with a requirement to hold a referendum if a proposed budget was excessive. The referendum scheme was introduced in the Localism Act 2011, and has applied to English LAs since 2012/13. A set of thresholds defines excessive increases in budgets. For the LAs studied in this paper, these thresholds are given by a percentage nominal increase in the council tax payable on a “standard” i.e., band D property. In most years since the introduction of the legislation, this increase has been 2%.¹⁵ For any increase above this level, a referendum must be held, and the proposed increase must be reduced to the threshold if a simple-majority of those voting reject the increase.¹⁶

A striking fact is that since the introduction of the referendum regime, the county of Bedfordshire has only held one referendum, in 2015/16, which the county lost. This referendum cost the county £600,000. It would seem that the financial and political costs of a referendum are sufficient to deter LAs from exceeding the thresholds, leading to a cap in current spending in all but name.

The constraints on capital expenditure are rather different. Prior to 1 April 2004, the government set strict limits on the amount that each LA could borrow; individual consents for borrowing were granted by the central government, under specific policy heads (e.g. education, housing). Following the 2003 Local Government Act, the central government implemented a much more flexible regime, set out in the Prudential Code, published periodically by the Chartered Institute of Public Finance and Accountancy (CIPFA). The Code requires all LAs to draw up rolling three-year plans for capital expenditure, except from that on housing. Most LA capital finance is obtained through borrowing, and most of that borrowing is from the central government at preferential rates, until very recently via the Public Works Loan Board.¹⁷

Each authority must set a total borrowing limit for itself in accordance with the Pru-

¹⁴The Secretary of State could decide whether any authorities had set excessive budget requirements. Authorities could be “designated” to be capped in-year or “nominated” in respect of future years.

¹⁵In 2012/13, the threshold was 3.5%.

¹⁶Since 2016/17, LAs with social care responsibilities have been permitted to increase council tax by an additional percentage amount. This is known as the ‘adult social care precept’. It is applied to county and unitary councils, metropolitan boroughs, and London boroughs.

¹⁷In 2020, the PWLB was abolished as a statutory organization, and its functions were allocated to HM Treasury, where they are discharged through the UK Debt Management Office.

dential Code and the limit must be related to the revenue streams available to the LA.¹⁸ There is some flexibility in exactly how individual LAs set these limits (the Prudential Code does not prescribe formulae), and the Code permits the authority to rely on the judgment of the LA chief finance officer, and on ‘generally accepted accounting practices’.

3.4 Funding of Current and Capital Expenditure

In this section, we give a brief review of how the current and capital expenditure of local government was funded over the sample period; this will guide us in our regression specifications. Our calculations are based on our dataset, which is described in more detail in Section 5. Over the entire period, current expenditure is funded mainly via grants from the central government, with the remainder made up of revenue from the residential property tax (council tax) and non-tax income, from fees, etc. Current expenditure cannot be financed from borrowing i.e., from the capital account except in very special circumstances.¹⁹

The broadest measure of expenditure by LAs is net current expenditure, which is expenditure on all services, plus housing benefits paid by local councils. As fig. 1 indicates, this expenditure is funded both by grants from the central government and revenue from the property tax, known as the council tax requirement. Over our sample period, this revenue was only about around 20% of net current expenditure for the average LA.

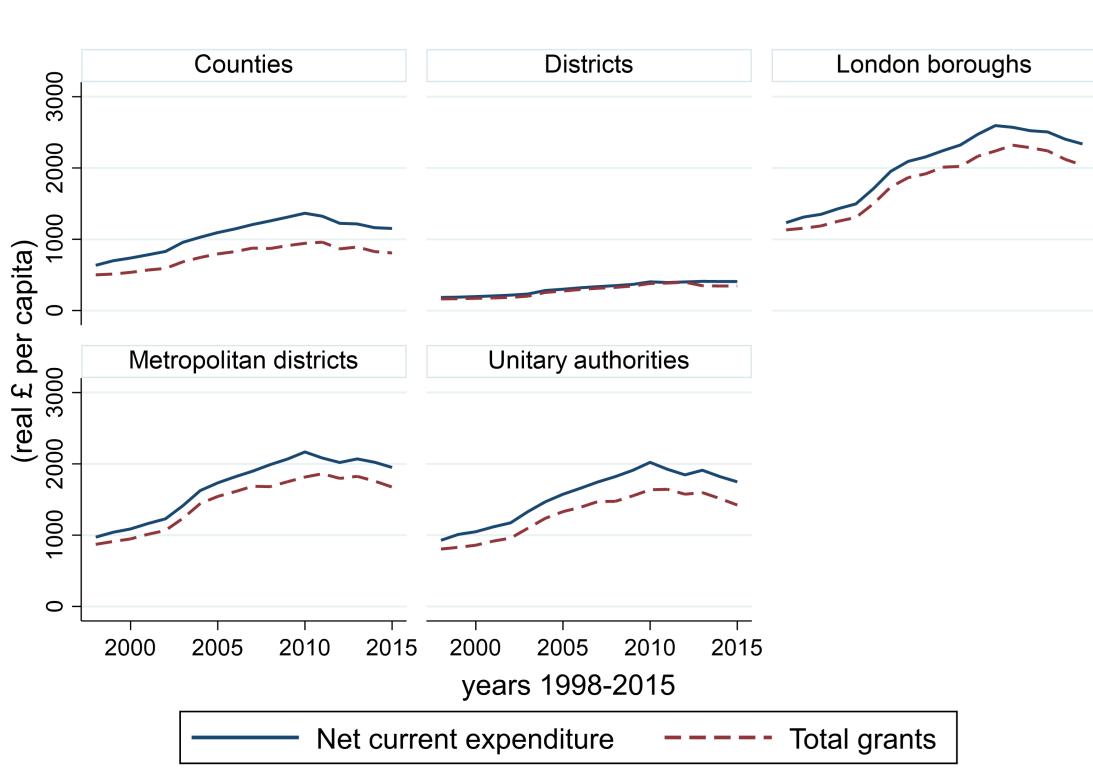
The remaining 80% or so comprises transfers from the central government. The overall amount received from central government is composed of three elements: the revenue support grant, which is a formula-based grant, various specific grants, and revenue from business taxes, which until recently were recycled as grants. In what follows, we call the sum of these three items the *total grant*. As explained in Appendix A, the individual elements of this total grant are quite unstable over the same period, due to various structural reforms, notably the movement of funding for schools, which accounts for over 50% of all service expenditure, from the formula grant to a ring-fenced specific grant in 2006. So, in our empirical work, we focus on the total grant as the key determinant of local government expenditure and taxation.

Over our sample period, 1998-2015, Figure 1 reports trends in net current expenditure and central government financing, as measured by the total grant. As can be seen in the

¹⁸Authorities are prevented by law from using their property as collateral for loans.

¹⁹According to [Sandford \(2020\)](#), Local authorities may transfer money earmarked for revenue expenditure into their capital account, but may not transfer money from their capital account into their revenue account without permission from central government. Moreover, this permission is only given for expenditures that finance cost reductions or quality improvements in services. In practice, capital financing of net current expenditure is very minor at less than 1% of the total.

Figure 1: Trends in Current Expenditure and Total Grants per Capita



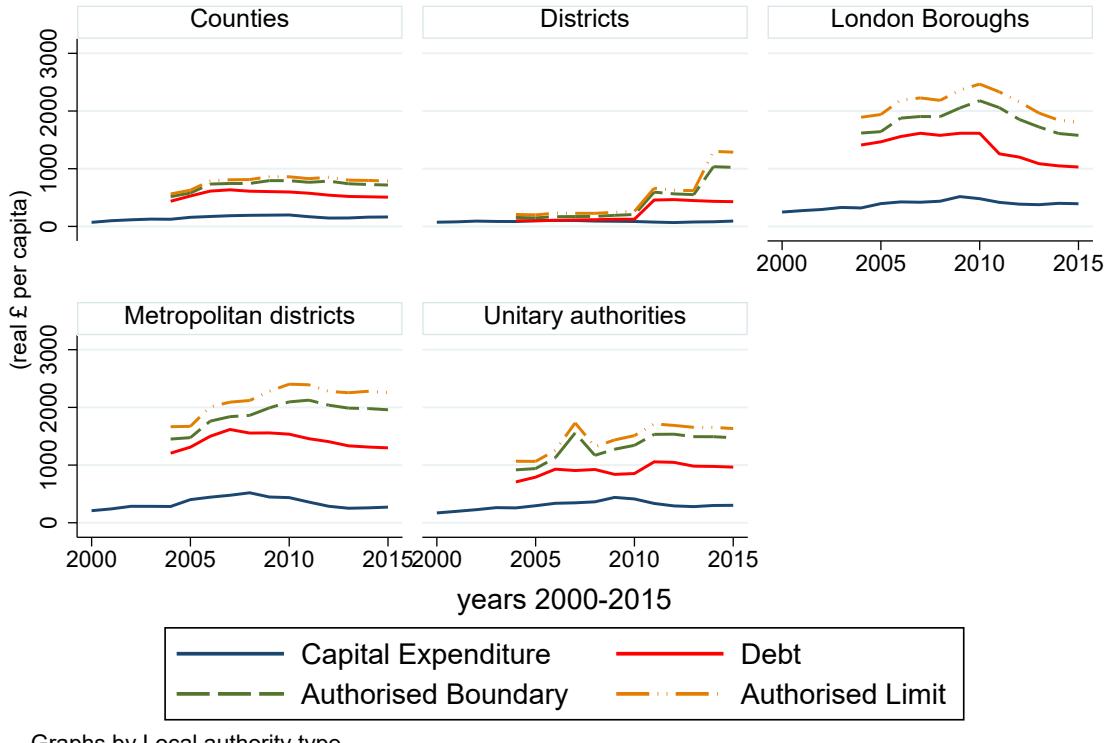
Graphs by Local authority type

Notes: All series are in £ per capita terms; nominal values are deflated by the 2013 consumer price index. *Net current expenditure* equals *Total Service Expenditure* plus *Rent Allowances, Levies and Other Adjustments*; *Total grants* equals the sum of *Revenue Support Grants*, *Rate Retention Scheme*, and *Specific grants*. The gap between *Net current expenditure* and *Total grants* is financed by the *Council tax requirement*. Source: authors' calculations based on CIPFA Finance and General Statistics.

