# The Politics of Public Housing Reform:

# Local Government Stock Transfer in England

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**ABSTRACT** Drawing on theories of political competition, we explore the extent to which local public housing reform reflects the ideology of local ruling parties and local political preferences. Based on the citizen candidate and median voter perspectives, we hypothesise that left-wing party rule and pro-state preferences are associated with higher levels of government-owned housing. We test these hypotheses by analysing the levels of housing stock held by English local governments during the period 2001-14. Our findings suggest that pro-state preferences matter more than left-wing party rule for the overall extent of public housing provision. By contrast, right-wing party rule is associated with the likelihood that a local government's housing stock will be transferred out of the public sector, but pro-market preferences do not influence this decision. The implications of the findings are discussed in the conclusion.

# INTRODUCTION

Reform of the local public sector has become an important objective for national and regional governments across the globe as they seek to modernize the design and delivery of key public services (Pollitt and Bouckaert, 2011). From the contracting out of corporate, social and technical services to the wholesale externalisation of entire functions, the past forty years has seen a dramatic shift in the ways in which the local state manages and provides public services (Bel, Hebdon and Warner, 2007). The impact of these changes has perhaps been nowhere more evident than in the controversial and politically sensitive area of housing policy. In response to mounting financial pressures, the public housing sector in Europe, in particular, has been subject to wide-ranging reforms aimed at making the market for affordable housing more flexible and reducing the cost of public housing to the taxpayer (Scanlon, Fernandez-Arrigoitia and Whitehead, 2015). These developments have been especially prominent in England, where tenants' right to buy their own 'council house' was established in 1980, and later large-scale voluntary transfer (LSVT) of all publicly-owned local housing stock to not-for-profit housing associations has been encouraged by both Conservative and Labour national governments. Although the economic and ideological rationales behind LSVT have been discussed in the public policy literature, to date, comparatively little research has systematically analysed the local politics of this far-reaching reform, even though the transfer of public housing stock required the support of existing tenants (Pawson and Mullins, 2010). The salience of political influences on the decision to transfer housing stock is thus an important area of theoretical and empirical study that can cast light on some of the forces that shape the adoption of, and resistance to, public management reforms at the local level. In this paper, we therefore seek to illustrate the relative importance of local politics for the public sector by examining its influence on the public ownership of housing in English local governments.

The adoption of new organizational forms for the delivery of key local public services has generally been regarded as an important means to generate service innovations and to cut costs (Bel, Hebdon and Warner, 2007). Despite the impact of these wider pressures to reconfigure the public sector, not all countries have reformed social housing provision to the same degree, with many preferring to retain ownership of most or all of the stock that they have accumulated during the post-war welfare boom (Scanlon, Fernandez-Arrigoitia and Whitehead, 2015). In England, much of the debate in favour of housing stock transfer focused on the economic benefits that divestment of such expensive-to-maintain assets might bring to the local public sector (Malpass and Murie, 1999). However, ideological and political influences have also appeared to be important. The Conservative national governments responsible for promoting stock transfer during the 1980s and 1990s were noted for the ideological zeal with which they pursued public sector reform (Florio, 2013). Moreover, there is evidence that Conservative local governments were enthusiastic early-adopters of stock transfer as a means to reconfigure housing service provision on more cost-efficient lines (Malpass and Mullins, 2002). Nevertheless, while the party political influences shaping local public housing reforms may have evolved in the wake of the New Labour national government's re-booting of LSVT to regenerate inner-city housing (Pawson and Mullins, 2010), few studies have systematically evaluated the extent of these influences on stock ownership decisions at the local level. Drawing on theories of political competition, we offer such an analysis in this paper.

The existing literature on the politics of local government decision-making is largely oriented around two key perspectives on political competition: the citizen-candidate and the median voter models. The citizen candidate model assumes that local policy decisions are made on the basis of the core ideological commitments of the ruling party of any given local government (Osborne and Slivinski 1996). From a slightly different point of view, the

median voter model supposes that ruling parties of whatever political persuasion are forced to adopt only those policies that reflect local political preferences (Downs, 1957). Hence, despite encouragement to transfer housing stock away from public ownership from national governments of different political hues, there is good reason to still expect that local party ideology and political preferences may influence the prospect of local public housing reform. In analysing the relationship between local politics and public ownership of social housing, we therefore seek to address the following questions: Is public housing reform more likely in local governments led by right-wing than left-wing parties? Are areas with pro-market preferences more open to the transfer of social housing away from public ownership than those with pro-state preferences? And, finally, is local political ideology more important than local political preferences in determining the outcome of housing reform proposals?

To answer these questions, we carry out statistical analysis of the levels of housing stock held by English local governments between 2001 and 2014. The effects of local politics on the public ownership of social housing are estimated using a Zero Inflated Negative Binomial model, with appropriate controls for relevant organizational and environmental characteristics. In the following section, we explore how ideological and political influences arguably shape decisions about public housing, drawing on the citizen candidate and median voter models advanced in alternative theories of political competition. Thereafter, we introduce the data and methods used to carry out the study, and discuss the statistical results. We conclude the paper by considering the implications of the findings from our study.


## IDEOLOGICAL AND POLITICAL INFLUENCES ON PUBLIC HOUSING REFORM

In England, the conventional motivation behind the transfer of local governments' housing stock has been the belief that this would enable them to achieve substantial cost savings,

whilst retaining comparable service quality (Malpass and Mullins, 2002). From a practical viewpoint, housing stock transfer can enable local governments to resolve the persistent tension between the minimisation of rents and the maximisation of central government subsidies that characterises the management of large public housing stocks (Murie, 1997). From a more theoretical perspective, externalisation of the production and maintenance of social housing may conceivably lead to both efficiency and quality improvements because it implies transferring service production away from a public sector monopoly to a scenario where multiple providers compete for business (Domberger and Jensen, 1997). However, in practice, stock transfer has usually resulted in the publicly-owned housing within a given local government area being transferred to a single not-for-profit provider – a housing association, which is then regulated by UK central government agencies (Pawson and Mullins, 2010).