Figure, there are two notable features. First, as already remarked, most expenditure is financed by grants. Second, in England, real net current expenditure by upper tier and unitary authorities peaked in 2010-11 (in per capita real terms, net current expenditure reached £2,063 in 2010-11, 117% above 1998 and 13% higher than 2015); at this point, the Conservative government introduced a series of austerity budgets that significantly cut per capita spending in England. In English Districts net current expenditure continued to rise up to 2013-14 reaching the value of £410 in real per capita terms before levelling off.

Finally, on the capital expenditure side, Figure 2 shows, on a per capita basis, capital expenditure and debt (gross borrowing) of LAs. These figures also show, since 2004, the authorized limit for borrowing set by the council as a whole, along with the lower operational limit to which council officials are subject. These figures thus reflect the fact that since 2004, a more flexible regime has been in place, as explained in Section 3.3 above.

Figure 2: Trends in Capital Expenditure and Debt per Capita



Graphs by Local authority type

Notes: All series are in £ per capita terms; nominal values are deflated by the 2013 consumer price index. Source: Authors' calculations based on data from the Department of Levelling Up, Housing and Communities.

As we can see, there is considerable variation in capital expenditure and debt across types of LA, with both being lower in counties and districts. There is also a noticeable downturn in capital expenditure somewhat prior to 2010, which is generally recognized as the first year in which “austerity budgets” lead to large decreases in LA funding.

4 Empirical Specification

Our empirical specification is motivated by the fact, documented in Section 5 below, that LAs in England are dominated by the three main parties, Labour, Conservative, and Liberal Democrats, with many councils being controlled by the Liberal Democrats. There are also a number of more minor parties who win seats, but do not control councils. As a result of this, on many councils, no party has a majority of seats, known in the UK system as “no overall control”. Moreover, elections to individual seats are often from multi-member districts (wards), and close elections can involve more than two parties and more than one seat.

Because of this feature, the standard RDD method developed for estimating the causal

effects of party control in two-party systems, such as [Ferreira and Gyourko \(2009\)](#), are not appropriate for our case. More precisely, in our sample there are only 33 elections for 23 LAs in which there was a change in control from Labour to the Conservatives with no change in the total seat share of other parties. Even then, the mix within the total share of the other parties (Liberal Democrats, Greens, etc.) may differ following the change. Similarly, there were only 220 elections across 88 LAs where the seat shares of Labour and the Conservatives changed, but the shares of other parties remained constant. Once we include LA fixed effects and restrict the sample to consecutive elections so that we can measure changes in tax and expenditure, the final sample would be much too small for statistical analysis.

For precisely these reasons, other papers that study multi-party system of local governments have developed different methodologies (e.g. [Folke \(2014\)](#); [Freier and Odendahl \(2015\)](#)), and we follow in this tradition. However, we cannot use the particular approaches in these two papers, which were developed for proportional representation systems, as the UK has plurality elections. Instead, as discussed above, we adapt the method of [Hyttinen et al. \(2018\)](#) to our setting. Our main regression equation is

$$Y_{l,t} = X'_{l,t}\beta + \sum_{P=L,C,LD} \delta^P S^P_{l,t-1} + \mu_l + \tau_t + u_{l,t} \quad (1)$$

where l , P are LA and party indices, and $Y_{l,t}$ is the outcome variable, which is either a measure of expenditure or council tax. Also, $X'_{l,t}$ is a vector of controls, $S^P_{l,t}$ are the seat shares for party P in LA l at time $t-1$ and finally, P refers to Labour, or Conservative ($P = L, C$), so everything is measured relative to the baseline effect of “other” parties, principally the Liberal Democrats and independents. The outcome variable is regressed on the lag of the seat share variables due to lags in the budget process for the UK, as explained in more detail in Section 5 below.

As usual, the problem is that $S^P_{l,t}$ may be correlated with $u_{l,t}$ via unmeasured municipality characteristics that affect voting behavior. To address this, we employ a close-election IV strategy that leverages quasi-random variation in the partisan composition of a council induced by close elections for individual seats. We adapt the approach of [Hyttinen et al. \(2018\)](#) to party-lists for UK local government elections. This builds upon prior work using close-election IVs such as [Clots-Figueras \(2011, 2012\)](#); [Folke \(2014\)](#); [Freier and Odendahl \(2015\)](#) but importantly for our context extends it to the case where there may be more than two candidates from more than two parties involved in close elections in a given ward. This is important for the UK case as local elections are characterized by a combination of single- and multi-member districts and elections for a variable number of districts in a given year.

Consider a particular council election. Let v_{idt} be the actual number of votes for candidate i in voting district (ward) d of the LA for an election in year t . Then, we can define for each candidate in the district a variable as follows:

$$M_{idt} = \begin{cases} v_{idt} - MLV_{dt} & \text{if elected} \\ MWV_{dt} - v_{idt} & \text{if not elected} \end{cases} \quad (2)$$

where MLV_{dt} and MWV_{dt} are the maximum losing vote and minimum winning vote, in that ward at that election, respectively.²⁰ This is well-defined both for single-councillor and multi-councillor districts.

Then can define a close election dummy as follows:

$$C_{idt} = \begin{cases} 1 & \text{if } |M_{idt}| / R_{dt} \leq \varepsilon \\ 0 & \text{if } |M_{idt}| / R_{dt} > \varepsilon \end{cases} \quad (3)$$

Here, R_{dt} is the number of registered voters in ward d at election t . So, if $C_{idt} = 1$, the (non)-election of i was close in that the margin of victory, relative to the size of the voting population, or defeat was less than $\varepsilon \times 100\%$. For our main results, we set $\varepsilon = 0.02$, so the margin of victory or defeat is within 2 %: in Table B.5, we demonstrate the robustness of our results to other values. Finally, data on R_{dt} is not available historically, so we use data for 2023.

Moreover, let $D_{idt} = 1$ if candidate i was actually elected. So, $C_{idt}D_{idt}$ is a dummy recording if a candidate got elected in a close election in district d . Finally, let P_{idt} is a dummy recording whether the candidate is in party P . Note that these definitions allow for there being multiple candidates from one or more parties who are closely elected or not, and it is not affected by the number of seats in the district being elected or the number of electoral districts in the council.

Our instrument is then the difference between the number of candidates of party P elected in close elections and the number that would be expected on average, across all electoral districts of the council. To calculate this, first define S_l as the set of candidates in LA l . Then our instrument can be calculated as follows:

$$T_{l,t}^P = \underbrace{\sum_{i \in S_l} C_{idt} D_{idt} P_{idt}}_{\# \text{Candidates Elected}} - \underbrace{\frac{\sum_{i \in S_l} C_{idt} P_{idt}}{\sum_{i \in S_l} C_{idt}} \left(\sum_{i \in S_l} C_{idt} D_{idt} \right)}_{\mathbb{E}[\# \text{Candidates Elected}]} \quad (4)$$

²⁰The MLV is the number of votes of the candidate with the largest number of votes who was not elected. The MWV is defined similarly.

The first term is the actual number of candidates from party P who were elected in close elections. The second term is the expected number of candidates from party i to get elected among all the close candidates. It differs from the first term because there will be elections in which there are multiple candidates from one party and or candidates from more than two parties in a close race. Positive (negative) values reflect the extent to which party P got lucky in the sense that a disproportionate number of close elections were resolved in its favour.

Our identification assumption is that $\mathbb{E}[T_{l,t}^P u_{l,t}] = 0$. This requires that no party tends to disproportionately win close elections, i.e., $\mathbb{E}[T_{l,t}^P] = 0$. Inspection of table 1 shows that this is indeed the case. It also requires the standard and well-documented claim that close elections are as good as random (Eggers et al., 2014). Note that we do not require that individual close district-level elections are independent of each other at a given council election.

In Table B.1, we report covariate balance tests dividing the data into two groups depending on whether the number of candidates elected in close elections was greater than expected ($T_{l,t}^P > 0$) or fewer than expected ($T_{l,t}^P < 0$). As our focus is on within-council variation we compute the differences conditional on LA fixed-effects. We can see that there are no systematic differences in the covariates.²¹

As discussed in Section 3.4, LAs saw a substantial increase in spending around in the first six years of the millennium. In practice this increase in funding occurred in different LAs at different times. To address this, we also include in $X_{l,t}$ a LA-specific structural break term in columns (4) and (6) in Tables 2, 3, 4, 5. This is estimated using a Wald Supremum test for a single structural break with an unknown date (Hansen, 1997).

A final issue is the possible endogeneity of grants. For reasons already explained, the total grant is a key determinant of both LA expenditure and taxation. A possible concern is that the grant could be endogenous to political control of the council. For example, Fournaises and Mutlu-Eren (2015) finds an alignment effect in specific grants, whereby councils that are politically aligned with the central government receive larger grants.²² This is a potential problem because if grants are affected by the party in power on the

²¹We also checked that the distributions of party seat shares is similar across elections that include a close election and those that do not. Conditional on LA and year fixed-effects, we find no large differences, although there is some evidence of Labour very slightly under-represented in close elections and the Liberal Democrats over-represented. Likewise, there are not systematic differences in terms of observable characteristics (with the exception of the population over-65) between LA-years in which there was a close election and those in which there was not.

²²This finding is in common with a literature documenting an alignment effect in several other countries including Albania (Case, 2001), Brazil (Brollo and Nannicini, 2012), India (Arulampalam et al., 2009), Italy (Bracco et al., 2015), Portugal (Migueis, 2013), Spain (Solé-Ollé and Sorribas-Navarro, 2008; Curto-Grau, Solé-Ollé and Sorribas-Navarro, 2018), and the US (Levitt and Snyder, 1995; Larcinese, Rizzo and Testa, 2006).

council, then the *preferences* and *resources* of politicians are confounded. For example, if Labour LAs get a larger grant than Conservative ones when Labour is the national government, then even conditional on local characteristics, a LA controlled by Labour will have some combination of higher expenditure and lower taxes than a LA controlled by Conservatives, *even though* there may be no ideological differences in the preferences of the two LAs over spending and taxation.