From a theoretical point of view, the takeover of social housing provision by the non-profit sector in the UK can be seen as a result of its distinctive sectoral advantage in the field of social welfare, where non-profits' engagement with and understanding of disadvantaged social groups can enable them to better tailor services to the needs of those groups (Selsky and Parker, 2005). More pragmatically, however, non-profit provision of social housing is sometimes seen, on the one hand, as a means for the local state to retain some control over housing provision, and, on the other, as a politically acceptable privatisation of the local welfare state (Pawson and Mullins, 2010). Indeed, in England, the housing stock transfer process itself is a highly politicised one, with local governments seeking to transfer housing stock away from public ownership requiring the support of a majority of council tenants in a transfer ballot (Department of Communities and Local Government, 2009). As a result, public housing reform remains an arena for local political contestation in a way that the centralized reform of health and education services in England has largely precluded (Murie,

1997). For this reason, housing stock transfer in English local governments represents an especially apt context in which to test theories of political competition.

Public choice theorists have long pointed towards the importance of ideological and political influences on local government decision-making (Downs, 1957; Niskanen, 1971; Tullock, 1965). The dynamics of these influences on policy-making are largely captured in two key perspectives on political competition: the citizen-candidate model and the median voter model; each of which draw attention to vital sources underpinning efforts to establish authority and influence over the content and direction of public policy.

The citizen-candidate model focuses on the ideology of political parties, emphasising that the ideological commitments of the ruling political party are an important influence on a government's policy choices (Besley and Coate, 1997; Osborne and Slivinski, 1996). In theory, right-wing parties prefer the free market as a mechanism for allocating goods and services, whereas left-wing parties favour government intervention in the economy and society. From this perspective, then, governments led by right-wing parties are linked with reforms to the public sector that weaken the grip of the state over public services. By contrast, governments led by left-wing parties are thought to be antagonistic towards alternatives to state provision, and, therefore, assumed to prefer the extension rather than the reduction of state ownership of public services (Osborne and Slivinski, 1996).While this idea is supported by several previous studies of privatisation and contracting out by local governments (e.g. Elinder and Jordahl 2013; Picazo-Tadeo et al. 2012; Sundell and Lapuente 2012), to date, it has not been systematically tested in many other areas of local public setor reform. Moreover, little effort has been made to apply the citizen-candidate model in England (though see Alonso, Andrews and Hodgkinson, 2016), even though the local government system in the country has experienced a wave of reforms advocating alternatives to the conventional in-house provision of public services (Bovaird, Briggs and Willis, 2014).

One particular advantage of applying the citizen-candidate model within the English local government context, is that the political control of local governments in England is almost entirely held by national-level political parties that divide strongly along ideological grounds. Even though there has been some ideological convergence between the main left-wing (Labour) and right-wing (Conservative) parties in recent times (Adams, Green and Milazzo, 2012), important differences in the policy positions adopted by the two parties still persist (Smith 2010). In general, the Labour Party continues to favour greater state involvement in the provision of public services than the Conservative Party. Indeed, during their last term of office, the Labour national government invested large sums of public money in an effort to improve the quality of those services, including increased resources for the upgrade of local government-owned social housing (Pawson, 2006). The ideological differences between the Conservative and Labour Party may therefore matter for the enactment of public housing reform, because local, like national, politics continues to be dominated by these parties. In fact, those differences might even matter more at the local level, where the ideological 'purity' of Conservative–led councils contrasts with those Labour controlled governments that may have been resistant to the 'modernising' ethos of the 'new' Labour national governments of the 2000s (Bache, 2003). Based on these arguments, our first hypothesis is therefore:

*Hypothesis 1*: Left-wing political control will be positively related to the size of public housing stock

In contrast to the citizen-candidate model, the median voter model emphasises the salience of citizens' attitudes, and challenges the assumption of the citizen-candidate model that ideological differences generate public policies. Based on Downs' (1957) conception of

political competition, the median voter model predicts that policy choices will be more strongly conditioned by the preferences of the average citizen than the ideological commitments and pronouncements of political parties. More precisely, in a majoritarian voting system, outcomes will converge towards the preferences held by the median voter due to the relative acceptability of those preferences to those at the opposite ends of the spectrum of preferences (Black, 1958). In our case, citizens' preferences about the size and scope of government are likely to be critically important determinants of politicians' decision-making regarding public sector reforms, especially at the local level, where public expenditures have long been found to be responsive to citizen demand (Gramlich and Rubinfeld 1982). From this perspective, then, the assumption that reform enactment (and resistance) will be shaped by the demands of the median voter seems perfectly reasonable. Nevertheless, despite the venerable intellectual lineage of the median voter model, the evidence supporting its validity in predicting local policy decisions is less clear-cut than that for the citizen candidate model. For example, a range of studies fail to uncover evidence of its influence on privatisation by local governments (e.g. Brudney et al. 2005; Elinder and Jordahl 2013; Picazo-Tadeo et al. 2012). However, a small number have identified a connection between citizens' attitudes and local public service redesign (e.g. Alonso, Andrews and Hodkinson, 2016; Hefetz and Warner 2003).

In England, voters' attitudes towards public spending, and the state funding and provision of public services tend to follow party political lines, with Conservative voters least committed to the state provision of public services and most committed to privatisation, and Labour voters most likely to hold the opposite viewpoints (Adams, Green and Milazzo, 2012; Clarke et al. 2004). As such, voting behaviour is likely to represent an effective means for capturing the effects of the median voter on English local governments, especially as Conservative voters are more likely to occupy managerial roles in private sector firms (Evans

and Tilley, 2012), and Labour voters are more likely to belong to trade unions hostile to public sector reforms (Foster and Scott 1998). Furthermore, these dynamics may be particularly important for housing reform efforts, since council tenants are traditionally assumed to favour Labour party rule (Evans and Tilley, 2012). Thus, whatever the ideological commitments held by political parties serving populations with a large proportion of Conservative voters, for example, they may face greater pressure to reorganize and remodel public service provision. Likewise, where local governments decide to attempt the transfer of housing away from public ownership, areas with a higher proportion of Labour voters seem more likely to resist such proposals. As a result, our second hypothesis is:

*Hypothesis 2*: Pro-state preferences will be positively related to the size of public housing stock

## DATA AND MEASURES

To test our hypotheses, we deploy in this paper a set of multivariate statistical methods using data collected from English local governments for the period 2001 to 2014. These governments are elected bodies, with a Westminster-style cabinet system of political management, which is typically composed of senior members of the ruling political party. English local governments receive the majority of their income from UK central government, and so their decision-making is heavily influenced by national level policy and regulatory frameworks. In terms of service delivery, they are multi-purpose authorities delivering education, social care, land-use planning, waste management, public housing, leisure and culture, and welfare benefits. In 2014, there were 358 local governments of five types in England: 54 unitary authorities (UAs); 32 London boroughs; and 36 metropolitan boroughs, mostly in urban areas providing all the services listed above; and, in rural areas, 27 county

councils, responsible for waste management, education, social services, and strategic planning, with 201 district councils beneath them administering benefits, housing, leisure and cultural services. For the purpose of our analysis, county councils are excluded since they are not responsible for managing housing services.

English local governments have been involved in the provision of social housing since the establishment of the modern local government system in the 1890s. Initially, this involved regulation of the bad practices of private landlords, but was extended by legislation in the wake of the first world war to inaugurate a programme of local public housing construction to provide 'homes fit for heroes' (Holmans, 1987). This construction programme was vastly accelerated by the post-second world war Labour government, and for the first time introduced the idea of affordable homes for all – so much so that there was a surplus of local government-owned homes in the late 1960s (Hanley, 2012). However, as noted above, with the advent of the New Right in the 1970s, the national political consensus around the public ownership of social housing broke down, and the Conservative governments of the 1980s established tenants' right-to-buy their council homes and subsequently encouraged housing stock transfer.

The housing policy of the 'new' Labour governments of the 2000s was marked by a continuation of the preceding Conservative policies. In particular, in addition to the perpetuation of the right-to-buy scheme, substantial financial incentives for the transfer of housing were offered to those Labour voting inner-city areas with a large and deteriorating stock of public housing. Nevertheless, despite this central steering of the social housing market, responsibility for the implementation of social housing policy still remains very much in the hands of local government. Hence, while levels of stock ownership and housing services expenditure may vary considerably, local governments choose whether or not to propose transferring housing stock to private providers, not-for-profit housing associations or

a local authority-owned Arms-Length Management Organisation (ALMO) set up to provide social housing. More generally, decisions about eligibility for social housing assistance, accomodation for vulnerable people and homelessness support services still remain an important function of the local state.

It should be noted that, during the period under examination, the two-tier element of the English local government system in rural areas experienced a relatively significant process of restructuring. On 1st April 2009 nine UAs were created from the combination of district councils. In five areas (Cornwall, Durham, Northumberland, Shropshire and Wiltshire) the districts were merged with the former county council which became the new UA. The four remaining areas were formed as follows: Cheshire East merged Congleton, Crewe and Nantwich, and Macclesfield; Cheshire West was formed from Chester, Ellesmere Port and Neston, and Vale Royal; Bedford from Bedford district; and Central Bedfordshire from Mid Bedfordshire and South Bedfordshire (Andrews and Boyne, 2012). To facilitate analysis of the politics of public housing reform it is necessary, therefore, to define a unit of analysis that can be observed before and after this reorganization occurred. In this paper, we use post-2009 boundaries, hence pre-2009 data for all nine new UAs is based on aggregates of data from local governments existing before the 2009 amalgamation.

**Dependent variable**

The dependent variable, *housing stock*, is a count of the dwellings owned by English local governments. While the dependent variable is a simple count indicator, one advantage of this approach is that we are able to clearly identify whether or not reform of housing provision has actually occurred. Data on the dwelling stock was obtained from the UK Department for Communities and Local Government, which publishes a range of online statistics relating to the social housing provision within the areas served by English local governments. Data

sources for the other variables included in our analysis are reported in Table 1, along with descriptive statistics.

**Independent variables**

The primary independent variables of interest are two indicators that should capture the influence of political parties on local decision-making and preferences about the size and role of government, among local voters. The variables we use for our analysis are the best available proxy variables for testing the citizen-candidate and median voter perspectives on political competition using longitudinal data. First, to evaluate the influence of ideology when retaining public housing stock, we include in our model a dichotomous variable which takes a value of 1 if the Labour party controls the local government and 0 otherwise. The prediction, as discussed in the previous section, is that local governments led by left-wing parties will keep higher stocks of public dwellings than those with non-left party rule.