Table B.2 reports regressions of the total grant on various LA characteristics and an alignment dummy that is equal to 1 if the council of that LA is aligned with the national government and 0 otherwise.²³ In the specification with two-way fixed effects (column 3) we see that the total grant does indeed depend on LA characteristics as expected. For example, it is decreasing in population, reflecting the fact that due to economies of scale, the costs of providing services are lower in larger LAs. Also, the grant is increasing in the shares of young and retired population. We also allow for a LA-specific structural break term. When the alignment dummy is added to this specification, it is insignificant. Statistically, this is not surprising as the other variables in this specification account for 81% of the variation in the grant within a LA. The reason our results differ from [Fouirnaies and Mutlu-Eren \(2015\)](#) is probably because we are studying the total grant, whereas they study specific grants, which are more open to political manipulation.

4.1 First Stage

Our empirical strategy is designed to address the key feature of our setting, that political competition is not limited to the Conservative and Labour parties. As can be seen in Figure 3 it is commonly the case that the Liberal Democrats, other parties and independents hold a substantial share of the seats on the council. In principle, one could study the impact of an increased share of each party. However, in practice in England, there are no other parties that routinely hold seats in more than a few councils, limiting variation with which to identify these impacts. Moreover, inference becomes more difficult as the number of endogenous variables increases. For this reason, we treat the Liberal Democrats, all the minor parties, and independents as a single group, which serves as the omitted category. This is reasonable given that the Liberal Democrats traditionally fall between the Conservatives and Labour on the left-right dimension. This means that we have two endogenous variables, Conservative and Labour seat shares (or control), which we instrument with $T_{l,t}^C$ and $T_{l,t}^L$.

In an idealized setting of a two-party close election involving a single seat the expected

²³In the construction of this variable, the coalition government of 2010-15 was classified as Conservative, as the Conservative party was the senior partner.

coefficient on each of $T_{l,t}^C$ and $T_{l,t}^L$ is 0.5 since the election of each candidate in excess of the expected number is an increase of half a seat relative to that expectation. In reality, the expectation will vary. We plot these coefficients for a variety of values of ϵ in fig. B.3 in the Appendix. The coefficient on the $T_{l,t}^C$ is indeed very close to 0.5 for our preferred definition of $\epsilon = 2\%$, although $T_{l,t}^L$ is a little larger, perhaps reflecting the preponderance of multi-member wards in LAs where Labour is strongest.

The presence of two endogenous variables means we have to be particularly concerned about the possibility that these instruments may be weak. In our case, this will be a concern if the net outcomes of close-elections only accounts for a limited amount of changes in seat shares, with other factors such as national political trends, local events, and candidate specific factors more important. This is plausible, and as we show below, borne out by the data. This concern is particularly important in our case as 2SLS is biased towards the OLS estimator with weak instruments, and so it is possible that with weak instruments, we might find that political control affects fiscal policy due to estimator bias. To address this problem we use the [Fuller \(1977\)](#) estimator instead of the conventional 2SLS estimator. This is because, [Staiger and Stock \(1997\)](#); [Stock and Yogo \(2005\)](#) show that, in the presence of weak instruments, the [Fuller \(1977\)](#) estimator has lower finite-sample bias than 2SLS and improved test size.

For each specification, we report the results of a diagnostic test on the performance of the instruments. As we have multiple instruments ($T_{l,t}^C, T_{l,t}^L$) we report the cluster-robust version of the Cragg-Donald F-statistic ([Cragg and Donald, 1993](#)), the Kleibergen-Paap Wald rk test ([Kleibergen and Paap, 2006](#)) as a test for weak-identification. This is the multivariate generalization ([Stock and Yogo, 2005](#)) of the more conventional first-stage F-statistic. Looking at our preferred specification column (6) of tables 2 and 5 the results suggest that weak identification is unlikely to be driving our results as test-statistic of 5.3 and 16.6 for party control and seat share, respectively, is sufficient to rule out bias of more than 10% (resp. 5%). Moreover, since our estimates are just-identified, our estimates will be approximately median-unbiased ([Angrist and Pischke, 2009](#), p. 319).

5 Data

Our dataset covers all English LAs from the period 1998 to 2015.²⁴ We first discuss our outcome variables $Y_{l,t}$. To measure aggregate expenditure outcomes, we use total service expenditure, as this is the variable most likely to reflect the spending choices of LAs. The

²⁴Data for Welsh LAs is available from CIPFA, but, as above, including Wales complicates things, as Plaid Cymru is a fourth major party, which controls some Welsh councils during our sample period. Excluding Wales only leads to the loss of about 5% of observations.

other spending outcome variable is net current expenditure per capita, which is equal to total service expenditure including various housing benefits paid by LAs, plus a number of smaller items.²⁵ However, as rates of housing benefit are set at a national level, so this component of expenditure does not reflect local choices. We also have total expenditure disaggregated by type of service provided.

Our measure of tax is the main tax rate, i.e., the council tax paid per “standard” or band D property.²⁶ As explained in Section 3.3, this rate is highly salient and the focus of media attention, as it determines whether a LA will be capped in any given year. In all cases, nominal values are deflated by the 2013 consumer price index. All of these variables are financial year variables and are taken from the *Finance and General Statistics* published annually by the *Chartered Institute of Public Finance and Accountancy* (CIPFA).²⁷

Our final variables relate to capital expenditure and debt and debt limits. These data are from the Department of Levelling Up, Housing and Communities.²⁸ Capital expenditure is defined as total capital expenditure across all categories, excluding acquisition of share and loan capital, total debt is defined as gross borrowing at the end of the financial year, and we also have the operational boundary and authorized limit for external debt. Descriptive statistics for these variables, and all others, are given in Table 1 below.

As explained in Section 4 above, our main explanatory variables of interest are the party seat shares. These shares taken from the Elections Centre, University of Plymouth (Rallings and Thrasher, 2020). These provide seat-shares for the Conservative, Labour, and Liberal Democrat parties as well as Plaid Cymru and the number of independent or otherwise affiliated councillors. They also provide data on which, if any, party had control of the council.

Ward level data used to construct instruments for the period 1993–2003 are taken from Ware, Rallings and Thrasher (2006). Data for 2004 and 2005 are based on newly digitized data from Rallings and Thrasher (2004) and Rallings and Thrasher (2005) respectively. Data for 2006–2015 are from the Local Elections Archive Project (Teale, 2020). In each case, the data are based on those supplied by the returning officers for each council.

Figure 3 is a tripolar scatter-plot showing the pattern of political control of councils of English LAs over the sample period. The main message of this plot is that there is substantial control of councils by all three parties, as well as numerous councils where no

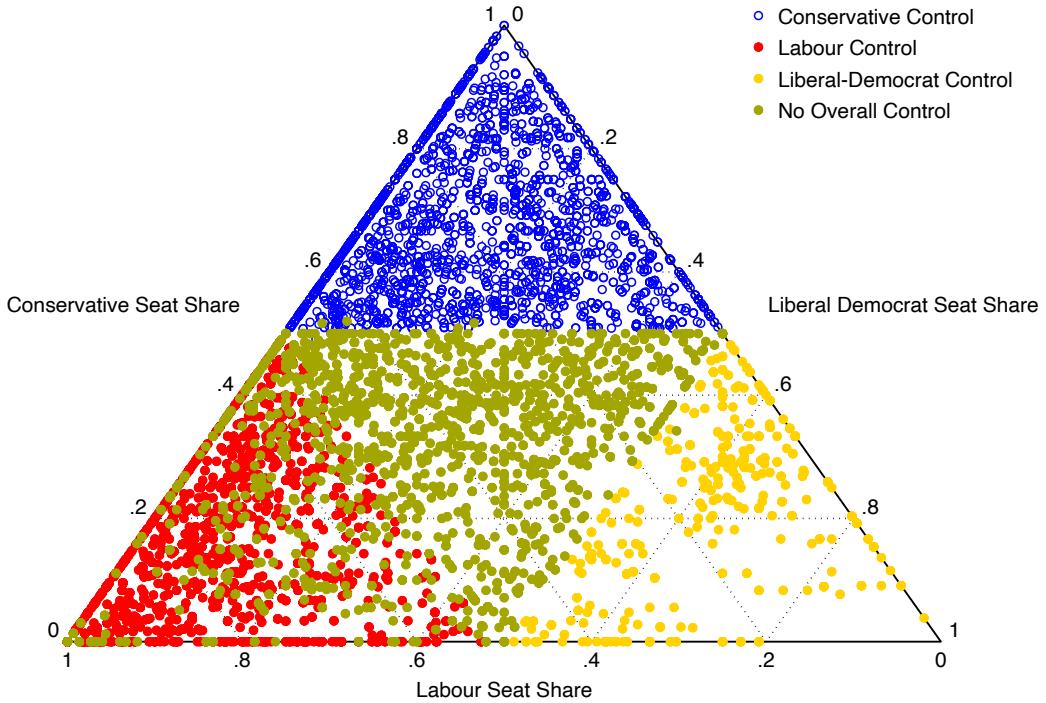
²⁵By far the largest component of the difference comprises the sum of rent allowances and rent rebates.

²⁶An alternative measure in the CIPFA data is the tax requirement per capita, which is the amount of property tax the LA intends to collect in that financial year.

²⁷Data are available at <https://www.cipfa.org>.

²⁸The data are available at: [Local Authority Capital Expenditure and Receipts England 2000-2015](https://www.gov.uk/government/statistics/local-authority-capital-expenditure-and-receipts-england-2000-2015)

Figure 3: Party Vote Shares and Council Control



The figure is a ternary (or tripolar or simplex) scatter plot reporting the vote shares of the Conservative, Labour, and Liberal Democrat parties. Each point describes a council election outcome and is colored to reflect which if any, party controlled the council. Elections in which the three-party vote share was less than 90% are excluded for clarity.

party has overall control i.e., more than 50% of the seats. Note that in constructing the figure, for clarity, we exclude the vote share of other parties. So, it is possible for there to be no overall control of the council even if one of the three main parties has more than 50% of the seats held by the three main parties. In practice, as the figure indicates, this occurs almost exclusively when the largest party on the council is the Labour Party.

Finally, we have some additional control variables that capture council characteristics that (a) might plausibly be changing over time at different rates for different LAs, and thus will not be picked up by LA and year fixed effects, and (b) might affect spending and taxation, conditional on the grant. These are total population and total population squared, and the proportions of the population under 15 and over 65. These capture any (dis)-economies of scale from having larger populations to serve, plus any additional needs from a larger share of young or elderly in the population ([Ward and John \(1999\)](#)). The source for these is the Office of National Statistics.

To understand the relationship between our party control variables and dependent variables, we briefly outline the budget process. In the summer of year t , the national government begins the process of deciding on the grant allocation to councils for year $t+1$.

This process ends with the announcement of the Provisional Local Government Finance Settlement for $t+1$, typically announced in December of year t . In January and February of year $t+1$, the council then prepares the budget for the financial year $t+1$, a process that ends with the approval of the Budget by the Council in February or March of that year. The expenditure and tax data in the CIPFA statistics for year t are simply taken from these budgets.²⁹ This has the following implications. As current expenditures and council taxes for year $t+1$ are planned in year t , they can be affected by party control in year t , if it is affected at all. So, to allow for this, we forward our outcome variables of interest by one year i.e., $Y_{l,t}$ in equation (1) above refers to a spending or tax measure in year $t+1$. The exception is for capital expenditure, where the dependent variable is defined as a three-year moving average of forward values, to reflect the statutory three-year planning horizon for this expenditure.

Finally, we comment on our choice of starting year. Over the period for which we have data, there were two rounds of reform of the structure of local government, over the period 1996-98 and also in 2009. The 1996-98 reforms were quite extensive; in England, a number of unitary authorities were created, mainly in urban areas, and five county councils were abolished, being divided into a number of unitary authorities.³⁰³¹ The 2009 reforms were much more minor, and involved five English counties moving from the two-tier structure to being single unitary authorities (Cornwall, Durham, Northumberland, Shropshire, and Wiltshire) and Cheshire divided into two UAs. So, given the extensive nature of the earlier reforms, we started our dataset in 1998.

²⁹CIPFA surveys all councils in March of every year, to collect the data for that year.

³⁰Avon, Berkshire, Cleveland, Humberside, and Isle of Wight. Berkshire retained its status as an administrative area.

³¹For a complete list of these reforms, see Gazetteer of the old and new geographies of the United Kingdom, ONS, 1999.

Table 1: Summary Statistics

	Mean	SD	Min	Max	N
Total Service Expenditure p.c.	682.13	672.82	38.17	3,053.76	6,613
Net Current Expenditure p.c.	893.48	758.35	38.17	3,914.73	6,643
Tax Requirement p.c.	180.35	145.87	6.35	635.44	6,643
Tax per Band D equiv.	1,222.79	263.09	62.10	1,756.44	6,544
Capital Expenditure p.c.	154.81	150.56	0.00	2,726.98	5,897
Debt p.c.	537.97	665.00	0.00	4,773.88	4,361
Authorised Boundary p.c.	774.67	2,310.86	0.00	100,597.61	4,361
Authorised Limit p.c.	896.93	3,142.30	0.00	140,438.25	4,361
<i>Council Control and Composition</i>					
CON Seat Share	0.42	0.25	0.00	1.00	6,651
LAB Seat Share	0.29	0.26	0.00	1.00	6,651
LD Seat Share	0.18	0.17	0.00	0.91	6,651
CON Control	0.41	0.49	0.00	1.00	6,651
LAB Control	0.23	0.42	0.00	1.00	6,651
LD Control	0.06	0.23	0.00	1.00	6,651
No Overall Control	0.30	0.46	0.00	1.00	6,651
T_{mt}^{CON}	0.01	0.07	-0.36	0.48	6,651
T_{mt}^{LAB}	0.01	0.06	-0.38	0.34	6,651
T_{mt}^{LD}	0.00	0.06	-0.24	0.34	6,651
Total Grants p.c.	761.89	663.16	0.00	3,653.71	6,651
Population (Millions)	0.19	0.20	0.02	1.51	6,651
% pop < 15	19.08	1.76	12.82	27.32	6,270
% pop > 65	17.35	3.81	6.00	32.70	6,270
no. of band D equiv. properties p.c.	0.35	0.05	0.18	0.64	6,544

Notes: Variable sources and definitions are given in the text. $T_{l,t}^{CON}$, $T_{l,t}^{LAB}$, and $T_{l,t}^{LD}$ are as defined in eq. (4).

6 Results

6.1 The Effect of Party Control and Seat Shares on Service Expenditure and Council Taxes

Our main results are in Tables 2 and 5. All tables have the same structure. Each Table reports estimates of different specifications of equation (1), where the main variables of interest are Labour and Conservative control indicators or seat shares. A party control variable equals unity if that party has a strict majority on the council and zero otherwise. For both tables, the dependent variables and the grant are both measured in logs, and the sample includes all types of council.

Looking at Table 2, we first comment on the OLS results. Column (1) is a simple bivariate regression without the grant, council fixed effects or controls. We see that relative to the benchmark of no overall control (NOC) or Lib Dem control, Labour controlled councils spend 76% more, and Conservative councils spend 17% less, than the benchmark. This confirms the conventional wisdom that Labour councils spend more. However, column (2) shows that when we also condition on the total grant, these party effects almost completely disappear, with only Conservative councils spending about 5% less. The interpretation of this set of results is straightforward; LAs that are under Labour control receive on average, a greater total grant per capita than either Conservative-controlled councils, or baseline councils with Lib Dem or no overall control. This fact is documented in the box plot B.2 in the Appendix. Receipt of this higher grant allows them to spend more - indeed, given the constraints on service provision described in Section 3, they are required by the central government to spend more.

When fixed effects and controls are added in (3) and (4), even this weak effect disappears. Note that when we include council fixed effects, we are effectively asking; does a change in party control in a LA make any difference to spending? The grant formula takes into account characteristics of LAs, such as (dis)economies of scale due to larger populations, levels of deprivation, and the age structure of the population. Hence, this should capture non-discretionary ways in which LA fiscal policy varies. Thus, it represents a parsimonious way to capture the impact of these factors, minimizing the number of parameters to be estimated and ensuring that we do not fail to find an effect of political control because we are asking too much of the data, in column (4) we present results showing that in fact our results are unaffected by the inclusion of the additional covariates among the regressors.

By including fixed effects, we are controlling for time-invariant differences between councils and changes in the national average over time. However, our estimates may still be biased if there is reverse causality such that, for example, high levels of taxation

lead to a Conservative council being more likely to be elected, or councils targeting the composition and level of spending to win particular types of support. As explained in section 4 our IV strategy, by focusing on quasi-random variation in party control and seat-shares eliminates these concerns. However, when we look at the IV results, this finding is confirmed; conditional on the grant, there are no party control effects.

Note that with either the OLS or IV specifications, the total government grant ceases to have any additional explanatory power when LA and year fixed effects and controls are included. One interpretation of this is that the grant is well-explained by LA characteristics i.e. there is no political element to the grant allocation, a finding that has already been noted above, where we found no alignment effect in the grant. The significant negative coefficient on population, and positive coefficient on squared population, have the usual interpretation that, initially, there are economies of scale in providing services to the population, but that these scale economies diminish at high levels of population.

Looking next at Table 3, we see a quite similar picture to in Table 2. To interpret the coefficients, we see, for example, from (1) that a 10% increase in the Labour seat share is associated with 16.5% higher spending. The main qualitative difference relative to the party control results is that now, the negative effect of Conservative seat share is quite robust across all specifications, although it decreases in size as more regressors are added. However, this negative effect disappears completely in the IV specifications.

We now turn to taxation. Tables 4 and Tables 5 show the effect of party control and seat shares on our measure of the rate of council tax set by LAs, the tax per band D property. These tables are organized in exactly the same way as the expenditure tables.

In Table 4, column (1) is a basic specification without the grant, council fixed effects or controls. We see, that relative to the benchmark of no overall control (NOC) or Lib Dem control, Labour controlled councils set a 42% higher tax rate, but the Conservative council tax is no different to the benchmark. This confirms the conventional wisdom that Labour councils set higher taxes. However, when we condition on the grant, Labour controlled councils set a 17% *lower* tax rate, although this finding is not robust to the inclusion of fixed effects and controls. Turning to the IV estimates, we see that these estimates also indicate no party control effects on the tax rate.

Our interpretation of these results is the following. As shown in Figure B.2 in the Appendix, Labour councils have a significantly smaller tax base on average, as measured by the number of Band D properties per capita, and thus set higher tax rates. However, the grant is strongly negatively correlated with the tax base, as shown in column (1) of table B.2. So, once we condition on the grant, the tax base effect disappears.

The effects of the controls on the dependent variable have a similar interpretation to the case of service expenditure; up to a point, larger councils enjoy economies of scale in

Table 2: Party Control and Local Authority Spending

	(log) Total Service Expenditure					
	OLS				IV	
	(1)	(2)	(3)	(4)	(5)	(6)
L.CON Control	-0.177** (0.088)	-0.053* (0.028)	-0.007 (0.007)	-0.006 (0.007)	0.007 (0.060)	0.005 (0.043)
L.LAB Control	0.764*** (0.107)	-0.029 (0.029)	-0.008 (0.008)	-0.008 (0.008)	-0.012 (0.099)	-0.001 (0.064)
(log) Total Grants p.c.		1.229*** (0.014)	-0.001 (0.025)	-0.016 (0.015)	0.147*** (0.024)	-0.017 (0.015)
Pre-Break				-0.075*** (0.015)	-0.221*** (0.013)	-0.075*** (0.015)
Population (Millions)				-2.801*** (0.763)		-2.822*** (0.762)
Population ²				0.002*** (0.000)		0.002*** (0.000)
% pop < 15				0.005 (0.008)		0.004 (0.009)
% pop > 65				-0.019*** (0.005)		-0.019*** (0.005)
band D equiv % p.c.				0.211 (0.287)		0.202 (0.291)
Observations	5855	5855	5855	5484	5855	5484
WeakID					3.90	5.30
LA FEs	No	No	Yes	Yes	Yes	Yes
Year FEs	No	No	Yes	Yes	Yes	Yes
Controls	No	No	No	Yes	No	Yes

Note: Controls are: population, % population below 15, % population over 65, no. of band D equiv. properties p.c. IV estimates in columns (5) and (6) are estimated using the [Fuller \(1977\)](#) modified LIML estimator with parameter 1 to minimize concerns about bias due to weak instruments. Columns (4)–(6) additionally include a structural break dummy computed using an LA-specific Supremum Wald test ([Hansen, 1997](#)). The WeakID statistic is the Cragg-Donald F-statistic. Standard Errors clustered by LA are in parentheses. *** Significant at the 1% level.
 ** Significant at the 5% level. * Significant at the 10% level.