Second, we use the percentage share of the vote gained by the Labour Party in local elections to capture preferences in favour of retaining public housing stock. Local residents voting Labour are expected to have a 'collectivist' pro-state disposition favouring public ownership of social services (see Clarke et al. 2004). Ideally, we would draw on surveys directly asking local residents about their attitudes towards housing, but such survey data are not available on an annual basis for the period under consideration, and are rarely collected from a large enough sample in each locality to guarantee representativeness. While all 'proxy' measures are contestable, the vote share of local political parties has been used in tests of the median voter theorem in numerous countries (e.g. Sweden - Elinder and Jordahl, 2013; Spain - Picazo-Tadeo et al. 2012). Hence, our approach may be readily generaliseable to, and replicable in, other settings. Furthermore, during the study period, local elections in England were largely a contest between the two main political parties and the vote share

obtained by either of those parties may be an even more reliable indicator of the median voter's attitudes than in other countries - especially given the different attitudes towards public ownership among Labour and Conservative voters (Evans and Tilley, 2012).

It is important to highlight that although housing transfers are dependent upon council housing tenants voting to support local governments' proposals for the transfer of the housing stock, ballot results can be influenced by the preferences of the whole local population. In particular, citizenship pressures, in the form of anti-privatization campaigns, may have prevented many housing stock transfer proposals from even reaching the ballot state (Pawson and Mullins, 2010). Organised campaigns against housing reform were especially active during the 2000s, with many being coordinated by the Defend Council Housing (DCH) network and trade unions. The DCH, for instance, helped local activists by providing support for campaigns, meetings, newsletters, and so on, during option appraisals and then ballots (Pawson and Mullins, 2010). Following from this, we argue here that these campaigns may have received stronger support in more collectivist local governments, measured as the Labour party vote share. Tenants rejecting housing transfers could, therefore, have been more influenced by wider citizen opposition to policies perceived to be antithetical to their preferences. In fact, in more collectivist local governments, citizens' pressure may even have prevented transfer proposals being developed at all.

**Control variables**

We include in our models a set of social and economic variables which may also influence the scale of publicly-owned social housing within a local government. First, more vulnerable citizens have been widely hypothesized to favour local government provision of public services, particularly low-income citizens and ethnic minorities (Thompson and Elling 2000; Brudney et al. 2005). To account for the impact of vulnerable groups on local government

decision-making relating to public housing reform we include in our model four different indicators: first, the relative quantity of service need within the local population is measured using the average ward scores of the English Indices of Multiple Deprivation (IMD) for each local government; and, second, three dimensions of the diversity of service needs within an area are also measured: age, ethnicity and social class diversity. The proportions of the different age, ethnic and social sub-groups within the local population identified in the UK national census was squared, and the sum of the squares was subtracted from 10,000, with a higher level of diversity reflected in a higher score of the index.

In addition to gauging the influence of the quantity and diversity of service needs on the prospects of public housing reform adoption and resistance, we include the population of each local government in our models to control for the likelihood that governments serving more populated areas need to provide a larger number of dwellings than those serving smaller populations. Finally, we take into account the possibility that higher housing expenditures may influence a local government's decision to attempt to reduce their public housing stock (see Malpass and Mullins, 2002) by including in our models a measure of each local government's social housing spending per capita.

[Table 1 about here]

## METHODOLOGY

In order to investigate the influence of political control and voter attitudes on the levels of housing stock held by English local governments during the period 2001-14, we use a Zero Inflated Negative Binomial (ZINB) regression model. As discussed in the previous section, our dependent variable, i.e. the number of publicly owned dwellings, is a count variable. When analysing count data, such as the local government-owned housing stock, simple linear regression methods may result in inconsistent, inefficient, and biased estimates due to the

14

discrete and nonnegative nature of count variables (Long, 1997; Cameron and Trivedi, 1998). These properties of count data suggest that perhaps a Poisson model should be used (see, for example, Winkelmann, 2000).

However, the first two moments for the Poisson distribution assume that the conditional variance is equal to the expected value (Hausman et al., 1984), an assumption which, in practice, is often too strong. In our case, preliminary analysis suggests that the variance of the public housing stock count is much larger than the mean (see Table 1), a condition known as over-dispersion. In addition, there also seem to be an 'excessive' number of zeroes in our data set. Figure 1 presents the frequency distribution of public housing stock for the period 2001-2014, where zeros constitute about 24% of the total number of counts in the data. Therefore, to account for both over-dispersion issues and an excess of zeroes a ZINB regression model should be applied (Long 1997).

[Figure 1 about here]

ZINB models extend the single-equation negative binomial (NB) model and introduce a two-stage process which can incorporate a potential excess of zeroes in the data-generating process (Long, 1997). In our case, the first stage of the model includes a logit regression model predicting the probability of whether a local government will keep any housing stock at all during the period under analysis. There are several key potential reasons for the presence of "always zeroes" in our data set, which permit us to analyse determinants of the likelihood of housing stock transfer.

First, it is conceivable that local governments could have transferred all their housing stock before the beginning of the period under analysis. Housing transfer policies, once committed, are difficult to reverse due to the high political and financial costs associated with undertaking such a far-reaching policy u-turn – indeed, to date, no such reversals have

15

occurred in England. More specifically, as hypothesised above, stock transfer may reflect the avowed ideology of a right-wing ruling party. Pawson and Mullins (2010) suggest that housing stock transfers during the late 1980s and 1990s were especially likely in local governments ruled by the Conservative party. They also highlight that for reasons of high cost and low overall demand, transfers were more likely to occur in rural districts, rather than in urban areas. Hence, in the logit part of the model, we include a dichotomous variable taking the value of 1 if the Conservative party holds the local government and 0 otherwise. In addition, we include a dichotomous variable coded 1 for those governments serving rural populations and 0 for those serving urban populations. This variable was based on the urban-rural administrative area classification used by UK central government (see Office of the Deputy Prime Minister 2002).