Table 3: Party Seat Shares and Local Authority Spending

	(log) Total Service Expenditure					
	OLS				IV	
	(1)	(2)	(3)	(4)	(5)	(6)
L.CON Seat Share	−0.151 (0.234)	−0.164** (0.070)	−0.093*** (0.032)	−0.048 (0.032)	0.018 (0.152)	0.014 (0.111)
L.LAB Seat Share	1.652*** (0.222)	−0.090 (0.070)	−0.010 (0.033)	0.007 (0.034)	−0.025 (0.196)	−0.002 (0.129)
(log) Total Grants p.c.		1.229*** (0.016)	0.002 (0.025)	−0.015 (0.014)	0.145*** (0.031)	−0.017 (0.015)
Pre-Break				−0.074*** (0.015)	−0.220*** (0.014)	−0.075*** (0.015)
Population (Millions)				−2.778*** (0.774)		−2.827*** (0.764)
Population ²				0.002*** (0.000)		0.002*** (0.000)
% pop < 15				0.006 (0.008)		0.004 (0.009)
% pop > 65				−0.017*** (0.005)		−0.019*** (0.006)
band D equiv % p.c.				0.219 (0.291)		0.207 (0.294)
Observations	5855	5855	5855	5484	5855	5484
WeakID					10.29	16.56
LA FEs	No	No	Yes	Yes	Yes	Yes
Year FEs	No	No	Yes	Yes	Yes	Yes
Controls	No	No	No	Yes	No	Yes

Note: IV estimates in columns (5) and (6) are estimated using the [Fuller \(1977\)](#) modified LIML estimator with parameter 1 to minimize concerns about bias due to weak instruments. Columns (4)–(6) additionally include a structural break dummy computed using an LA-specific Supremum Wald test ([Hansen, 1997](#)). The WeakID statistic is the Cragg-Donald F-statistic. Standard Errors clustered by LA are in parentheses. *** Significant at the 1% level. ** Significant at the 5% level. * Significant at the 10% level.

service provision and have to tax less. Finally, we see that the coefficient on the tax base, the number of band D properties per capita, has a positive sign in regressions (4) and (6). This is possibly counter-intuitive as we would expect that with a larger tax base, the council would need to set a lower rate. However, as LA fixed effects are present, the interpretation of the positive coefficient is that if the tax base expands in a LA, the tax rate rises. One possible explanation for this is that as shown in Table B.2, the grant is very sensitive to a change in the tax base and so the grant may “undershoot” following an increase in the tax base and require the council to set a higher tax.³²

Tables 5 shows a broadly similar picture. Column (1) is a basic specification without the grant, council fixed effects or controls. We see, that a 10% increase in the Labour seat share increases service expenditure by 8.3%, relative to the benchmark of no overall control (NOC) or Lib Dem control, Labour controlled councils set a 42% higher tax rate, but the Conservative council tax is no different to the benchmark.

So, overall, we have found quite robustly, that when we condition on the grant, there appear to be no effects of Labour or Conservative party control or seat share on our measures of spending and taxation. This result is robust to the inclusion of fixed effects, controls, and finally addressing endogeneity bias using an IV estimator.

³²For example, a 0.1 increase in the tax base (which is roughly the difference in the average tax base between Labour and Conservative unitary councils, see B.2), implies, from Table B.2, a $0.1(\exp(-2.250) - 1) = -0.09 = 9\%$ reduction in the grant.

Table 4: Party Control and Local Authority Taxation

	(log) Tax per Band D property					
	OLS				IV	
	(1)	(2)	(3)	(4)	(5)	(6)
L.CON Control	−0.042 (0.069)	0.050 (0.033)	0.010* (0.006)	0.002 (0.005)	0.078 (0.050)	0.020 (0.030)
L.LAB Control	0.416*** (0.080)	−0.176*** (0.036)	−0.000 (0.006)	0.005 (0.005)	0.108 (0.099)	0.072 (0.051)
(log) Total Grants p.c.		0.921*** (0.020)	0.060*** (0.021)	0.016* (0.009)	0.253*** (0.020)	0.017* (0.010)
Pre-Break				−0.028*** (0.011)	−0.199*** (0.011)	−0.025** (0.011)
Population (Millions)				−2.027*** (0.472)		−2.111*** (0.499)
Population ²				0.001*** (0.000)		0.001*** (0.000)
% pop < 15				0.010* (0.005)		0.008 (0.006)
% pop > 65				0.015*** (0.003)		0.015*** (0.004)
band D equiv % p.c.				2.494*** (0.213)		2.523*** (0.225)
Observations	5885	5885	5885	5484	5885	5484
WeakID					3.97	5.34
LA FEs	No	No	Yes	Yes	Yes	Yes
Year FEs	No	No	Yes	Yes	Yes	Yes
Controls	No	No	No	Yes	No	Yes

Note: IV estimates in columns (5) and (6) are estimated using the [Fuller \(1977\)](#) modified LIML estimator with parameter 1 to minimize concerns about bias due to weak instruments. Columns (4)–(6) additionally include a structural break dummy computed using an LA-specific Supremum Wald test ([Hansen, 1997](#)). The WeakID statistic is the Cragg-Donald F-statistic. Standard Errors clustered by LA are in parentheses. *** Significant at the 1% level. ** Significant at the 5% level. * Significant at the 10% level.

Table 5: Party Seat Shares and Local Authority Taxation

	(log) Tax per Band D property					
	OLS				IV	
	(1)	(2)	(3)	(4)	(5)	(6)
L.CON Seat Share	0.004 (0.189)	-0.009 (0.089)	0.083*** (0.023)	0.046** (0.020)	0.191* (0.114)	0.045 (0.071)
L.LAB Seat Share	0.837*** (0.177)	-0.509*** (0.080)	-0.048* (0.025)	-0.023 (0.019)	0.205 (0.175)	0.143 (0.094)
(log) Total Grants p.c.		0.951*** (0.020)	0.056*** (0.021)	0.014 (0.009)	0.256*** (0.023)	0.019* (0.010)
Pre-Break				-0.029*** (0.010)	-0.199*** (0.012)	-0.026** (0.011)
Population (Millions)				-2.052*** (0.453)		-2.086*** (0.505)
Population ²				0.001*** (0.000)		0.001*** (0.000)
% pop < 15				0.009* (0.005)		0.010* (0.006)
% pop > 65				0.013*** (0.003)		0.016*** (0.004)
band D equiv % p.c.				2.476*** (0.209)		2.551*** (0.223)
Observations	5885	5885	5885	5484	5885	5484
WeakID					10.49	16.62
LA FEs	No	No	Yes	Yes	Yes	Yes
Year FEs	No	No	Yes	Yes	Yes	Yes
Controls	No	No	No	Yes	No	Yes

Note: IV estimates in columns (5) and (6) are estimated using the [Fuller \(1977\)](#) modified LIML estimator with parameter 1 to minimize concerns about bias due to weak instruments. Columns (4)–(6) additionally include a structural break dummy computed using an LA-specific Supremum Wald test ([Hansen, 1997](#)). The WeakID statistic is the Cragg-Donald F-statistic. Standard Errors clustered by LA are in parentheses. *** Significant at the 1% level. ** Significant at the 5% level. * Significant at the 10% level.

6.2 The Effect of Party Control and Seat Shares on The Composition of Expenditure

In this section, we investigate whether there is any effect of Labour or Conservative seat shares on the composition of expenditure. In the CIPFA data, the main categories of expenditure are: expenditure on schools, social care, corporate, transport, culture, planning, environment, housing, and other expenditure. So, we estimate a specification (1) separately for each of these expenditure categories, with the dependent variable being the amount spent on that service as a fraction of the total across all these expenditure categories.

The mean values of these shares are given in Table 6; the largest expenditure categories are environmental and education expenditures. In turn, the main components of environmental expenditure are waste collection, disposal, and recycling. We do not include spending on police and fire services, as spending on the latter is determined by other, primarily non-political bodies. For example, the police precept (levy on the local council tax) is, in fact, determined by a separate body, the police authority, some of whose members are non-political appointees.

The results are shown in Table 6 below. As we can see from the table, not a single party control or seat share variable is significant, except the share of expenditure on transport, where there is some weak evidence that Conservatives spend more. Given the number of outcomes we consider, and that the relationship is only significant at the 10% level our interpretation of this is that it represents chance rather than any effect of political control.³³ So, we can conclude that there is strong evidence that neither the party composition, nor the party control of the council, has any effect on the composition of expenditure.

One final issue is that there was a major change in the funding of education expenditure in 2006-7, when a ring-fenced Schools Grant was introduced; before, education had been funded out of the overall grant and council tax revenues. It is possible, therefore, that reduced discretion on spending on this important item after 2006 may be leading to the absence of party control effects, as seen in column 1 of the table. To test for this, we estimate (1) separately for the period 1998-2006 and 2007-15 for education expenditure, and these two results are reported in columns 10 and 11 of Table 6. As we can see, there is no effect of party control even before the dedicated schools grant was introduced.

³³Put differently, using standard Bonferroni type corrections would imply that we require a much higher level of statistical significance.

Table 6: Party Seat Share & Composition of Expenditure

Panel A: Party Seat Share											
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
L.CON Seat Share	Education %	Social Care %	Corporate %	Transport %	Culture %	Planning %	Environment %	Housing %	Other%	Education %	Education %
	-0.025 (0.025)	0.004 (0.036)	0.051 (0.064)	0.065* (0.033)	-0.062 (0.043)	0.028 (0.034)	0.000 (0.051)	-0.042 (0.035)	-0.011 (0.018)	-0.029 (0.048)	0.005 (0.048)
L.LAB Seat Share	0.013 (0.037)	-0.033 (0.045)	0.063 (0.084)	0.029 (0.030)	-0.036 (0.046)	-0.027 (0.047)	0.016 (0.067)	-0.014 (0.043)	-0.024 (0.023)	-0.001 (0.043)	0.014 (0.059)
Observations	5481	5443	5479	3957	5483	5342	5483	5463	4580	2013	3122
Mean	0.22	0.10	0.12	0.03	0.15	0.08	0.23	0.09	0.01	0.30	0.47
WeakID	16.81	16.85	16.82	15.77	16.86	16.91	16.86	16.82	12.93	8.75	10.36
LA FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Panel B: Party Control											
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
L.CON Control	Education %	Social Care %	Corporate %	Transport %	Culture %	Planning %	Environment %	Housing %	Other%	Education %	Education %
	-0.009 (0.010)	0.000 (0.014)	0.021 (0.025)	0.022* (0.012)	-0.024 (0.017)	0.009 (0.013)	0.000 (0.020)	-0.016 (0.013)	-0.005 (0.007)	-0.008 (0.012)	0.003 (0.017)
L.LAB Control	0.007 (0.019)	-0.017 (0.023)	0.032 (0.043)	0.012 (0.014)	-0.017 (0.024)	-0.014 (0.024)	0.008 (0.034)	-0.007 (0.021)	-0.011 (0.011)	-0.001 (0.020)	0.008 (0.030)
Observations	5481	5443	5479	3957	5483	5342	5483	5463	4580	2013	3122
Mean	0.22	0.10	0.12	0.03	0.15	0.08	0.23	0.09	0.01	0.30	0.47
WeakID	5.36	5.37	5.35	5.46	5.37	5.04	5.37	5.39	6.44	4.47	2.08
LA FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Note: Controls are: population, % population below 15, % population over 65, no. of band D equiv. properties p.c. All specifications additionally include LA and year fixed effects, as well as an LA-specific structural break computed using an LA-specific Supremum Wald test (Hansen, 1997). IV estimates are estimated using the Fuller (1977) modified LIML estimator with parameter 1 to minimize concerns about bias due to weak instruments. The WeakID statistic is the Cragg-Donald F-statistic. Standard Errors clustered by LA are in parentheses. *** Significant at the 1% level. ** Significant at the 5% level. * Significant at the 10% level.

6.3 The Effect of Party Control on Capital Expenditure and Debt

In this section, the dependent variables are capital expenditure and the growth rates of actual debt, and the operational boundary and authorized limit for debt. As LAs are required to formulate a rolling three-year plan for capital expenditure, we take the three-year forward moving average (MA) of the log of capital expenditure as the dependent variable i.e., the dependent variable in year t is the average of the log of capital expenditure in years $t + 1, t + 2, t + 3$. The results for capital expenditure and debt are in Table 7 show that there are no party control effects.

Table 7: The Determinants of Local Authority Capital Expenditure and Borrowing

	(1)	(2)	(3)	(4)	(5)	(6)
MA Cap. Exp. p.c.						
L.CON Seat Share	−0.519 (0.478)	0.242 (0.788)	−0.219 (0.363)	−0.273 (0.286)	0.010 (1.245)	−0.035 (0.977)
L.LAB Seat Share	−0.455 (0.508)	0.510 (0.624)	−0.485 (0.363)	−0.395 (0.318)	−0.079 (1.259)	0.018 (1.063)
Observations	4774	2893	3996	4096	3996	4096
WeakID	18.88	14.02	12.54	12.99	12.54	12.99
LA FEs	Yes	Yes	Yes	Yes	Yes	Yes
Year FEs	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes

Note: Controls are: population, % population below 15, % population over 65, no. of band D equiv. properties p.c.. All specifications additionally include LA and year fixed effects, as well as an LA-specific structural break computed using an LA-specific Supremum Wald test (Hansen, 1997). IV estimates are estimated using the Fuller (1977) modified LIML estimator with parameter 1 to minimize concerns about bias due to weak instruments. The WeakID statistic is the Cragg-Donald F-statistic. Standard Errors clustered by LA are in parentheses. *** Significant at the 1% level. ** Significant at the 5% level. * Significant at the 10% level.

6.4 Robustness Checks

6.4.1 Results by Council Type

Given the large number of district councils in our dataset, one possible concern is that our negative results are driven by the fact that political parties are weaker at the district level. First, there is career progression; for example, county councilors have often been district councilors previously. Second, even if a district councillor is a member of a political party and represents that party on council, they will have responsibility for a smaller budget, less onerous duties, which is reflected in lower pay and allowances.³⁴

To investigate this, we report in columns (1) and (2) of table B.3 the regressions as in the final columns of Table 2 and Table 3 (i.e. the IV specification with fixed effects and controls), but disaggregated between districts and non-districts. In both cases, there is no evidence that party control makes a difference. Similarly, in columns (5) and (6) of table B.3 we report the regressions as in the final columns of Table 4 and Table 5, but disaggregated between districts and non-districts. Again, there is no evidence that party control makes a difference.

6.4.2 Before and After Austerity

Another concern is the impact of spending cuts implemented after the 2008 financial crisis, which may have significantly constrained local government activities. To assess whether the austerity measures introduced by the central government in the aftermath of the crisis influenced our results, we divided the sample into two subsamples: the first covering the period from 1997 to 2009, and the second from 2010 onward.

We examine this issue further in columns (3) and (4) of Table table B.3, where we present the regressions corresponding to the final columns of Tables 2 and 3 (i.e., the IV specification with fixed effects and controls), disaggregated for the periods before and after 2009. In both subsamples, there is no evidence that party control affects the results. Similarly, in columns (7) and (9) of Table table B.3, we report the regressions from the final columns of Tables 4 and 5, again disaggregated into the two periods, before and after the financial crisis. Once more, there is no evidence to suggest that party control has any significant impact.

³⁴For example, the leader of Warwickshire County Council receives an allowance of twice that for the leader of Warwick District Council, and while county Councilors receive allowances of around £10,000, district councilors get only travel and subsistence expenses.

6.4.3 Alignment and Income Dispersion

Our leading explanation for the irrelevance of party control for LA fiscal outcomes is that the LA is fiscally constrained. As noted by [Ferreira and Gyourko \(2009\)](#), an alternative explanation could be that LAs are rather homogeneous in voters characteristics. In that case, the standard Downsian model with probabilistic voting predicts that party platforms are close together ([Lindbeck and Weibull, 1993](#)).³⁵

We investigate this alternative hypothesis as follows. We use data on average income for each MSOA, a lower-level statistical area corresponding to neighbourhoods of around 8,000 people each, in a LA.³⁶ We then compute the Gini Coefficient of these average incomes within the LA; this Gini is our measure of income heterogeneity within the LA. We then re-run our analysis separately for low- and high-inequality LAs.

The results are reported in appendix [B.4](#) for both expenditure and taxation. If the [Ferreira and Gyourko \(2009\)](#) hypothesis is correct, we would expect to find party control effects for the high-Gini i.e. heterogeneous districts, where the location on the median voter is more uncertain from the perspective of the political parties. In fact, we see that there is no evidence in favour of that hypothesis, as these are no party control effects for either type of district.

7 Conclusions

This paper has investigated the effect of party control on fiscal behavior by LAs in England, using an instrumental variable approach based on seats won in close elections. Our main finding is that political control of the council by the two main parties, Labour or Conservative, has no effect on service expenditure, the composition of that expenditure, or the property tax rate (council tax per band D property). We find the same null results for capital expenditure, debt, and authorized debt limits. These results are robust to a variety of alternative specifications. Thus, our results confirm the widely expressed belief that centrally imposed constraints on local government fiscal policy (rate-capping, and more recently, compulsory referenda) hold local government fiscal policy in a tight grip.

³⁵Technically, equilibrium party platforms are closer together, the smaller is the uncertainty about the location of the median voter.

³⁶These data are from the 2011 ONS [Income estimates for small areas, England and Wales](#).

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A Appendix

A Funding of Local Authorities by Central Government in the UK: Structure and Trends

As stated in the paper, there are three components of central government funding: the formula grant, specific grants, and redistributed revenue from the business rate. The details of the formula grant are complex, but the important determinants, other than population, are as follows. First, expenditure need per head of population for a particular service is calculated using two main factors: deprivation of the client population and the cost of providing services.³⁷ Second, local resources are measured by the tax-base, measured as the number of “band D equivalent” properties per capita in the LA area. The greater an authority’s tax base, the more income it can raise from a given increase in the council tax rate. The size of the tax base is then balanced against the expenditure need to calculate a final figure for the formula grant.

The second component is the specific grant component, which comprises a number of special purpose grants, some of which are ring-fenced. By far, the most important of these is the Dedicated Schools Grant, which was created in 2006-7 and covers the cost of providing primary and secondary education.