A second, major, potential reason explaining the presence of excessive zeroes in our data is that local governments in which citizens', on average, are more receptive to market-based solutions to public policy problems will be more likely to exhibit zero publicly-owned social housing stock. Hence, we include the percentage share of the vote gained by the Conservative and Liberal Democrat parties in local elections in the logit part of the model as a measure of the pro-market attitudes of local residents. As noted above, despite some convergence in antipathy towards public ownership during the study period, Conservative voters, in particular, still remain more open to alternative forms of public service provision than their Labour voting counterparts (Adams, Green and Milazzo, 2012).

Following estimation of the logit part of the model, the second stage of the ZINB model, i.e. the negative binomial equation, predicts the number of count events (i.e. the number of local government-owned dwellings). It does this by estimating the relationship between the size of the public housing stock and the independent variables described above, given that a local government is willing to retain ownership of social housing, as predicted by

the logit part of the model. Thus, formally, for an outcome variable $y$, the ZINB model specifies

$$\Pr[y = j] = \begin{cases} \pi + (1 - \pi)f(0) & if \; j = 0 \\ (1 - \pi)f(j) & if \; j > 0 \end{cases}$$

where $\pi$ is the logistic function and $f(.)$ is the negative binomial distribution (see Cameron and Trivedi, 1998).

Several statistical tests support our choice of a ZINB model over competing models such as Poisson, Zero Inflated Poisson (ZIP) and/or single equation-NB models. First, likelihood ratio tests (LR)[1] suggest that our response variable is clearly affected by over-dispersion issues, thus confirming our preliminary exploratory analysis and reinforcing our initial view about the suitability of NB models over Poisson models (see Table 2). Second, Akaike's information criterion (AIC) and Bayesian information criterion (BIC) for the fitted models provide statistical evidence in favour of the ZINB model over the single-equation NB model.

[Table 2 about here]

Although all these tests point to the appropriateness of the ZINB model, we also estimate a single-equation NB model to check the robustness of our results to different model specifications. As a final precaution, we additionally estimate a single-equation NB model[2] including dummies for each local government (the so-called unconditional fixed-effects approach; see Allison and Waterman, 2002) to control for potential non-observable time-invariant confounders. The results of our analysis, however, do not seem to depend on the

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[1] The likelihood-ratio chi-square tests whether the dispersion parameter *alpha* is equal to zero. Large test statistics would suggest that the outcome variable is over-dispersed.

[2] To the best of our knowledge, the fixed effect approach cannot be extended to ZINB models.

model choice, with all three models producing similar results for our main variables of interest (see Table 4 below).

# RESULTS

Table 3 reports the estimated parameters of the ZINB regression model, which includes, as discussed in the previous section, a logit and a NB model. The logit part of the model predicts the probability of not having any public housing stock at all during the period under study. The results of the logit model suggest, first, that the political ideology of the ruling party influences the likelihood of having zero housing stock. In particular, the coefficient for Conservative control is positive and statistically significant. Hence, local governments with right-wing party rule appear (on average) to be more likely to have transferred all their housing stock, when compared to those with any other form of political control, even given the policy context in which Labour-controlled councils were offered substantial incentives to undertake stock transfer. Consistent with our expectations, the coefficient for the rural dummy variable is also positive and statistically significant, suggesting therefore that local governments serving rural areas are more likely to exhibit zero stock values than those serving urban populations. On the other hand, the coefficient for pro-market vote shares, though positive, is not statistically significant. Thus, voters' preferences for less government intervention in public service delivery does not increase the likelihood of having zero public housing stock.

The results of the NB part of the model predicting the number of public dwellings are also reported in Table 3. The interpretation of coefficients in NB models, however, is somewhat complicated because of the use of a log-link function. To better illustrate the results we therefore compute the discrete change in the dependent variable given a one

standard deviation (SD) change in the independent variable(s), while holding all other independent variables at their means.

[Table 3 about here]

Starting with the analysis of the ideology variable, we find no evidence that local governments led by the Labour party tend to keep more public housing stock: the predicted discrete change (and the coefficient estimate) for Labour majority is positive, as expected, but not statistically significant. Thus, our first hypothesis based on the assumptions of the citizen-candidate model is not confirmed. Even given the salience of the government's efforts to encourage stock transfer in disadvantaged urban areas, Labour controlled councils were (on average) no more likely to have a large stock of public housing than other councils. Nevertheless, it is possible that our findings for Labour political control may reflect a 'new' Labour effect, with aggregation of all Labour local governments masking significant differences in public ownership between 'old' Labour councils committed to 'in-house' provision and their 'new' Labour counterparts open to a more mixed economy of social housing provision.

To try to disentangle the complex ideological effects of the changing nature of the Labour party during the 1990s and 2000s we added to our statistical models an 'old' Labour dummy variable. This was constructed by defining 'old' Labour councils as those that were both in the top 50 for Labour vote shares in the local elections prior to the Labour national government in 1997 and controlled by Labour during our study period (i.e. 2001-2014). While the coefficient for this 'old' Labour measure was positive when included in our ZINB model it did not achieve statistical significance. Hence, we cannot say with confidence that it is possible to identify a 'new'/'old' Labour effect on the size of the local council-owned housing stock for our study period. Nevertheless, this is certainly something worthy of more

in-depth investigation across all aspects of local government behaviour during the study period, perhaps through detailed analysis of the minutes of council meetings for the study period or examination of local newspaper reports.

In contrast with the findings for Labour political control, local residents' political preferences seem to be an important predictor of the number of local-government-owned dwellings, providing support for our second hypothesis. Local governments with higher Labour vote shares appear to own relatively more dwellings when compared to governments with lower Labour vote shares. In particular, our model predicts that a one standard deviation increase in the Labour vote share is associated with an increase in the number of public dwellings of 1659.31, approximately twenty-five per cent more than the average housing stock size.