The third is revenue from the local business property tax, or the “business rate” as it is more commonly known. The business rate is a tax levied at a uniform rate across the whole of the UK, on the nominal value of non-residential property. Until 2013-14, the business rate revenue was included in the total for redistribution via the formula grant. This approach limited the financial incentive for LAs to grow their business rates base. As a result, in England, the government changed the system of local government funding from 2013-14 with the introduction of the business rates retention system. Under the scheme, the local government sector retains 50% of all business rates receipts, and therefore 50% of any growth.³⁸

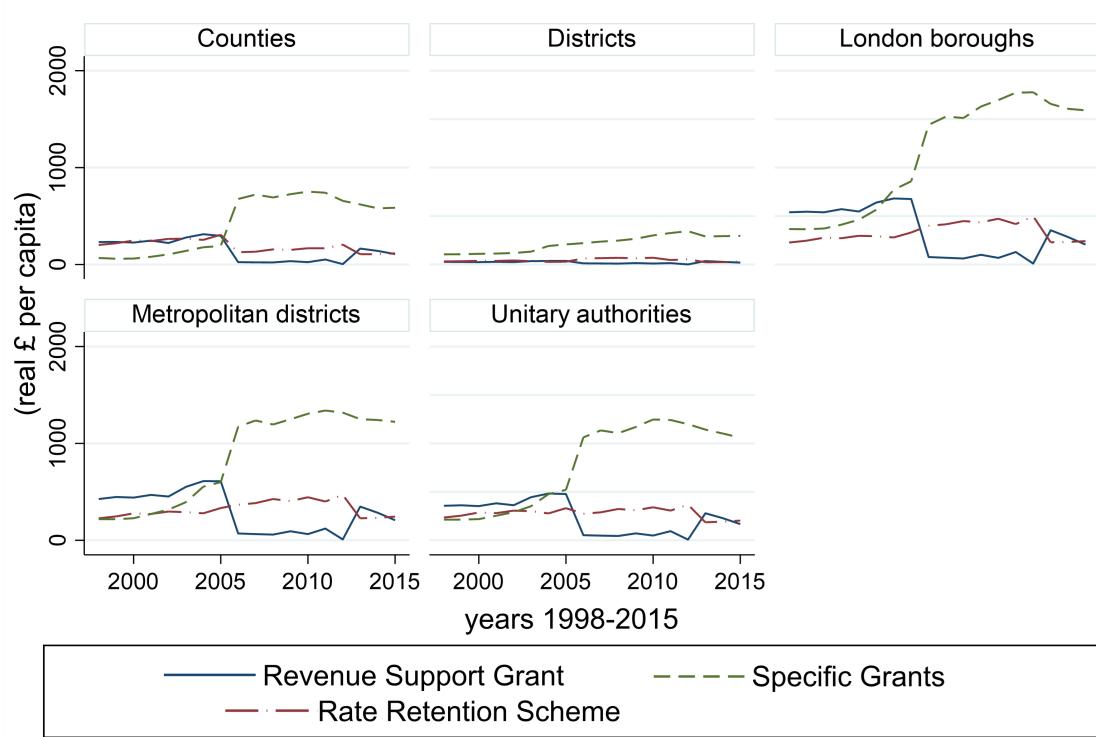
Over the sample period, 1998-2015, Figure A.1 reports the total structure of grants in real per capita terms. As can be seen in Figure A.1, a major structural change in 2006-07 was the introduction of the school grant, which saw a proportionate decrease in the revenue support grant. Excluding English Districts, in 2006-07 in all English upper tiers and unitary authorities, Specific Grants rose by 102% to £1,016 in real per capita terms, and Revenue support grants decreased by 68% to £179 in real per capita terms. A second significant change was in 2013-14, with the introduction of the rate retention scheme in England (as discussed above). As the figures show, English upper tier and unitary authorities on average lost revenue from this reform, which was compensated for by a rise in revenue support grant. In all English LAs, Revenue Support

³⁷“The formula for each specific service area is built on a basic amount per client, plus additional top-ups to reflect local circumstances. The top-ups take account of a number of local factors which affect service costs, but the biggest factors are deprivation and area costs.” (A guide to the Local Government Finance Settlement, 2010/11, p173).

³⁸For more details, see [Treasury \(2015\)](#).

Grants rose by 280

Figure A.1: The Composition of Total Grants Per Capita



B Additional Tables and Figure

Table B.1: Balance Tests

$T_{l,t}^C < 0$			$T_{l,t}^C > 0$			Diff
	n	mean	sd	n	mean	
Population (Millions)	2158	0.19	0.19	2681	0.19	0.21
% pop < 15	2010	19.07	1.67	2544	19.05	1.67
% pop > 65	2010	17.34	3.64	2544	17.62	3.76
band D equiv % p.c.	2119	0.36	0.05	2640	0.36	0.05
$T_{l,t}^L < 0$			$T_{l,t}^L > 0$			Diff
	n	mean	sd	n	mean	
Population (Millions)	2164	0.19	0.20	2205	0.20	0.17
% pop < 15	2000	19.12	1.67	2090	19.39	1.78
% pop > 65	2000	17.29	3.49	2090	16.47	3.56
band D equiv % p.c.	2133	0.35	0.05	2174	0.35	0.05
$T_{l,t}^{LD} < 0$			$T_{l,t}^{LD} > 0$			Diff
	n	mean	sd	n	mean	
Population (Millions)	1855	0.19	0.22	2258	0.19	0.19
% pop < 15	1716	19.00	1.74	2108	18.99	1.60
% pop > 65	1716	17.59	4.07	2108	17.55	3.57
band D equiv % p.c.	1827	0.36	0.05	2213	0.36	0.05

Notes: $T_{l,t}^{CON}$, $T_{l,t}^{LAB}$, and $T_{l,t}^{LD}$ are as defined in eq. (4). Diff is the difference in means, controlling for LA fixed effects. *** Significant at the 1% level. ** Significant at the 5% level. * Significant at the 10% level. Errors are clustered by LA. We exclude observations for which the instrument is identically 0.

Table B.2: Political Alignment and Grants

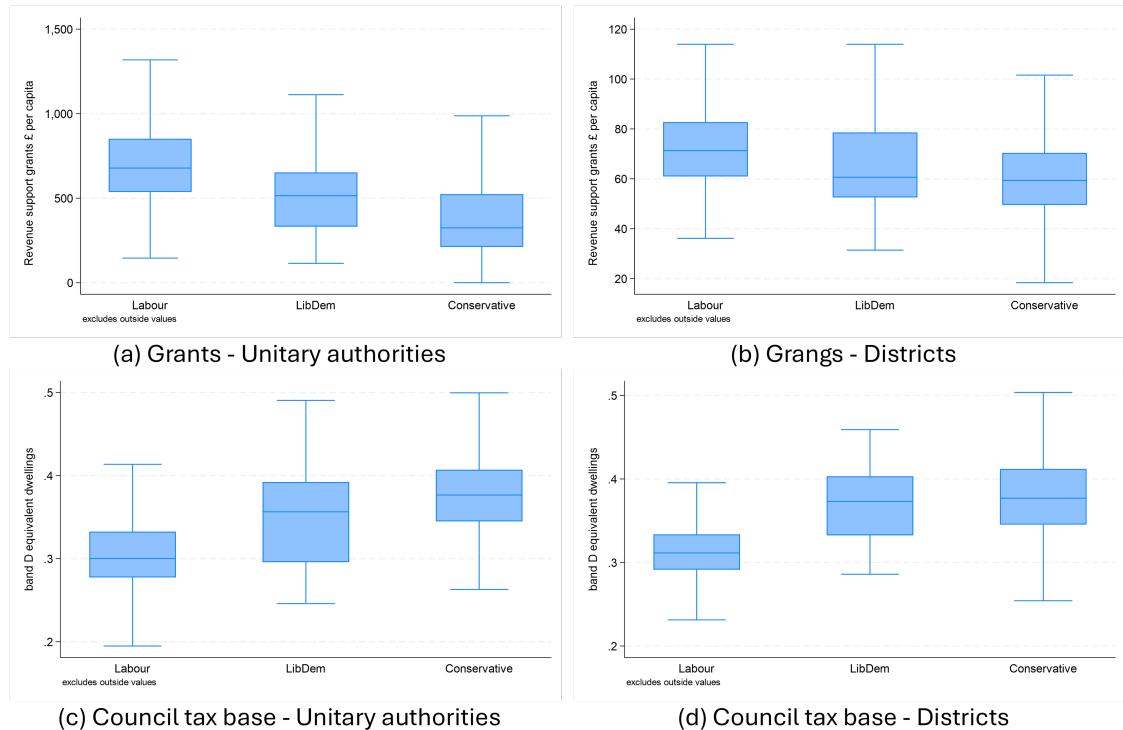
	(log) grant from central government			
Population (Millions)	5.481*** (0.522)	0.093 (1.820)	-2.969*** (0.252)	-2.965*** (0.250)
popsq	-0.004*** (0.001)	-0.001 (0.001)	0.000 (0.000)	0.000 (0.000)
% pop < 15	-0.017 (0.026)	-0.060*** (0.009)	0.025*** (0.008)	0.023*** (0.008)
% pop > 65	-0.049*** (0.012)	0.015*** (0.005)	0.008 (0.005)	0.006 (0.005)
band D equiv % p.c.	-2.250*** (0.642)	0.379 (0.389)	-0.057 (0.255)	-0.064 (0.255)
LA-Specific Break	-0.538*** (0.024)	-0.487*** (0.016)	-0.213*** (0.009)	-0.213*** (0.009)
Political Alignment				0.008 (0.008)
Constant	7.687*** (0.693)	7.270*** (0.543)	5.945*** (0.242)	6.005*** (0.245)
Observations	6173	6173	6173	6173
R^2	0.44	0.72	0.80	0.80
LA FEs	No	Yes	Yes	Yes
Year FEs	No	No	Yes	Yes

Note: Coefficients are OLS estimates from a regression of the form

$$\log \text{grant}_{it} = \beta' X_{it} + \varepsilon$$

Political Alignment is a dummy variable taking value 1 when the council is controlled by the same party as is in power nationally.

Figure B.2: Revenue Grants and Council tax base by Party Control



Notes: box plots show the distribution of grants and council tax base for Local Authorities grouped by the political party with the majority of seats (Conservative, Labour, Liberal Democrats). The central box represents the interquartile range (IQR), capturing the middle 50% of the data. The lower boundary of the box shows the first quartile (Q1, 25th percentile), and the upper boundary shows the third quartile (Q3, 75th percentile). The solid horizontal line within the box marks the median, splitting the data such that half of the values fall below this point and half above, providing a central value for the data. Vertical lines extending from the box, called whiskers, show the range of the data up to 1.5 times the IQR from the quartiles, demonstrating the variability outside the central 50%.