As regards our control variables, our findings suggest that the quantity of service need, measured through the index of multiple deprivation, is another important predictor of the scale of the local government-owned housing stock. A one standard deviation increase in the index of relative deprivation is associated with a predicted increase in the number of public dwellings of 1622.74 – an effect size very similar to that for the Labour local vote share. That said, the measures of the diversity of service need, i.e. age, ethnic and social class diversity, do not seem to be related to the size of the public housing stock. Although the coefficients for ethnic and social class diversity have the expected positive sign, they are not statistically significant at the 5% level. Age diversity exhibits a negative sign and is not statistically significant. Unsurprisingly, the size of the population served by a local government seems to explain housing stock figures; a one standard deviation increase of the logarithm of population is associated with an increase in the number of dwellings by 4058.47 – about two-thirds more than the average public housing stock level.

To further facilitate interpretation of our results, we present in Figure 2 the predicted number of public dwellings, comparing local governments led by the Labour party with non-Labour led governments, given varying values for the other independent variables. The plots depicted in Figure 2 clearly illustrate our finding that, while the colour of the ruling party does not seem to influence housing stock figures in the period under analysis, after controlling for excessive zeroes in our sample, "collectivist" pro-state political preferences, socio-economic deprivation and population size have a clear positive relationship with the levels of housing stock retained by local governments.


[Figure 2 about here]


In what follows, we explore whether our findings remain robust to alternative model specifications. Table 4 reports the estimated parameters of the single-equation NB model and estimates of a single-equation NB model including local government fixed effects. Overall, both sets of estimates underline that Labour political control does not seem to have a statistically significant effect on the levels of local government housing stock. Regarding our second variable of interest, i.e. Labour vote share, the estimates reported in Table 4 remain very similar to the ZINB regression, though the coefficient estimates are slightly larger. Turning to the control variables, socio-economic deprivation continues to be an important influence on public housing stock, with both NB models predicting that the higher the deprivation rate the larger the number of public dwellings. By contrast, the results for the other controls are not so conclusive. First, the point estimates for ethnic and social diversity become statistically significant when estimating a single-equation NB model, though their effect size is still very small. Second, the magnitude and sign for the coefficient for population size changes dramatically when including local government fixed effects in our

21

model – a finding that could reflect the inability of fixed effects models to accurately estimate the effect of covariates that have very little within variance (Plumper and Troeger, 2007).

[Table 4 about here]

In summary, using multivariate regression models that integrate socio-economic and political variables, our results suggest that politics is an important feature of the externalisation of public housing delivery, influencing public sector reform at the local level. In particular, our findings suggest that the citizen candidate model may help to predict reform implementation success – Conservative local governments are more likely to have no public housing stock at all; while the median voter perspective predicts reform implementation resistance – Labour-voting areas have higher levels of publicly-owned housing.

One potential explanation for these findings is that, during the genesis of housing stock transfers, i.e. the 1980s and early 1990s, social housing policies in England reflected an ideological stance influenced by the Conservative's "anti-municipalism" and by the aim to stimulate private sector engagement in local public services (Stewart and Burridge, 1988; Oatley, 1998). At the same time, council housing sales were considered unacceptable by Labour-controlled local governments until 1997, when the Labour government in power at the national level also started to promote social housing externalisation policies – albeit with a strong preference in favour of non-profit providers (Pawson and Mullins, 2010). Nonetheless, it is precisely from the late 1990s when political organizations supporting campaigns against council housing transfers, such as the DCH, emerged across the UK, which may explain our finding that in more collectivist local areas, where anti-transfer campaigns may have received stronger support, there is a larger stock of publicly-owned dwellings. As such, this study offers support to the arguments advanced in previous studies

highlighting the importance of political considerations when explaining social housing externalisation policies.

## CONCLUSION

In this paper, we have analysed the politics of public housing reform in English local governments, focusing on the ideological and political influences on the size of the publicly-owned dwelling stock. Our analysis was guided by two alternative models of political competition: the citizen-candidate model, which emphasises parties' political ideologies; and, the median voter model, which emphasises citizens' political preferences. Although the political variables we analyse certainly do not account for all the variation in publicly-owned housing stock, the findings that we present suggest that both models may offer valuable insights for understanding the politics of local public sector reform. Ideology seems to play an important role in making reforms happen, but resistance, antipathy and alternatives to those reforms appear to be driven by local political preferences. These findings have important implications for the study of local politics and government.

Firstly, we provide statistical evidence that the enactment of local public sector reform may be influenced by ideological forces, as the citizen-candidate model implies. Right-wing political control, in particular, may be associated with large-scale structural changes to the local state – Conservative-led local governments in England appear more likely to have disposed all publicly-owned dwelling stock than their counterparts ruled by other political parties. Nevertheless, our findings also highlight that Labour-led governments are no more or less likely to be committed to publicly-owned social housing than governments led by parties of other political hues. This may perhaps, in part, be a reflection of the 'new' Labour convergence towards the wider public sector reform agenda of the Conservative Party (Hay, 1999). Future quantitative and qualitative studies of the ideological influences on public sector reform should therefore seek to understand the extent to which

local policy commitments may reflect the operation of wider political ideologies or be driven by the financial and operational imperatives of individual organizations and their leaders.

Secondly, our study confirms the insights of the 'Downsian' political competition literature regarding the salience of citizens' preferences for public policy implementation. That said, it offers a nuanced and valuable counterpoint to simplistic accounts of the connection between preferences and policies, highlighting that citizens' hostility towards a given proposal may be a more important determinant of implementation success than their embrace of the aims and objectives behind that proposal. It is therefore essential to always consider the role of citizens' preferences in models of local public sector reform, and to establish the relative salience of ideological versus political influences on whether reforms are successfully enacted by local governments. Grassroots resistance to unpopular local policies has long been a theme in the literature on political activism in developed (see Norris, 2002) and developing countries (see Scott, 1985). Further quantitative and qualitative evidence on the dynamics of campaigns against housing stock transfer proposals in the UK and elsewhere would therefore cast valuable further light on this important issue.

Despite the strengths of our approach to analysing the politics of public housing reform, limitations in our study design furnish valuable opportunities for further research. First, although we offer a longitudinal investigation of the determinants of local government-owned housing stock in England, our findings may not be altogether generaliseable to other countries. The UK is a noted public sector reform pioneer, with a distinctive Anglo-Saxon political and administrative culture (Pollitt and Bouckert, 2011). That said, due to the strength of the central state, local government in the UK is also acknowledged to have less autonomy than its counterparts elsewhere in Europe often possess (John and Copus, 2011). Hence, while the data requirements for undertaking a comparison of the politics of public housing across multiple countries may be somewhat daunting, such an endeavour could nonetheless

reveal much about the politics and management of the local state in different political systems. As well as seeking to develop a large-scale time-series of administrative data for this purpose, researchers could also seek to bring together information from cross-country surveys (e.g. the European Social Survey) on attitudes towards public housing and political preferences.

Second, our study examines public housing reform aimed at the divestment of state-owned assets at a time when the financial and political pressure on local governments to consider alternatives to state-managed public services was particularly strong (Bel, Hebdon and Warner, 2007), especially in the area of social housing (Scanlon, Fernandez-Arrigoitia and Whitehead, 2015). Due to limited data availability, we have been unable to fully explore the full range of alternative approaches to the provision of social housing at the local level that this has prompted in England. For instance, the balance between social renting, private renting and owner-occupation varies considerably across local governments, and this may in part reflect political considerations. Moreover, while the impact of the right-to-buy scheme is held constant in our analysis as it is a national-level policy, it is quite possible that Conservative councils marketed this policy more aggressively, and that this partly explains the greater likelihood that they have no public housing stock at all. For all these reasons, it would be interesting to undertake detailed case-studies within individual local governments to better understand the dynamics of the local politics around social housing. Likewise, a similar study to that presented here could be carried out in circumstances where public investment in social housing by local governments was encouraged rather than discouraged. Historical analysis of varying local responses to the post-war programme for the construction of council housing in the UK, for example, could serve as a useful complement to our analysis, as would research investigating the politics of public housing works in developing countries (see Wakely, 2014).

Finally, it is possible that the politics of public housing reform are not wholly representative of that associated with other parts of the local public sector. In particular, primary and secondary education are the main public services provided by English local governments, and policy developments in this field are largely driven by the aspirations of the middle-class (Ball, 2013), rather than their concerns about the tax burden posed by meeting social needs. That said, there is evidence from other local public services in England that models of political competition are reliable predictors of the policy choices made by local government. In particular, analysis of the adoption of alternative forms of providing leisure services suggests that political preferences influence the choice of contractor made by local governments (Alonso, Andrews and Hodgkinson, 2016). All in all, further investigation of the politics of reforms to the different parts of the English local government system would therefore prove invaluable in illuminating the dynamics of local democracy, as, of course, would similar analyses undertaken in other countries.

In conclusion, our study has highlighted the role that politics may play in shaping public sector reform at the local level. Ideological commitments may have motivated large-scale changes to the scope and responsibilities of the local state in some areas, and political attitudes may have prevented the emergence and enactment of such plans in other areas. We have also illustrated that social and economic circumstances too may exert an important influence on the nature of public sector reform in sub-national governments. Further research comparing the relative salience of ideological and political motives on proposals for restructuring the local state would therefore add vital knowledge on the forces that shape local public sector reform.

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## TABLE 1

### Data sources and descriptive statistics

| Variable | | Source | Mean | Std. Dev. | VIF |
|---|---|---|---|---|
| Housing stock | A | 6346.735 | 9483.191 | |
| Labour control | B | 0.215 | 0.411 | 1.92 |
| Labour vote share | B | 25.135 | 14.887 | 2.56 |
| Deprivation | C | 19.707 | 9.503 | 2.6 |
| Age diversity | D | 8731.398 | 183.854 | 1.14 |
| Ethnic diversity | D | 1965.780 | 1888.053 | 1.62 |
| Social diversity | D | 8664.902 | 226.255 | 1.19 |
| Housing spending | E | 27.134 | 28.557 | 1.74 |
| Population (log) | D | 11.822 | 0.537 | 1.53 |

*Notes:* To deal with non-normal distributions of the variable measuring population we use its logged value. VIF refers to the Variance Inflation Factor.
*Data sources:*
A; Department for Communities and Local Government.
B; Rallings C & Thrasher M, various years, *Local Elections in Britain: A Statistical Digest* (LGC Elections Centre, University of Plymouth).
C; Department for Communities and Local Government.
D; Office for National Statistics (census data).
E; Chartered Institute for Public Finance and Accountancy. CIPFA Finance and General Statistics.