Table B.3: Expenditure and Revenue Differences by Period and Local Authority Type

Panel A: Party Seat Share								
	(log) Tax per Band D Equivalent				(log) Total Service Expenditure p.c.			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
L.CON Control	0.015	0.035	0.023	0.034	0.008	0.029	-0.042	0.036
	(0.037)	(0.047)	(0.029)	(0.042)	(0.024)	(0.060)	(0.034)	(0.115)
L.LAB Control	0.005	0.234	0.070	0.012	0.003	0.069	0.002	-0.147
	(0.036)	(0.167)	(0.042)	(0.095)	(0.030)	(0.158)	(0.048)	(0.200)
Pre-Break	0.001	-0.025			-0.014	-0.072***		
	(0.028)	(0.017)			(0.012)	(0.017)		
(log) Total Grants p.c.	0.007	0.019	0.030	0.002	0.596***	0.023	0.029	0.018
	(0.046)	(0.015)	(0.027)	(0.005)	(0.030)	(0.016)	(0.033)	(0.016)
Observations	2275	3209	3392	2089	2275	3209	3392	2089
Sample	NDs	D	97-2009	2010-	NDs	D	97-2009	2010-
WeakID	4.40	1.42	7.64	0.19	4.35	1.38	7.64	0.19
LA FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Panel B: Party Control								
	(log) Tax per Band D Equivalent				(log) Total Service Expenditure p.c.			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
L.CON Seat Share	0.050	0.057	0.068	0.096	0.028	0.060	-0.126	0.194
	(0.126)	(0.086)	(0.085)	(0.116)	(0.076)	(0.124)	(0.100)	(0.271)
L.LAB Seat Share	0.014	0.318**	0.164*	0.056	0.009	0.100	0.010	-0.096
	(0.090)	(0.161)	(0.096)	(0.113)	(0.074)	(0.203)	(0.111)	(0.254)
Pre-Break	0.000	-0.033***			-0.013	-0.076***		
	(0.028)	(0.009)			(0.011)	(0.017)		
(log) Total Grants p.c.	0.007	0.014	0.040	0.000	0.597***	0.022	0.029	0.010
	(0.046)	(0.011)	(0.028)	(0.006)	(0.030)	(0.014)	(0.034)	(0.016)
Observations	2275	3209	3392	2089	2275	3209	3392	2089
Sample	NDs	D	97-2009	2010-	NDs	D	97-2009	2010-
WeakID	7.31	9.58	24.40	5.13	7.36	9.32	24.40	5.13
LA FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Note: Controls are: population, % population below 15, % population over 65, no. of band D equiv. properties p.c. IV estimates are estimated using the [Fuller \(1977\)](#) modified LIML estimator with parameter 1 to minimize concerns about bias due to weak instruments. Columns (1)–(2) and (5)–(6) additionally include a structural break dummy computed using an LA-specific Supremum Wald test ([Hansen, 1997](#)). The WeakID statistic is the Cragg-Donald F-statistic. Standard Errors clustered by LA are in parentheses. *** Significant at the 1% level. ** Significant at the 5% level. * Significant at the 10% level.

Table B.4: Local Authority Inequality & Alignment

	(log) Tax per Band D Equivalent			(log) Total Service Expenditure p.c.		
	(1)	(2)	(3)	(4)	(5)	(6)
L.CON Seat Share	-0.012 (0.108)	0.131 (0.104)	0.045 (0.071)	0.178 (0.140)	-0.172 (0.179)	0.014 (0.111)
L.LAB Seat Share	0.471* (0.268)	0.010 (0.091)	0.143 (0.094)	0.416 (0.332)	-0.142 (0.129)	-0.002 (0.129)
Pre-Break	-0.033*** (0.011)	-0.013 (0.020)	-0.026** (0.011)	-0.078*** (0.020)	-0.072*** (0.022)	-0.075*** (0.015)
Population (Millions)	6.315** (2.457)	-0.685 (0.576)	-2.086*** (0.505)	2.698 (2.775)	-0.858 (0.889)	-2.827*** (0.764)
Population ²	-0.010*** (0.003)	0.000 (0.000)	0.001*** (0.000)	-0.005 (0.003)	0.001* (0.000)	0.002*** (0.000)
% pop < 15	-0.012 (0.011)	0.009 (0.006)	0.010* (0.006)	0.004 (0.015)	-0.000 (0.011)	0.004 (0.009)
% pop > 65	0.010 (0.007)	0.013** (0.005)	0.016*** (0.004)	-0.007 (0.010)	-0.011 (0.008)	-0.019*** (0.006)
band D equiv % p.c.	3.965*** (0.470)	2.615*** (0.245)	2.551*** (0.223)	1.300** (0.542)	0.339 (0.406)	0.207 (0.294)
(log) Total Grants p.c.	0.023 (0.015)	0.007 (0.016)	0.019* (0.010)	0.010 (0.019)	-0.021 (0.031)	-0.017 (0.015)
Observations	2589	2895	5484	2589	2895	5484
Sample	Low-Gini	High-Gini	All	Low-Gini	High-Gini	All
WeakID	4.35	18.81	16.62	4.33	18.59	16.56
LA FEs	Yes	Yes	Yes	Yes	Yes	Yes
Year FEs	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes

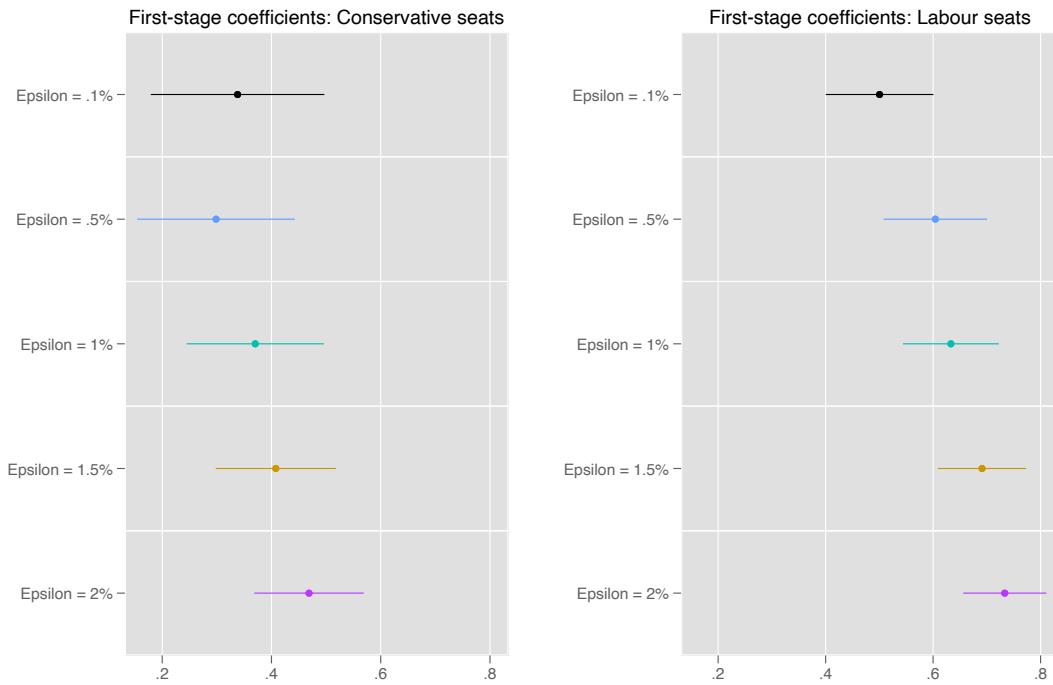
Note: IV estimates are estimated using the [Fuller \(1977\)](#) modified LIML estimator with parameter 1 to minimize concerns about bias due to weak instruments. All specifications include a structural break dummy computed using an LA-specific Supremum Wald test ([Hansen, 1997](#)). The WeakID statistic is the Cragg-Donald F-statistic. Standard Errors clustered by LA are in parentheses. *** Significant at the 1% level. ** Significant at the 5% level. * Significant at the 10% level.

Table B.5: Party Control and Local Authority Taxation: Varying Epsilon

ϵ	(log) Tax per Band D property					(log) Total Service Expenditure p.c.				
	0.1%	0.5%	1%	1.5%	2%	0.1%	0.5%	1%	1.5%	2%
L.CON Control	(1) -0.032 (0.082)	(2) -0.022 (0.076)	(3) 0.016 (0.034)	(4) 0.020 (0.043)	(5) 0.020 (0.030)	(6)	(7)	(8)	(9)	(10)
L.LAB Control	-0.075 (0.162)	0.038 (0.120)	0.081 (0.067)	0.088 (0.092)	0.072 (0.051)					
(log) Total Grants p.c.	0.015 (0.010)	0.019 (0.013)	0.018* (0.010)	0.018* (0.011)	0.017* (0.010)	0.014	0.020	0.019* (0.011)	0.018* (0.011)	0.019* (0.010)
Pre-Break	-0.032*** (0.012)	-0.026* (0.014)	-0.025** (0.011)	-0.024** (0.011)	-0.025** (0.011)	-0.031*** (0.011)	-0.026* (0.015)	-0.026** (0.011)	-0.026** (0.010)	-0.026** (0.011)
L.CON Seat Share						-0.126 (0.373)	-0.018 (0.194)	0.079 (0.099)	0.051 (0.103)	0.045 (0.071)
L.LAB Seat Share						-0.188 (0.408)	0.130 (0.353)	0.184 (0.142)	0.142 (0.137)	0.143 (0.094)
Observations	5484	5484	5484	5484	5484	5484	5484	5484	5484	5484
Mean										
WeakID	0.28	0.46	2.40	1.64	5.34	0.55	1.03	7.75	12.25	16.62
LA FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Note: Controls are: population, % population below 15, % population over 65, no. of band D equiv. properties p.c. IV estimates are estimated using the [Fuller \(1977\)](#) modified LIML estimator with parameter 1 to minimize concerns about bias due to weak instruments. All specifications include a structural break dummy computed using an LA-specific Supremum Wald test ([Hansen, 1997](#)). The WeakID statistic is the Cragg-Donald F-statistic. Standard Errors clustered by LA are in parentheses. *** Significant at the 1% level. ** Significant at the 5% level. * Significant at the 10% level.

Figure B.3: First Stage Coefficients



Notes: coefficients are the estimates from a regression of the endogenous variables on the excluded instruments.