**TABLE 2**

Model selection criteria LR, AIC and BIC of the fitted models

| Model selection criteria | Poisson | NB | ZIP | ZINB |
|---|---|---|---|---|
| LR | | 2.1e+07 | | 1.2e+07 |
| AIC | 2.103e+07 | 72081.935 | 1.183e+07 | 70376.82 |
| BIC | 2.103e+07 | 72146.124 | 1.183e+07 | 70466.68 |

# TABLE 3

## ZINB model for local government-owned social housing stock

| | Coefficient | Robust Std. Err. | P-value | Discrete change | Robust Std. Err. | P-value |
|---|---|---|---|---|---|---|
| *NB model* | | | | | | |
| Labour control | 0.02075 | 0.06535 | 0.751 | 126.106 | 397.044 | 0.751 |
| Labour vote share | 0.01624 | 0.00317 | 0.000 | 1659.351 | 391.204 | 0.000 |
| Deprivation | 0.02493 | 0.00495 | 0.000 | 1622.774 | 392.073 | 0.000 |
| Age diversity | -0.00037 | 0.00030 | 0.219 | -399.086 | 314.272 | 0.204 |
| Ethnic diversity | 0.00002 | 0.00002 | 0.365 | 213.409 | 237.854 | 0.370 |
| Social diversity | 0.00029 | 0.00015 | 0.053 | 411.08 | 219.332 | 0.061 |
| Housing spending | 0.00026 | 0.00071 | 0.714 | 45.46 | 125.256 | 0.717 |
| Population (log) | 0.95329 | 0.07204 | 0.000 | 4058.471 | 533.237 | 0.000 |
| *Logit model* | | | | | | |
| Conservative control | 0.40718 | 0.18688 | 0.029 | | | |
| Pro market vote share | 0.00842 | 0.00614 | 0.170 | | | |
| Rural district | 0.74374 | 0.23057 | 0.001 | | | |
| Log-likelihood | -35174.41 | | | | | |
| Observations | 4532 | | | | | |

Notes: Robust standard errors clustered at the local government level.

# TABLE 4

## Robustness checks

| | Negative Binomial model | | | Negative Binomial model including unit fixed effects | | |
|---|---|---|---|---|---|---|
| | Coefficient | Robust Std. Err. | P-value | Coefficient | Robust Std. Err. | P-value |
| Labour control | 0.0134 | 0.0920 | 0.884 | -0.2030 | 0.1367 | 0.138 |
| Labour vote share | 0.0243 | 0.0048 | 0.000 | 0.0226 | 0.0085 | 0.008 |
| Deprivation | 0.0204 | 0.0072 | 0.004 | 0.0886 | 0.0269 | 0.001 |
| Age diversity | -0.0003 | 0.0005 | 0.516 | -0.0017 | 0.0011 | 0.118 |
| Ethnic diversity | 0.0001 | 0.0000 | 0.029 | 0.0000 | 0.0001 | 0.787 |
| Social diversity | 0.0005 | 0.0002 | 0.029 | 0.0003 | 0.0003 | 0.364 |
| Housing spending | -0.0010 | 0.0011 | 0.349 | -0.0042 | 0.0017 | 0.011 |
| Population (log) | 1.1365 | 0.1006 | 0.000 | -4.2738 | 1.5379 | 0.005 |
| Log-likelihood | -36030.97 | | | -33579.35 | | |
| Observations | 4532 | | | 4532 | | |

Notes: Robust standard errors clustered at the local government level.

**FIGURE 1**

Frequency distribution of local government-owned housing stock, 2001-2014
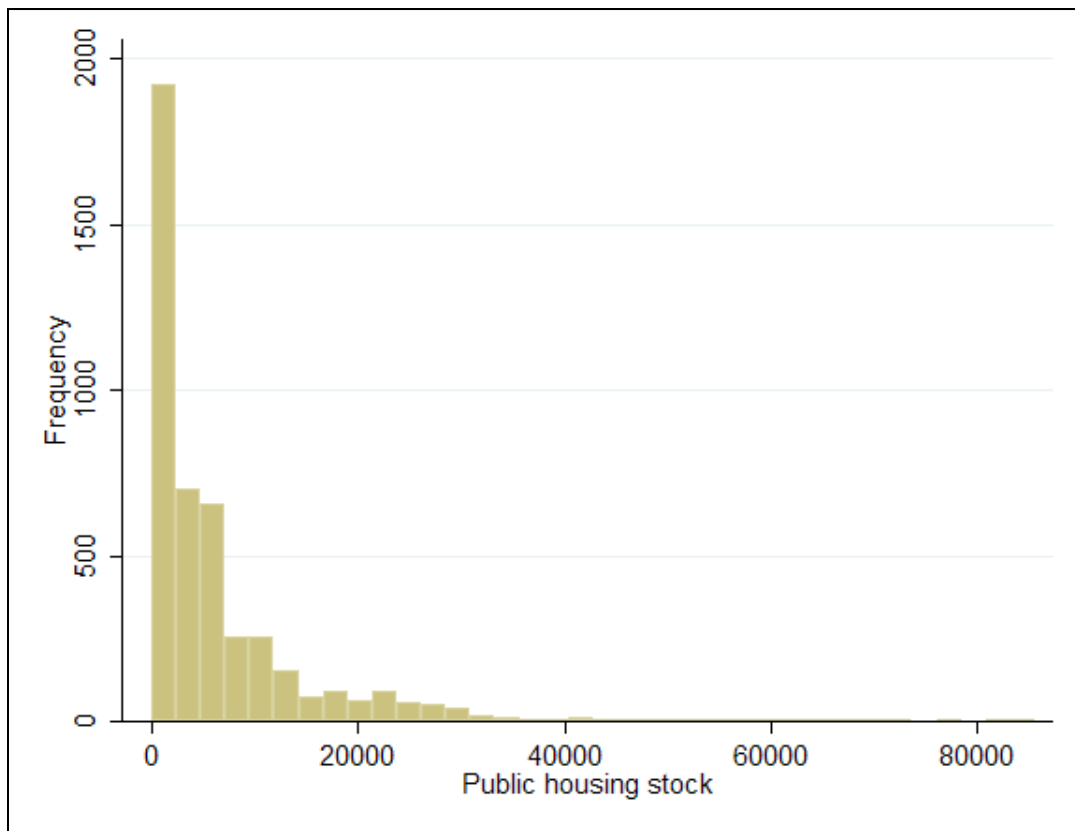
## FIGURE 2

Predicted public housing stock with 95% confidence intervals